Materials for Presidential Candidates
to be Interviewed March 5

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Barbara Boyan
Dear Members of the Search Committee:

I am writing to you at the invitation of Storbeck/Pimentel & Associates concerning my interest in the University of Central Florida. As dean of engineering at Virginia Commonwealth University, I have had the opportunity of working with faculty at UCF on a number of initiatives and have been very impressed with the energy that has characterized the university over the past five years. Like VCU, UCF has a diverse student population, many of whom live in the region and are first generation college students. Like UCF, we have a strong medical campus. While UCF is certainly much larger, indeed twice our size, many of the issues that impact us as a public institution in Virginia are the same issues that impact you in Florida.

Academic Philosophy

UCF is relatively young in the world of academic institutions and is going through the transitions that often typify a university that is focused on teaching to one that is research intensive. This is where Georgia Tech was when I joined their faculty in 2002 and where the University of Texas Health Science Center at San Antonio when I joined that faculty in 1981. It struck me then and it strikes me now that tensions arise from the failure to recognize the value of the professors who had devoted their careers to student learning at the expense of their research careers. Not only does this foment frustration, but it is extremely shortsighted. The taxpayers expect students to learn and commit their tax dollars to this. Yes, they are proud of the research and understand that it must be done to support economic competitiveness, but bottom line, they want their children and even themselves, to be taught well.

It is important to me that all members of the academic community be valued and that they see themselves as a part of the university community. The students are our product, but they are not a passive outcome of advanced manufacturing. No university can exist without dedicated staff and certainly, the academic mission is the purview of the faculty who create and deliver the curriculum. It is the president’s role to ensure that all stakeholders see their contributions are esteemed and that the funds exist to enable them to realize their goals.

Education and Early Academic Career

I have had an unusual academic career that puts me in a position to lead a complex institution like UCF. My degrees are BA, MA and PhD in Biology, not BS or MS. Yes, I had a liberal arts education, with a minor in art history. As a result, I value liberal arts and firmly believe that exposure to philosophy and art teach students how to think in a broader sense than can be learned from technology alone. After finishing my formal education at Rice University, where I did my dissertation on how snails calcify their shells, I began a postdoctoral fellowship at the University of Texas Houston Health Science Center in their dental school studying bacteria in dental calculus, using molecular biology technology with the goal of learning what caused calcification to occur. I was offered a teaching appointment in microbiology and taught medical microbiology in the dental school for three years. At the same time, I had an appointment in biochemistry in the medical school. In 1981, I moved to a faculty position as an associate professor at the University of Texas Health Science Center at San Antonio, first in the Departments of Periodontics and Biochemistry and then as a full professor in the Departments of Orthopaedics, where I served as vice chair for research, with a joint appointment in Biochemistry. In that role, I was able to build the Department of Orthopaedics from no extramurally funded research to have the fifth highest
orthopaedic research portfolio in the US.

**Leadership Experience**

I began my first biomedical technology company, Biomedical Development Corporation, while still in the School of Dentistry. As a result of my experience in establishing BDC, the president of the Health Science Center asked me to serve as director of a multi-institution NSF-sponsored University Cooperative Research Center focused on cell signaling (UTHSCSA, UT-Austin, and the Southwest Research Institute), and I before I was settled into that role, I was asked to help the university set up a more formal tech transfer office. Did I know what I was doing? Not by a long shot, but I was fortunate to have a number of people mentor me, keeping me from making serious mistakes and helping me to develop leadership skills that many academics do not have the opportunity to learn. As I was learning the give and take between industry and academia, I was given the chance to attend a variety of business-oriented leadership programs, including an IBM marketing executives retreat, media training, Leadership Texas, and Leadership America. These exposures to the broader world of executive training have had a lasting impact on how I operate in an organization, whether it be a scientific committee, my research lab, my activities in the university, and on corporate boards. Not surprisingly, I am committed to mentorship in as many different forms as there are mentors and mentees.

Georgia Tech came calling in 2002, with the express purpose of recruiting me to help them build a strong relationship with Emory University Medical School, Morehouse School of Medicine and Childrens Healthcare of Atlanta. I was recruited as a Georgia Research Alliance Eminent Scholar, which is a public/private partnership with the purpose of bringing senior faculty to Georgia in order to establish foci for commercialization of university technologies. I served on the GRA Executive Committee as Georgia Tech’s representative, which gave me the opportunity to see how the member universities built centers of excellence to further their academic goals. I was able to establish two companies, Orthonics, Inc. and SpherIngenics, Inc., and I was asked to join the boards of two multinational NASDAQ companies. What a great experience that has been (more on this below). At the same time, we were able to grow the research mission at Georgia Tech, finally leading me to accept the position of Associate Dean for Research and Innovation in the College of Engineering. My time at Georgia Tech was filled with opportunities to collaborate across disciplines. Not only did this enhance the research in my own lab, but it led to exciting new research initiatives that grew beyond my expectations. Many of these activities continue to be successful at the university and throughout the greater Atlanta region.

I have loved being dean of engineering at VCU. I work with wonderful people and my students are dear to me in so many ways. I am a delegator and a collaborator, so we have broken down many barriers that plague academic institutions and limit access to resources in this age of convergence. I am not an engineer, but I appreciate engineers and how they solve problems. I appreciate their systems thinking. During my tenure as dean, we have doubled the size of our faculty, increased our extramural funding 400%, renovated and built buildings, and created the nation’s first Ph.D. program in Pharmaceutical Engineering. The Bill and Melinda Gates Foundation has invested $40 million in establishing the Medicines for All Institute and we now have an IUCRC with the University of South Carolina on catalysis.

**Lessons Learned from Business**

Building biomedical technology companies has taught me a number of priceless lessons in leadership. The company we began at UTHSCSA, Biomedical Development Corporation, gave me valuable experience in starting the hard way, yes, in my garage. The company was conceived as a mechanism for Texas university-based scientists to move their inventions out of the laboratory into a start-up venture able to apply for SBIR grants and contracts, without having to leave their faculty positions. BDC exists in San Antonio today and serves a vital role as a mechanism to transition university technologies into functional start-ups that commercialize technology and provide the university a return on their investment. I learned the importance of overhead and why companies cannot be charitable organizations, even though universities so depend on their philanthropy. In my role as “head” of the tech transfer office at UTHSCSA, I participated in the founding of BIO, the international biotechnology organization; and I helped raise capital to create the Texas Venture Partners, which then supported 11 university-based start-ups, 10 of which were successful.
One of these companies was OsteoBiologics, Inc. I served as CEO for its first few years of life, raising $7 million in capital in 1993 and receiving an offer of $81 million in less than two years. The university enabled me to take on this challenge and for that I will always be grateful. I realized that I am a die-hard academic and resigned my position as CEO so that the company could move forward with sound business experience at the helm. The board decided not to accept the offer, taking a chance on further growth. OBI’s products were cleared for clinical use and the company was acquired by Smith & Nephew 12 years later. At Georgia Tech, I established Orthonics as a spine implant company, which we morphed into a cartilage technology company, ultimately selling our IP to another well-funded start-up, Carticept Medical. Carticept spun out our original device to form Cartiva, which was purchased last year by Wright Medical. Serving on the Carticept and Cartiva boards gave me the opportunity to observe best management practices, both by the company leadership and by the venture funds that invested in us. Most recently, I have served on the Medical Advisory Board of an early stage growth company that was acquired by Medtronic this summer. Like OsteoBiologics and Cartiva, Titan Spine LLC was developing technology from my lab, so I have had a first-row seat in seeing how inventions can make it from the bench into commercial medical products and how much team work it takes to achieve this goal.

My industry experience has also included exposure to corporate management in the highly regulated world of publicly traded companies. IsoTis, Inc. (NASDAQ) was the US subsidiary of IsoTis, SA (Switzerland), so I was able to see how corporate business is conducted in Europe as well as in our own country. IsoTis was acquired by Integra Life Science, which was my first real exposure to this type of transaction. Clearly, my learning curve as a board member of publicly traded corporations had to be fast, but it was worth it. Arthrocare Corporation (NASDAQ) sent me to the Harvard School of Business’ Board of Directors workshop, where I was exposed to the Harvard pedagogical style and to C-suite members of some of the world’s largest corporations. Serving on the Arthrocare Board taught me about developing corporate DNA, which is important in academia as well; focusing on core strengths; supply chain management; SAP; and managing manufacturing in Latin America (Costa Rica). Clearly, Arthrocare was a much larger company than IsoTis, but many of the same lessons applied. I also learned what can happen when the C-suite team does not follow the rules, how quickly all employees and investors can suffer, and how critical it is for the board to act swiftly and responsibly to mitigate damage. The Board members rebuilt the company and brought it back to profitability, leading it to a successful exit with acquisition by Smith and Nephew. Needless to say, the experience of facing a challenge and overcoming it as part of a truly wonderful team has been a fundamental building block in establishing my own personal ethic.

How My Experiences Benefit UCF

There is no question that this is the era of the engineer and data science. However, companies tell me that they don’t want to hire only engineers and computer scientists. To the contrary, they want to hire students who are biologists, psychologists, English and French majors, teachers, sociologists, artists, historians, economists—you name it. They do want these students to be digitally literate but able to understand the user interface and to be able to operate in a digital economy. Here at VCU we have found that many of our students have not had exposure to math and computing while in high school; some even come from high schools that do not offer these courses that have become so important to their success in higher education or the work force. To meet this challenge, our College of Engineering has developed a suite of online courses designed specifically for non-engineering majors. We are now making these courses available to the broader community and to provide a pre-freshman year academy to help our students get ready for their freshman year.

I would like to share a little of my personal life with you to help you understand why initiatives like this matter so much to me. I am the mother of 11 children, all adopted and all but one as older children. My late 30’s/early 40’s crew are Hispanic and came to our family from a part of San Antonio that is essentially Spanish speaking. My three youngest (15,16 and 19) are the children of our now 40 years old daughter, who at the age of 10 was the first cross-cultural adoption in San Antonio. My husband and I worked closely with the State of Texas to make their transitions as positive as possible. Two of my grandchildren are multi-racial. Through this process, I came to understand in a personal way many of the challenges that children face that come from their life experience and how important it is to foster a diverse and inclusive environment, not just with respect to
ethnicity and race, but also with respect to gender identity, learning styles, and physical limitations. Our faculty, staff and students exhibit these attitudes in all that they do.

The last 17 years of my academic career have been in a traditional academic campus environment, first at an elite engineering institution and more recently, at a community serving urban research university internationally known for its School of Art. However, my background in healthcare, both as a faculty member in dental and medical schools, and as a developer of medical device technologies, puts me in a special place to help foster a unified university. Not only was I vice-chair of orthopaedics at UTHSCSA, but I also am a member of the American Academy of Orthopaedic Surgeons. I have served as chair of the Orthopaedic Device panel for the FDA and am proud to say that several of my inventions have made it through the FDA and CMS to be used clinically. In fact, our lab developed the surfaces of dental and orthopedic implants as well as the bone graft substitute that were used in my own body. I am committed to healthcare. At Georgia Tech, I was co-PI of the NIH-sponsored Atlanta Clinical and Translational Research Institute in collaboration with Emory and Morehouse College of Medicine; the director of the FDA-sponsored Atlanta Pediatric Device Consortium with Emory and Childrens; and the director of the DoD sponsored Center for Advanced Bioengineering for Soldier Survivability. At VCU, I have appointments in the medical school Departments of Pediatrics, Orthopaedics, and Biochemistry.

As important to the community a medical campus may be, it must be integral to the university. This is a lesson I have learned throughout my career. UTHSCSA is only a medical campus; University of Texas at San Antonio is a separate institution. The autonomy of UTSA has enabled it to develop as a strong academic university and not as a step sister to the medical school. Georgia Tech does not have a medical school. To be successful in biomedical engineering, it has had to learn to partner with equals: Emory and Morehouse. VCU does have a medical campus. The Monroe Park campus, home of humanities, sciences, engineering, business, education and art, has to fight the medical campus for equality, at least in the minds of the faculty. While medical research generates extramural funding, the 21st century has given us many challenges where other skills are needed. UCF is well on its way to being a valuable institution on so many fronts. It is exciting to consider the contributions that are hers to make.

There is so much more that I would like share with you. I look forward to the opportunity to meet all of you and hear what you want for your president.

Sincerely,

Barbara D. Boyan, Ph.D.
Alice T. and William H. Goodwin, Jr. Dean
I. Earned Degrees

1970  B.A., Biology  Rice University, Houston, Texas
1974  M.A., Comparative Biochemistry and Physiology  Rice University, Houston, Texas
1975  Ph.D., Comparative Biochemistry and Physiology  Rice University, Houston, Texas
1974-1977 Postdoctoral Fellow, Calcification Mechanisms  Dental Science Institute, The University of Texas Health Science Center at Houston

II. Employment

2018-present  Alice T. and William H. Goodwin, Jr. Dean  College of Engineering, Virginia Commonwealth University, Richmond

2013-2018  Alice T. and William H. Goodwin Chair in Biomedical Engineering  VCU

2013-2018  Dean, School of Engineering  VCU

2013-present  Adjunct Professor, Departments of Pediatrics, Biochemistry, and Orthopaedics, Medical School  VCU

2013-present  Professor Emerita, Department of Biomedical Engineering; School of Materials Science and Engineering; and School of Biology  Georgia Institute of Technology, Atlanta, Georgia

2013-2019  Director, Virginia Site Atlantic Pediatric Device Consortium  VCU

2011-2013  Executive Director, Atlanta Pediatric Device Consortium  Georgia Institute of Technology, Atlanta, Georgia

2010-2013  Director, Georgia Tech/Children’s Healthcare of Atlanta Center for Pediatric Healthcare Technology Innovation  Georgia Institute of Technology, Atlanta, Georgia

2010-2013  Executive Director, Translational Research Institute for Biomedical Engineering and Science  Georgia Institute of Technology, Atlanta, Georgia

2008-2013  Director, Center for Advanced Bioengineering for Soldier Survivability  Georgia Institute of Technology, Atlanta, Georgia

2008-2013  Associate Dean for Research and Innovation College of Engineering  Georgia Institute of Technology, Atlanta, Georgia

2006-2013  Director Children’s Healthcare of Atlanta Laboratory for Craniofacial Plastic Surgery Research  Georgia Institute of Technology, Atlanta, Georgia

2005-2013  Adjunct Professor  Georgia Institute of Technology
<table>
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<tr>
<th>Year</th>
<th>Position</th>
<th>Institution</th>
</tr>
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| 2004-2013  | Adjunct Professor  
School of Materials Science and Engineering | Georgia Institute of Technology  
Atlanta, Georgia                                                                   |
| 2002-2013  | Professor  
Georgia Institute of Technology  
Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech / Emory University | Atlanta, Georgia                                                                 |
| 2002-2013  | Price Gilbert, Jr. Chair in Tissue Engineering  
Georgia Research Alliance Eminent Scholar | Georgia Institute of Technology  
Atlanta, Georgia                                                                   |
| 2002-2008  | Deputy Director for Research  
Georgia Tech / Emory Center for the Engineering of Living Tissues | Georgia Institute of Technology  
Atlanta, Georgia                                                                   |
| 2003-2013  | Adjunct Professor  
Departments of Orthopaedics and Cell Biology | Emory University Medical School  
Atlanta, Georgia                                                                   |
| 1992-2013  | Adjunct Professor  
Department of Periodontics | The University of Texas Health Science Center at San Antonio                   |
| 2001-2002  | Vice Chair for Research  
Department of Orthopaedics | The University of Texas Health Science Center at San Antonio                   |
| 1992-2001  | Director  
Center for Enhancement of the Biology/Biomaterials Interface | The University of Texas Health Science Center at San Antonio                   |
| 1988-2002  | Professor  
Departments of Orthopaedics and Biochemistry | The University of Texas Health Science Center at San Antonio                   |
| 1988-2001  | Director of Research  
Department of Orthopaedics | The University of Texas Health Science Center at San Antonio                   |
| 1986-2001  | Director  
Industry-University Cooperative Research Center | The University of Texas Health Science Center at San Antonio                   |
| 1985-1988  | Adjunct Associate Professor  
Department of Orthopaedics | The University of Texas Health Science Center at San Antonio                   |
| 1984-1990  | Adjunct Faculty  
Minority Basic Research Grant Program | Incarnate Word College  
San Antonio, Texas                                                               |
| 1982-2002  | Member, Graduate Faculty  
Graduate School of Biomedical Sciences | The University of Texas Health Science Center at San Antonio                   |
| 1981-1988  | Associate Professor  
Departments of Periodontics and Biochemistry; Tenure, 1984 | The University of Texas Health Science Center at San Antonio                   |
1977-1980 Assistant Professor  
Department of Microbiology  
and Dental Science Institute Faculty  
Dental Branch  
The University of Texas Health Science Center at Houston

1977-1981 Faculty  
Graduate School of Biomedical Sciences  
The University of Texas Health Science Center at Houston

1975-1980 Supervisor  
Electron Microscopy Laboratory  
Dental Science Institute  
Houston, Texas

1974-1977 Research Associate/Postdoctoral Fellow  
Dental Science Institute  
Houston, Texas

1970-1974 Predoctoral Trainee  
Department of Biology  
Rice University, Houston, Texas

OTHER EMPLOYMENT

2012-2018 Director and Chief Scientific Officer, Cartiva, Inc., Alpharetta, GA
2007-present Co-Founder, Director and Chief Scientific Officer, SpherIngenics, Inc., Atlanta, GA
2007-2019 Independent Director, Board of Directors, Carticept Medical, Inc., Atlanta, GA
2006-2007 Independent Director, Board of Directors and Chief Scientific Officer, IsoTis, Inc., Irvine, CA (publicly traded company acquired by Integra, Inc., December 2007)
2006-2007 Independent Director, Board of Directors, IsoTis SA, Lausanne, Switzerland
2004-2014 Independent Director, Board of Directors, ArthroCare Corporation, Austin, TX (ARTC, a publicly traded mid-cap medical device company, was acquired by Smith & Nephew, June, 2014)
2003-2007 Co-Founder and Chief Scientific Officer, Orthonics, Inc., Atlanta, GA (technology acquired by Carticept Medical, 2007)
1996-1997 Co-Founder and Chairman, Board of Directors, OsteoBiologics, Inc., San Antonio, TX (acquired by Smith & Nephew)
1987-1989 Co-Founder and Chief Scientific Officer, Biomedical Development Corporation, San Antonio, TX

CURRENT CONSULTANTSHIPS
Consultant, Titan Spine LLC, Mequon, WI
Consultant, Exactech, Alachua, FL
Consultant, Spineology, Inc.
Consultant, Depuy Orthopaedics, Warsaw, IN
Consultant, Institut Straumann AG, Basel, Switzerland
Consultant, Henry Schein, New York City
Consultant, Musculoskeletal Transplant Foundation, Edison, NJ

BOARDS of DIRECTORS (2010-2019)
For Profit:
Arthrocare Corporation, acquired by Smith & Nephew, June, 2014
Carticept Medical, Alpharetta, GA (2019)
Cartiva Inc., Alpharetta, GA, acquired by Wright Medical, 2018
SpherIngenics, Inc., Richmond, VA
HONORS AND AWARDS

Fellow, European Academy of Sciences and Art, 2020
Fellow, National Academy of Inventors, 2016
Member, Tau Beta Pi, 2016
Member, National Academy of Engineering, 2012
Women’s Leadership Award, Orthopaedic Research Society, 2012
ASTM Manny Horowitz Award for service to the F04 Division as Chair of the Assessments Subcommittee, 2009
Fellow, American Institute for Medical and Biological Engineering, 2006
Recipient, Atlanta Woman Magazine Top Innovator in Science Award, 2005
Member, National Materials Advisory Board, National Academies, 2003-2009
Recipient, The Birnberg Research Award, Columbia University School of Dental and Oral Surgery, 2003
Recipient, Georgia Research Alliance Eminent Scholar, 2002 - present
Recipient, Society for Biomaterials, Clemson Award for Contributions to the Literature, 2001
Co-recipient Albert-Hoffa-Prize (with Drs CH Lohmann, Z Schwartz, Y Liu, H Guerkov, B Simon, BD Boyan), Die Norddeutsche Orthopädenvereinigung e.V (North German Orthopaedic Society) Research Prize, 2001
Co-recipient, American Academy of Periodontology, R. Earl Robinson Regeneration Award (with Drs Z Schwartz, DD Dean, CH Lohmann, D Andreacchio, TC Weesner, DL Carnes, DL Cochran), October, 2001
Recipient, Certificate of Appreciation, ASTM Committee F-4 Awards Subcommittee, 2001
Fellow, American Association for the Advancement of Science, elected 2000
Recipient, AADR Student Research Group Mentor Award, American Association for Dental Research, Washington, D.C., April 7, 2000
Co-Recipient of 1999 R. Earl Robinson Periodontal Regeneration Award, American Academy of Periodontics
Co-recipient, American Academy of Periodontology R. Earl Robinson Regeneration Award, 1997
Basic Research in Biologic Biomineralization Award, International Association for Dental Research, 1995
San Antonio Women's Hall of Fame 1988-1989 Honoree in Science and Technology
Lifetime Honorary Member Achievement Award, Alpha Omega International Dental Fraternity, 1987-1988
Recognition Award, San Antonio Women's Hall of Fame, 1986
Appreciation Award, Sophomore Dental Student Summer Research Fellows, 1985
Honorary Member, Alpha Omega International Dental Fraternity Regency 25, 1985
Tenure, Department of Periodontics, The University of Texas Health Science Center, 1984
Awarded a National Research Council-National Academy of Sciences, Postdoctoral Research Associateship for 1974-1975 (declined in favor of NIDR fellowship)

III. TEACHING
A. Individual Student Guidance
Note: Only primary advisorships are listed. While at Georgia Tech, Dr. Boyan served as a committee member on numerous Ph.D. and M.S. thesis committees in BME, MSE, and Biology. She continues as primary advisor for three Georgia Tech Ph.D. students and as co-advisor for two others. Each graduate student and post-doctoral fellow in her laboratory supervises 1-2 undergraduate research fellows including Presidential Undergraduate Research Award (PURA), Petit Scholars, Research Experience for Undergraduates (REU), and Undergraduate Research Scholarship (URS) awardees.

As a faculty member at VCU, Dr. Boyan is primary advisor for four PhD students (1 in BME, 1 in Chem E, 1 in Biochemistry, and 1 in Integrated Life Sciences. She co-advises an additional BME PhD student. As at Georgia Tech, all PhD students in her lab serve as mentors for undergraduate students and high school students.

Ph.D. Theses Directed (Committee Chairperson)
Virginia Commonwealth University
Shirae Leslie, Chemical Engineering, 2013-2016
Ethan Lotz, BME, 2013-2019
Ryan Clohessy, BME, 2013-present; co-mentor: Zvi Schwartz
Kayla Scott, BME, 2015-present
Cydney Dennis, BME 2018-present
Jaeyung Deng, BME 2017-present

Georgia Institute of Technology
Bryan Bell, M.S., BioE/MSE, 2003-2009, Ph.D.
Jiaxuan Chen, Ph.D. in BME, 2007-2012, Ph.D.
Reyhaan Chaudhri, Biology, 2007-2013, Ph.D.
Tracy Denison, BioE/BME, 2003-2009, Ph.D.
Maryam Doroudi, Biology, 2009-2014, Ph.D.
Khairat ElBaradie, Biology, 2007-2012, Ph.D.
Tanya Farooque, ChBE, 2005-2009, Ph.D., co-mentor: Timothy Wick
Rolando Gittens, BioE/MSE, 2007-2013, Ph.D.
Christopher Hermann, MD/PhD in BioE, 2008-2012, Ph.D.
Erin Hewett Lee, BME/PKU, 2010-2016
Jennifer Hurst-Kennedy, Biology, 2006-2009, Ph.D.
Ramsey Kinney, BME, 2002-2007, Ph.D.
Christopher S.D. Lee, BME, 2007-2012, Ph.D.
Jung Hwa Park, MSE, 2007-2012, Ph.D.
Brandy Rogers, BioE/BME, 2006-2013, Ph.D.
Kathryn Smith, ME, 2007-2010, Ph.D., co-mentor: Ken Gall
Ge “Alice” Zhao, BioE/BME, 2004-2008, Ph.D.
Ming Zhong, BioE/BME, 2007-2009, Ph.D.
Andrew L. Raines, BioE/BME, 2005-2011, Ph.D.
James Wade, BME, 2010-present, co-mentor: Eberhard Voit
Qingfen Pan, Mechanical Engineering, 2009-2015
Alice Cheng, BME/PKU, 2011-2016
Xiaokun Wang, PKU/BME, 2011-2012, Ph.D., co-mentor: Haifeng Chen (PKU)
Marcus Walker, Bioengineering/Electrical Engineering, 2013-present, co-mentor: Brani Vidakovic

University of Texas Health Science Center at San Antonio

Masters' Theses Directed (Committee Chairperson)
Georgia Institute of Technology
Jiaying Guo, Biology, 2007-2009
Mimi Fang, BME, 2005-2009
Maya Fisher, Biology, 2007-2009
Sharon Hyzy, Biology, 2009-2012
Jessica Mata, Biology, 2005-2009
Meredith Myers, MSE, 2009-2011
Kevin Wong, BioE/BME, 2004-2010
Ge “Alice” Zhao, BioE/BME, Georgia Tech, 2002-2004
Ming Zhong, BioE/BME, 2005-2006
Henry Mei, ECE, 2012-2013
Marcus Walker, ECE, 2012-2013
Shirae Leslie, BME, 2009-2012, M.S.

University of Texas Health Science Center at San Antonio
Richard Batzer, D.D.S., “Effects of Calcium Phosphate Crystallinity and Titanium Surface Roughness on Growth and Differentiation of Osteoblasts in Vitro,” Dept. of Prosthodontics,

University of Texas Houston Health Science Center

Current Postdoctoral Fellows

No current postdocs.

Past Postdoctoral Fellows
Michael McClure, Ph.D., 2013-2016
David J. Cohen, M.D., 2012-2018
Zhao Lin, D.D.S., Ph.D., 2015-2017
Tea Arapovic, Ph.D., 2013-2014
Janina Sedlaczek, M.D., 2012-2013
Arun Srinivasan, M.D., 2011-2012
Scott Cuda, M.D., 2010-2011
David Deutsch, M.D., 2011-2012
Steffen Drange, M.D., 2010-2011
John Kalisvaart, M.D., 2010-2011
Yun Wang, Ph.D., 2007-2012
Rene Olivares-Navarrete, D.D.S., Ph.D.

Past Visiting Faculty
Antonella Motta, Ph.D., Associate Professor, University of Trento, Italy, 2007
Jida Chen, Ph.D., Professor, Department of Biomaterials, Chonqing University, Chongqing, China, 2006-2008
Amani Mostafa, Ph.D., Associate Professor, National Research Center, Cairo, Egypt, 2006
Zvi Schwartz, D.M.D., Ph.D., Hebrew University Hadassah

Current Positions of Former Postdoctoral Fellows
Michael McClure, Ph.D., 2013-2016, Assistant Professor, VCU College of Engineering
David J. Cohen, M.D., 2012-2018, Assistant Professor, VCU College of Engineering
Zhao Lin, D.D.S., Ph.D., 2015-2017, Assistant Professor, VCU School of Dentistry
Jonathan Kaye, M.D., private practice of pediatric urology, Dallas, TX
Hunter Moyer, M.D., plastic surgery residency, Emory University College of Medicine
Kimberly Singh, M.D., plastic surgery residency, Emory University College of Medicine
Anna Fallon, Ph.D., Industry
Hai Yao, PhD, Assistant Professor, Department of Bioengineering, Clemson University
Liping Wang, MD, PhD, Staff Scientist, VA Medical Center, and Department of Orthopaedics, Stanford Medical School, Palo Alto, CA
Larry Swain, DDS, Vice President, Kinetic Concepts, Inc, San Antonio, TX
Zvi Schwartz, DMD, PhD, Visiting Professor, Georgia Institute of Technology and Professor Emeritus, Hebrew University
Isabel Gay, DDS, MS, Professor, Department of Periodontics, Dental School, University of Texas Houston Health Science Center
Yuhong Liu, MD, Research Instructor, Department of Physiology, San Antonio, TX
Simon van Dijk, PhD, Assistant Professor, Northwest Vista College, San Antonio, TX
Hugo Pedrozso, PhD, Senior Scientist, Depuy, Inc., Warsaw, IN
Shingo Maeda, MD, Private Practice of Orthopaedics, Sendai, Japan
Christoph Lohmann, MD, Chairman of Orthopaedics, George August University, Magdebourg, Germany
Stefan Lossdorfer, DDS, MS, Department of Orthodontics, University of Bonn, Germany
Jose Romero, MD, Associate Professor of Orthopaedics, University of Zurich, Switzerland
Heinrich Guerkov, MD Orthopaedics, The Netherlands
Scott Mackey, DDS, MS, Director of Periodontics Postgraduate Program, Wilford Hall Medical Center, Lackland Air Force Base, San Antonio, TX
Thomas Hummert, DDS, PhD, Assistant Professor of Prosthodontics, University of North Carolina at Chapel Hill, Raleigh, NC
John Rapley, DDS, MS, Chairman, Department of Periodontics, Dental School, University of Missouri at Kansas City
Kristine Kieswetter, PhD, Senior Scientist, Kinetics Concepts, Inc., San Antonio, TX
Douglas Erickson, DDS, MS, Faculty, Prosthodontics Program, USAF, Wilford Hall Medical Center, Lackland, TX
Victor Sylvia, PhD, Associate Professor, Department of Orthopaedics, UTHSCSA, San Antonio, TX
John Schmitz, DDS, PhD, Associate Professor, Department of Oral and Maxillofacial Surgery, UTHSCSA and private practice of oral surgery, San Antonio, TX
Aruna Khare, PhD, Director of Research, Diagnostics Systems Laboratories, Webster, TX
Fidel Del Toro, DDS, PhD, Professor, Department of Orthodontics, UTHSCSA and private practice of orthodontics, Austin, TX.

B. Other Teaching Activities (Classroom/Laboratory)

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<tr>
<th>Year</th>
<th>Course Title</th>
<th>Role</th>
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<tr>
<td>2008 to 2013</td>
<td>Guest Lecturer in Physiology, Pathophysiology in BME PhD program and in MSE and BME undergraduate survey courses</td>
<td>Undergraduate Research Fellows in BME, Biology, and MSE Co-Director</td>
</tr>
<tr>
<td>2008 Summer</td>
<td>Systems Physiology I: The Cell (BMED 3160)</td>
<td>Director</td>
</tr>
<tr>
<td>2008 Spring</td>
<td>Introductions to Materials Science</td>
<td>Lecturer</td>
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<td>2008 Spring</td>
<td>Pathophysiology</td>
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<td>2008 Spring</td>
<td>Bone and Muscle Physiology</td>
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<td>2008 Spring</td>
<td>Animal Models</td>
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<tr>
<td>2007 Fall</td>
<td>Systems Physiology I: The Cell (BMED 3160)</td>
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The University of Texas Health Science Center at San Antonio

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<tr>
<th>Year</th>
<th>Course Title</th>
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<tr>
<td>1998-2002 Fall</td>
<td>Dental Biochemistry</td>
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<td>1997 Fall</td>
<td>Orthopaedic Basic Science</td>
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<td>Dental Biochemistry</td>
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<td>1996 Fall</td>
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<td>1996 Fall</td>
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<td>Year</td>
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<tr>
<td>1994 Winter</td>
<td>Fracture and Fracture Healing</td>
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<td>1994 Fall</td>
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<td>1994 Fall</td>
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<td>1994 Summer</td>
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<tr>
<td>1994 Spring</td>
<td>Biochemistry of the Extracellular Matrix</td>
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<td>1993 Fall</td>
<td>Research Internship (Ron Caloss)</td>
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<td>1989 Spring</td>
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<td>1985 Spring</td>
<td>Research Topics in Periodontics</td>
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<td>1984 Fall</td>
<td>Biochemistry of Mineralized Tissues</td>
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<td>1984 Fall</td>
<td>Postdoctoral Dental Microanatomy</td>
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1984 Fall Dental Biochemistry Lecturer
1984 Fall Dental Hygiene Lecturer
1984 Fall Community Dentistry Lecturer
1984 Spring Postdoctoral Dental Biochemistry Director
1984 Spring Research Topics in Periodontics Director
1984 Spring Biomembranes Lecturer
1984 Spring Postdoctoral Dental Biochemistry Director
1984 Spring Research Topics in Periodontics Director
1984 Spring Microbial Physiology Lecturer
1983 Fall Dental Biochemistry Lecturer
1983 Fall Proteolipid Structure and Function Director
1983 Fall Sophomore Periodontics Lecturer
1983 Fall Community Dentistry Lecturer
1983 Fall Dental Hygiene Periodontics Lecturer
1983 Fall Advanced Periodontics Lecturer
1983 Spring Postdoctoral Dental Biochemistry Co-Director
1983 Spring Research Topics in Periodontics Director
1983 Spring Biochemistry Laboratory Rotation Advisor
1983 Spring Microbial Physiology Lecturer
1983 Table Clinic Elective Advisor
1982 Fall Dental Biochemistry Lecturer
1982 Fall Biochemistry Laboratory Rotation Advisor
1982 Fall Sophomore Periodontics Lecturer
1982 Spring Microbial Physiology Lecturer
1981 Lipids in Membrane Function Director
1981 Dental Biochemistry Lecturer
1981 Growth and Development Lecturer
1981 Sophomore Periodontics Lecturer
1981 Postdoctoral Dental Biochemistry Lecturer
1981 Table Clinic Elective Advisor

The University of Texas Health Science Center at Houston
1980 - 1981 Biochemistry Tutorial Leader
1979 - 1981 Membrane Biochemistry Lecturer
1975 - 1981 Pathology of Connective Tissues Lecturer
1977 - 1981 Microbiology Laboratory Lab. Instructor
1977 - 1981 Microbiology Laboratory Section
1977 - 1981 "Bacterial Genetics" in Developmental Biology I Module Director
1978 - 1981 "Dental Calculus" Section
1978 - 1981 "Respiratory Infections" Director
1977 - 1980 Microbiology Lecturer
1977 - 1980 Microbiology Laboratory Lab. Instructor
1977 - 1979 Microbiology Lecturer

Rice University, Houston
1973 Electron Microscopy Lab. Instructor
1971 Physiology Lab. Instructor
1972 Advanced Comparative Anatomy & Physiology Lab. Instructor
1971 Genetics Lab. Instructor
1970 General Biology Lab. Instructor

Clinical Teaching
2005 – 2012 Co-Director, DMD/PhD Program in Dental Research
MCG and Georgia Tech

2005 – present  Pediatric Plastic Surgery Resident Research Rotation  Advisor
1995 - 2012  Orthopaedic Resident Research Rotation  Advisor
1987 - 1988  Sophomore/Junior/Senior for 4 students  Advisor
1986 - 1987  Junior/Senior Advisor for 4 students  Advisor
1985 - 1986  Freshman/Sophomore/Junior Advisor for 6 students  Advisor
1984 - 1985  Freshman/Sophomore Advisor for 4 students  Advisor
1983 - 1984  Freshman Advisor for 2 students  Advisor

Instructional Development

BME Abroad
New Course involving three weeks didactic instruction in international business issues related
to biomedical engineering, followed by an internship in European company.

Formal Study to Improve Teaching Abilities
Education courses at Rice University, Houston, TX, 1968-1970.
Practice teaching in Biology, Rice University Houston, TX, summer, 1969, 1970

Current Research Concerning Teaching
Study on Laboratory Teaching Effectiveness in BMED 3160, Spring 2007 (with Essy Behravesh)

Bibliography Concerning Teaching
Undergraduate Dental Biochemistry Curriculum Kit (with the Biochemistry Department)

New Course Development
Course Director: Special Topics in Biomedical Engineering Applications for Dentistry and Head
and Neck Medicine (2005-present)

Development of self-directed curriculum in the Microbiology of Infectious Disease with special

IV. SCHOLARLY ACCOMPLISHMENTS

A. Published Books and Parts of Books

Campbell JM, Boyan BD:  On the acid-base balance of gastropod molluscs.  In The Mechanisms of
Mineralization in the Invertebrates and Plants, N Watabe, K Wilbur (eds), University of South Carolina

Boskey AL and Boyan BD, Editors: Proceedings of the 5th International Conference on the Chemistry

Boskey AL and Boyan BD, Editors: Proceedings of the 5th International Conference on the Chemistry
and Biology of Mineralized Tissues. Kohler, Wisconsin, USA, October 22-27, 1995. Session I. Connect


B. Refereed Publications
1. Vogel J, Boyan-Salyers B: Acidic lipids associated with the local mechanism of calcification. A


90. Swain LD, Schwartz Z, Boyan BD: 1,25-(OH)2D3 and 24,25-(OH)2D3 regulation of arachidonic acid turnover in chondrocyte cultures is cell maturation specific and may involve direct effects on phospholipase A2. Biochim Biophys Acta 1136:45-51, 1992.


293. Schwartz Z, Sylvia VL, Larsson D, Nemere I, Casasola D, Dean DD, Boyan BD: 
1α,25(OH)2D3 regulates chondrocyte matrix vesicle protein kinase C (PKC) directly via G-protein-
dependent mechanisms and indirectly via incorporation of PKC during matrix vesicle biogenesis. 

staining alone is not sufficient to confirm that mineralization In Vitro represents bone formation. 


Involves Membrane Receptor- and Nuclear Receptor-mediated Mechanisms. Connective Tissue Research 

298. Boyan BD, Sylvia VL, Frambach T, Lohmann CH, Dietl J, Dean DD, Schwartz Z: Estrogen-
dependent rapid activation of protein kinase C in estrogen receptor-positive MCF-7 breast cancer cells 
and estrogen receptor-negative HCC38 cells is membrane-mediated and inhibited by tamoxifen. 

HL, Boyan BD: Pulsed electromagnetic fields affect phenotype and connexin 43 protein expression in 

300. Schwartz Z, Shaked D, Hardin RR, Gruwell S, Dean DD, Sylvia VL, Boyan BD: 1α,25(OH)2D3 
Causes a Rapid Increase in Phosphatidylinositol-specific PLC-β Activity via Phospholipase A2 Dependent 

301. Hirsch A, Shteiman S, Boyan BD, Schwartz Z: Use of Orthopaedic Treatment as an Aid to Third 

BD, Robertson G, Taylor WR: Analyzing bone, blood vessels, and biomaterials with microcomputed 

303. Boyan BD, Schwartz Z: Consideration of systemic hormone status when treating patients with 

Metabolites 1α,25(OH)2D3 and 24R,25(OH)2D3 Are Retained in Growth Plate Cartilage Cells from 

generate an osteogenic microenvironment when grown on surfaces with rough microtopographies. 

306. Gay I, Schwartz Z, Sylvia VL, Boyan BD: Lysophospholipid regulates release and activation of 

Response to Bioactive Glasses in Vitro Correlates with Inorganic Phosphate Content. Biomaterials 

Simpson J, Wieland M, Lohmann CH, Textor M, Boyan BD: RGD-containing Peptide 
GCRGYGRGDSPG Reduces Enhancement of Osteoblast Differentiation by Poly(L-lysine)-graft-


393. Olivares-Navarrete R, Gittens RA, Schneider JM, Hyzy SL, Haithcock DA, Ullrich PF, Schwartz Z, Boyan BD. Osteoblasts exhibit a more differentiated phenotype and increased bone morphogenetic


502.

C. Other Publications

504. Boyan BD and Schwartz Z. “Smart” biomaterials and osteoinductivity. Nat Rev Rheumatol April, 2011, Response to Authors


D. Presentations (available on request)

E. Other Scholarly Accomplishments

Patents and Copyrights

Issued US Patents
10,441,610 B2 Protein delivery from stem cell microcarriers
9,373,584 Cranial suture snake algorithm
8,895,073 Hydrogel implant with superficial pores
8,486,436 Articular joint implant
8,445,006 Biomolecular coating for implants
8,318,192 Method of making load bearing hydrogel implants
8,202,701 Microencapsulation of cells in hydrogels using electrostatic potential
8,142,808 Method of treated joints with hydrogel implants
8,114,808 Biomolecular coating for implants
8,002,830 Surface directed cellular attachment
7,910,124 Load bearing biocompatible device
7,682,540 Method of making hydrogel implants
6,444,446 Calcium binding proteolipid compositions and methods
6,013,853 Continuous release polymeric implant carrier
6,001,352 Resurfacing cartilage defects with chondrocyted proliferated without differentiation using platelet derived growth factor
5,989,907 Methods and compositions for calcium binding proteolipid encoding nucleic acids
5,977,204 Biodegradable implant material comprising bioactive ceramic
5,876,452 Biodegradable implant
5,656,450 Activation of transforming growth factor beta by matrix vesicles
5,607,474 Multi-phase bioerodible implant/carrier and method of manufacturing and using same
5,492,697 Biodegradable implant for fracture nonunions
5,397,672 Resorbable materials based on independently gelling polymers of a single enantiometric lactide
5,290,494 Process of making a resorbable implantation device

Copyrights
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Foreign Patents (partial list)
V. SERVICE
A. Professional Contributions

Current Professional and Scientific Organizations

- American Institute for Medical and Biological Engineering (AIMBE)
- Biomedical Engineering Society (BMES)
- Alpha Omega International Dental Fraternity
- American Academy of Orthopaedic Surgeons (AAOS)
- Orthopaedic Research Society (ORS)
- American Association for the Advancement of Science (AAAS)
- American Society for Bone and Mineral Research (ASBMR)
- American Society for Matrix Biology (ASMB)
- American Society for Testing and Materials (ASTM)
- Biotechnology Industry Organization (BIO)
- American Association for Dental Research (AADR)
- International Association for Dental Research (IADR)
  - Implantology Group of IADR
  - Mineralized Tissue Research Group of IADR

International Conferences on the Chemistry and Biology of Mineralized Tissue
Organization for the Study of Sex Differences (OSSD) (Charter Member)
Tissue Engineering and Regenerative Medicine International Society (TERMIS)
  - North American Chapter

Society for Biomaterials (SFB)
  - Tissue Engineering Special Interest Group of SFB
Society for Women's Health Research
Leadership America Alumnae Association (Class of 1989)
Leadership Texas Alumnae Association (Class of 1988)

Past Professional and Scientific Organizations and Societies

- Surfaces in Biomaterials Foundation
- American Association of Oral Biologists (AAOB)
- Biomineralization Society (Charter Member)
- Implant Dentistry Research and Education Foundation (Charter Member)
- Electron Microscopy Society of America
- Central Texas Biotechnology Consortium
- Forum on Entrepreneurship, San Antonio, TX
- Greater Austin-San Antonio Corridor Council
Southwest Association of Biotechnology Companies
Technology Transfer Society
Texas Mineralized Tissue Society (Founder)
Texas Society for Electron Microscopy
Texas Technology Transfer Association (T³A)
Women’s Faculty Association, University of Texas Health Science Center at San Antonio

**Past and Current Positions and/or Offices Held in Professional Organizations**

(*Elected Offices)

**American Academy of Orthopaedic Surgeons**
- 2012-pres ORS Representative to Women’s Health Initiatives Advisory Board
- 2010-pres Member, Working Group on Platelet Rich Plasma
- 2008-2010 Chair, Instructional Course on Sex and Gender Issues in Knee Osteoarthritis
- 2005-pres Chair, Combination Products Working Group, AAOS/OSMA/FDA Orthopaedic Device Forum
- 2004-2010 Member, Biological Implants Committee
- 2001-pres Member, New Technologies Working Group, Orthopaedic Device Forum
- 2001-2008 Consultant, Women’s Health Issues Committee
- 2000-2003 Chair, Aging and Disability, Bone Structure and Function Panel, Task Force on Musculoskeletal Research
- 2000-2002 Member, Single-Use Forum Work Group, Orthopaedic Device Forum
- 1997-pres Orthopaedic Research Society Representative, Orthopaedic Device Forum
- 1997-2004 Member, Committee on Research
- 1997-2002 Chair, Animal Models Working Group, Orthopaedic Device Forum

**American Association for Dental Research**
- 2011-pres Member, Government Affairs Advisory Committee
- 2005-2012 *Mineralized Tissue Group Councilor, AADR Council
- 1998 Workshop Chair, Industry Affairs Advisory Committee
- 1994-1997 Member, Publications Committee
- 1994-1995 Member, Gies Award Committee
- 1994-1995 Member, Local Arrangements Committee for 1995 Meeting
- 1993-1998 *Member, Board of Directors (President, 1996-1997)
- 1993-1997 Member, National Affairs Committee
- 1988-1990 *Chairman, Finance Committee, San Antonio Section
- 1988-1989 Chairman, Publications Committee
- 1987-1990 *Member-at-Large, Publication Committee
- 1987-1989 Member, Ad Hoc Long Range Planning Committee
- 1985-1986 *Member, Executive Committee, San Antonio Section
- 1984-1987 Member, Summer Student Fellowship Committee
- 1984-1985 *President, San Antonio Section
- 1983-1984 Program Chairman, San Antonio Section

**International Association for Dental Research**
- 2005-2012 *Councilor, Mineralized Tissue Group, IADR Council
- 1997-2000 Member, Biomineralization Award Committee (Chair, 2000)
- 1993 Member, Nominating Committee, Mineralized Tissue Group
- 1990-1993 Member, Exhibits Committee
- 1988-1990 Chairman, Young Investigator Award Committee
- 1988-1989 *President, Mineralized Tissue Group
1987-1990  Member, Gies Award Committee
1987-1988  Chairman, Appropriate Advertising Subcommittee
1987-1988  Member, Young Investigator Award Committee
1987-1988  *Vice President and Symposium Chairman, Mineralized Tissue Group
1986-1987  *Vice President-elect and Program Chairman, Mineralized Tissue Group
1985-1987  Chairman, Student Travel Award Committee, Mineralized Tissue Group
1985-1986  Symposium Organizer, Mineralized Tissue Group

American Association for the Advancement of Science
2011-2012  *Chair-elect, Dentistry Division, AAAS
2005  Organizer, Tissue Engineering for the Head and Neck Symposium, AAAS Annual Meeting
2003-2008  AADR Representative, Section Committee of the AAAS Section on Biological Sciences (G)
2003-pres  *Executive Committee of the Dentistry Section (Chairman, 2004-2005)
1997-2006  AADR Representative, Medical Sciences Section Committee

Orthopaedic Research Society
2011-2014  Member, Basic Science Committee
2008  Workshop Co-chair, Osteoarthritis
2007  Workshop Co-chair, Use of Xenografts in Orthopaedics
2005  Workshop Co-chair, Sex and Gender Issues in Orthopaedics
2004-2005  *Member, Nominating Committee
2000  Faculty, ORS/OREF/AAOS Grant Writing Workshop, January, 2000
1998  Workshop Chair, Animal Models for Use in Orthopaedics
1997-pres  ORS Representative to the Orthopaedic Device Forum
1997-1998  Member, Finance Committee, 3rd Combined US/Japan/Canada Orthopaedic Research Society
1994-1997  *Secretary, Board of Directors
1990-1991  *Member, Board of Directors
1989-1990  Adjunct Program Review Committee
1988-1991  *Member, Membership Committee (Chair, 1990-1991)

Society for Biomaterials
2006-2008  Member, International Scientific Program Committee for the 8th World Congress in Biomaterials, Amsterdam, 2008
1995  Co-chair, Biotechnology Special Interest Group Symposium
1994-1997  Member, Organizing Committee, Implant Retrieval Database Symposium
1994  *Vice-chair, Biotechnology Special Interest Group

Surfaces in Biomaterials Foundation
2008-2010  Chair, Local Arrangements Committee, 2010 meeting in Atlanta
2007  Member, Musculoskeletal Research Network
2001  Member, Awards Committee
2000  Session Organizer
1995  Symposium Co-chair

International Conference on the Growth Plate
2005-2006  Member, Scientific Advisory Board, Second International Conference, Portland, OR
2001-pres  Secretary, Board of Directors
2000-2001  Co-organizer, First International Conference, San Antonio, TX

American Society for Bone and Mineral Research
2008  Abstract Reviewer
2007  Abstract Reviewer
2005  Abstract Reviewer
2004  Abstract Reviewer
2003  Abstract Reviewer  
2002  Abstract Reviewer  
1996-1997  Member, Program Committee  

ASTM  
2000 –present  Chair, Preclinical Assessments Subcommittee, F04 Committee on Tissue Engineered Medical Products  

Society for Women’s Health Research  
2007-2012  Chair, 15-Person Task Force “Isis Fund for Sex Differences Research Network on Sex Differences in Musculoskeletal Health”  

Organization for the Study of Sex Differences  
2007-2009  *Member, Council  
2007-2009  *Member, Executive Committee  

Texas Mineralized Tissue Society  
2000  Organizer, 10th TMTS, Austin, TX  
1997  Co-organizer, 9th TMTS, Corpus Christi, TX  
1992  Organizer, 5th TMTS, Kerrville, TX  
1988-2002  President, TMTS Executive Committee  

Texas Technology Transfer Association  
1990-1992  Member, Scholarship Committee  
1990-1992  Member, Publication Committee  
1990-1991  *Treasurer, Board of Directors  
1989-1990  *Member-at-Large, Board of Directors  
1989-1990  Editor, T³A Newsletter  

Tissue Engineering and Regenerative Medicine International Society  
2007-2008  Member, Scientific Advisory Board, TERMIS, EU, 2008 Meeting, Porto, Portugal  
2006-2008  Member, Finance Committee, TERMIS-NA Council  
2006-2008  Member, Board of Directors, TERMIS-NA Council  
2005-2006  Member, Executive Committee, TESi Annual Meeting, Shanghai, China  
2004-2005  Member, Scientific Advisory Board, Regenerate, Atlanta, GA  
2003-2004  Member, Scientific Advisory Committee, Engineering Tissue Growth  
2003-2005  Member, International Scientific Committee  
2002-2004  Member, Steering Committee of the North American Chapter of TESi  

Vitamin D Workshop  
2005-2006  Member, Program Committee for 13th Workshop, Victoria, BC, Canada  
2002-2003  Member, Program Committee for 12th Workshop, Maastricht, The Netherlands  

International Conferences on the Chemistry and Biology of Mineralized Tissue  
2011-present  President, Board of Directors, ICCBMT, Inc.  
2001-2010  Secretary, Board of Directors, ICCBMT, Inc.  
2004-2005  Member, Scientific Advisory Board, 8th International Conference  
2000-2001  Member, Scientific Advisory Board, 7th International Conference  
1996-1998  Member, Scientific Advisory Board, 6th International Conference  
1995  Guest Editor, Special Edition of Connective Tissue Research: “Proceedings of the Fifth International Conference on the Chemistry and Biology of Mineralized Tissues”  
1992-1996  Co-organizer, 5th International Conference, Kohler, WI, October 22-27  
1992  Member, International Scientific Committee, 4th International Conference  
1988-1992  Chairman, Finance Committee  

EDITORIAL BOARDS
2015-present Member, Editorial Board, *Regenerative Engineering and Translational Medicine*
2011-2013 Member, Editorial Board, *Journal of Biological Chemistry*
2006-present Member, Editorial Board, *Journal of Tissue Engineering and Regenerative Medicine*
2005-2006 Guest Co-Editor, *Dental Clinics of North America* Special Issue on Tissue Engineering in Dentistry
2005-pres Member, Editorial Board, *Biochimica Biophysica Acta*
2000-2005 Member, Board of Editors, *e-biomed: The Journal of Regenerative Medicine*
1997-2002 Member, Editorial Board, *Journal of Oral Implantology*
1996-2006 Member, Editorial Board, *Biomaterials*
1996-pres Member, Editorial Board, *Journal of Biomedical Materials Research*
1995-pres Member, International Advisory Board, *Journal of Bone and Mineral Metabolism*, Japan
1994-1998 Member, Senior Editorial Advisory Board, *Tissue Engineering*
1992-2002 Member, Editorial Committee, *Journal of Musculoskeletal Pain*
1991-1996 Member, Editorial Board, *Journal of Oral Implantology*
1991-1996 Member, Editorial Advisory Board, *Journal of Orthopaedic Research*
1989-2000 Member, Editorial Advisory Board, *Clinical Oral Implants Research*

**OTHER PROFESSIONAL ACTIVITIES**

2015-2016 External Advisory Board, Atlanta Clinical and Translational Science Institute, Emory University Medical School, Atlanta, GA
2014-2020 Member, Biomedical Materials and Bio-imaging Study Section (BMBI), National Institutes of Health, Bethesda, MD
2008-present Alternate, Scientific Review Board, California Institute of Regenerative Medicine, San Francisco, CA
2008-2011 Member, Scientific Review Board, Arthritis Foundation, Atlanta
2007-2008 Member, Scientific Review Board, Ohio Advanced Technology Program
2007-2008 Member, National Research Council Panel on Chemical Science and Technology, National Institute of Standards and Technology
2006-2007 Member Program Committee, Arthritis Foundation Annual Symposium, Atlanta
2005-2013 Member, External Advisory Board, Regenerative Medicine Institute (REMEEDI), Galway, Ireland
2005 Review Panel, Emtech Bio Seed Grant Program, Emtech Bio, Atlanta, GA
2005-2013 Member, Eminent Scholars Advisory Group, Georgia Research Alliance
2003-2008 Member, National Materials Advisory Board, National Research Council of the National Academies
2003-2010 Member, External Advisory Board, Program Project on Osteocytes (Lynda Bonewald, PI), University of Missouri at Kansas City
2003 Member, Advanced Biomaterials R01 Review Panel, NIH
2003-2009 Member, Medical and Scientific Advisory Council, Arthritis Foundation
2003 Member, Search Committee for Investigators with Research Interest in Bone Cell Biology, Emory University Division of Endocrinology.
2002-2004 Member, External Advisory Board, Comprehensive Training Program in Oral Biology, David Eich, PI, University of Missouri at Kansas City
2002-pres External Advisory Board, Comprehensive Training Program in Oral Biology, John Keller, PI, University of Iowa.
2002-2003 Faculty Member, Symposium on Musculoskeletal Allograft Tissue: Safety and Efficacy, at the 2003 Annual Meeting of the AAOS, New Orleans, LA, February 9, 2003
2002  Public Hearing FDA Regulation of Combination Products, Testimony on Behalf of the AAOS
2002  Member, Special Review Committee for Osteoarthritis SCOR Applications, National Institute of Arthritis & Musculoskeletal & Skin Diseases, Washington, D.C., April, 2002
2002  Member, FDA Advisory Board on BMP-2 Implant for Spine
2001  Scientific Reviewer, Scientific Peer Review with the Fiscal Year 2001 Neurofibromatosis Research Program (NFRP, Department of Defense (DOD), U.S. Army Medical Research and Materiel Command (USAMRMC), Congressionally Directed Medical Research Programs (CDMRP)
2001-2002  Member, Internal Advisory Committee, San Antonio Center for Research to Reduce Oral Health Disparities (SACRROHD)
2000-2001  Member, U.S. Clinical Advisory Board, Spine Solutions, Inc.
2000  Faculty, "Status of Products for Bone Replacement and Repair that Contain Biological Materials," Tissue Engineering in Bone, FDA Staff College, February, 2000, Rockville, MD
2000  Faculty Member, MacArthur Cartilage Repair Workshop, Hospital for Special Surgery, New York, NY, May 13, 2000
2000  Session Chair, Cell Surface Interactions Session, Surfaces in Biomaterials 2000 Symposium, Miami, FL
1999-2004  Member, Orthopaedic Education and Research Foundation Peer Review Committee, Research Grant Applications, Rosemont, IL
1999  Session Chair, Biomedical Engineering Society, Biomaterials and Cellular Response, Chicago, IL, October 15, 1999
1999  Chairperson, Telephone Conference for K01 Awards, National Institute of Arthritis Musculoskeletal and Skin Diseases, May 7, 1999
1999  Ad hoc reviewer, Musculoskeletal and Dental Review Group, General Medicine B Study Section, NIH, Bethesda, MD, June, 1999
1999  Member, Special Emphasis Panel, National Institute of Dental and Craniofacial Research, May, 1999
1998-2002  Reviewer, McArthur-Cartilage Award grants, Hospital for Special Surgery, The New York Hospital and Cornell University Medical College
1999  Faculty, ORS/OREF/AAOS Grant Writing Workshop, "Budgets/justification," American Association of Orthopaedic Surgeons, Rosemont, IL, January 1999
1998-2002  Grantee Officer, National Institute of Arthritis and Musculoskeletal and Skin Diseases Institutional Study Section, National Institutes of Health
1998-2002  Member, Arthritis and Musculoskeletal and Skin Diseases Review Committee, National Institute of Arthritis and Musculoskeletal and Skin Diseases
1998-2001  Chairman, Orthopaedic and Rehabilitation Devices Panel, Medical Devices Advisory Committee, Food and Drug Administration
1998  Session Chair, Society for Biomaterials
1997-2001 Member, Department of Veterans Affairs (VA) Merit Review Subcommittee for Surgery
1997 Consultant, Spine Tech, Inc., Minneapolis, MN
1997 Chair, Bone Session, Gordon Research Conferences on Periodontal Diseases, New England College, NH
1997 Member, Organizing Committee, Dentistry Subgroup, NIH Women's Health Initiative Conference, Bethesda, MD
1997 Organizer, "Funding - Non-National Institutes of Health," Educational Program/Workshop, Orthopaedic Research Society Annual Meeting, San Francisco, CA
1997 Panelist/discussant, "Protecting Your Orthopedic Invention," Orthopaedic Research Society Plenary Session
1996-2001 Member, Orthopaedic Device Panel, FDA
1996-2000 Member, Board of Advisors, Institute for Spine & Biomedical Research, Dallas, TX
1996 Member, Program Committee, Bone Cartilage and Connective Tissue Matrix Category, 1996 Annual Meeting, American Society for Bone and Mineral Research, Seattle, OR
1996 Moderator, Spine Fusion Session, 42nd Annual Meeting, Orthopaedic Research Society, Atlanta, GA
1995 Consultant, Orthopedic and Rehabilitation Devices Panel, Center for Devices and Radiological Health, Food and Drug Administration
1995 Session Chair, "Biologic Responses to Wear Debris," American Academy of Orthopaedic Surgeons Workshop on Wear Debris
1995 Session IX Chairman, "Bone Cell Phenotypes in Host Responses," Gordon Conference on Periodontal Diseases
1994-1999 Consultant and Chair, Scientific Advisory Board, OsteoBiologics, Inc.
1994-1996 Member, Scientific Advisory Board, Implant Dentistry Research and Education Foundation
1994-1995 Co-chair, International Symposium on Cartilage Metabolism, Osaka, Japan
1994 Member, Organizing Committee of the International Conference on Bone Morphogenetic Proteins in Honor of Marshall Urist
1994 Panelist, "Symposium - The Reviewers' Perspective," Writing Winning Grants by Avoiding Common Pitfalls Workshop, University of Texas Health Science Center at San Antonio
1994 Ad Hoc Member, Orthopaedic and Musculoskeletal Diseases Study Section, National Institutes of Health
1993 Consultant, Biomaterials Initiative, Columbia University
1993 Moderator, "Technology Transfer," S/IUCRC Directors' Meeting, National Science Foundation
1992-1993 Member, Planning Committee, S/IUCRC Directors' Meeting, National Science Foundation
1992 Presenter, "Writing Industry Grants," Dentist/Scientist Program Industry Grant Writing Workshop, University of Texas health Science Center at San Antonio
1992 Chairman, National Institutes of Health Special Study Section
1992 Invited participant, Vision 2020, San Antonio, TX
1992 Co-sponsor, Forum on Entrepreneurship, San Antonio
1992 Panel Discussion Moderator, "Research Collaborations with Industry," Building Collaborations in Research and Training, University of Texas at San Antonio
1992 Co-sponsor and presenter, Business Plan Development Conference/Workshop, Industry University Cooperative Research Center, University of Texas Health Science Center at San Antonio
1991-1992 Presenter, Associate Editor of Proceedings, Organizing Committee, NIH Workshop on Osteoporosis and Oral Bone Loss, Landsdowne, Virginia
1991-1995 Member, Technology Review Board, Technology Transfer Team of San Antonio
1991 Consultant, Improving the Dental Research Program in Veterans Health Services and Research Administration, Washington, D.C.
1991 Participant, Dental Research Programs Advisory Committee, Minority Oral Health Issues, National Institute for Dental Research
1991 Chairman, Industry/University/Government Interactions: Models for the Future, National Institute for Dental Research-sponsored Conference at Forsythe Dental Center and Harvard University in honor of Jack Hein
1991 Chairman, Study Section, "Gordon Conference on Calcium Phosphates," National Institute for Dental Research
1991 Consultant, Training of Women and Minorities, Testimony to Program Advisory Committee, National Institute for Dental Research
1990 Reviewer, Grant Review Committee, National Osteoporosis Foundation
1990-1991 Member, Executive Committee and Chairman, Young Investigator Awards, Fifth International Conference, Cell Mediated Calcification and Matrix Vesicles, Hilton Head, SC
1989 Ad Hoc Consultant, Board of Scientific Counselors, Intramural Research Program, National Institutes for Dental Research
1989-1990 Chairman, Ad Hoc Long Range Planning Committee, Academia/National Institutes for Dental Research/Industry Section, National Institutes for Dental Research
1989-1993 Member, Orthopaedic and Musculoskeletal Diseases Study Section, National Institutes of Health
1989-pres Reviewer, Implantology Foundation Research Grants
1988—1990 Chairman, North American Fellowship Committee, Alpha Omega Foundation
1988-1990 Member, Editorial Advisory Board, Windows, Texas A & M Technology Transfer Journal
1988 Member, Editorial Advisory Board, Clinical Orthopaedics and Related Research
1988-1992 Reviewer, Veterans Administration Research Grants
1988-1989 Chairman, Ad hoc Long Range Planning Committee, Mineralized Tissues and Craniofacial Anomalies Section, National Institute for Dental Research
1987-pres Reviewer, Journal of Orthopaedic Research
1987-pres Ad hoc Grant Reviewer, Medical Research Council of Canada
1987-pres March of Dimes Foundation, Grant Reviewer
1987-1988 Member, Scientific Advisory Board, Texas Research Park
1987-1988 Member, NIDR Committee to Study Training Grants
1987  Chairman, Oral Biology and Medicine Study Section, AHR-2 for SBIR proposals
1987  Member of Program Project Site Visit Team, Diabetes Study Section
1987  Chairman and Organizer, AAAS Symposium on Calcium Metabolism, Austin, Texas, April
1987-1988  Chairman and Organizer, "Bioactive Factors in Bone Development and Repair", Kerrville, Texas, 1988
1986-1995  Media Spokesperson, American Dental Association
1986-1995  Media Spokesperson, American Association for Dental Research
1985-1988  Executive Committee Member, Third International Conference on Chemistry of Mineralized Tissues, Chatham Bars, MA 1988
1985-1987  Board of Directors, San Antonio Bone Bank Foundation
1985  Session Chairman, International Association for Dental Research
1984-pres  Reviewer, *Journal of Biological Chemistry*
1984-1987  Co-Founder and Scientific Consultant, Biomedical Development Corporation
1984-1985  Member, Consultant Panel on the Center Grant Program, National Institute for Dental Research
1984  Session Chairman, American Association for Dental Research
1983  Session Chairman, American Association for Dental Research
1982-2001  Advisor, Alpha Omega International Dental Fraternity, San Antonio Chapter
1982-pres  Reviewer, *The American Journal of Pathology*
1981  Session Chairman, Mineralized Tissue Group Section, American Association for Dental Research
1980-pres  Consultant, Intramural Review Board, National Institute for Dental Research
1980-pres  Reviewer, *Clinical Orthopaedics and Related Research*
1980-pres  Reviewer, *Bone* (formerly *Metabolic Bone Disease and Related Research*)
1980-1987  Consultant, Alternate, June, 1982; Consultant, Alternate, June, 1983; Consultant, October, 1983; Consultant, Alternate, February, 1984; Member, June 1984 to June 1987; National Institutes of Health, Oral Biology and Medicine Study Section
1980-1981  Coordinator, Houston Area Calcium Metabolism Society
1980-1981  Reviewer, National Institutes of Health-National Institute for Dental Research, Goals and Objectives Panel, Mineralization Component of the Soft Tissue, Stomatology and Nutrition Program Branch
1980  Session Co-Chairman, American Association for Dental Research
1975-pres  Reviewer, *Journal of Dental Research*
1975-1977  Abstractor, American Dental Association

B. Campus Contributions

2007-2008  Chair, Subcommittee on Technology Transfer Issues
2007-2008  Member, Provost’s Strategic Planning Initiative
2007-pres  Member, Strategic Planning Committee, IBB
2006-2010  Member, Executive Committee, Cancer Center for Nanotechnology Excellence
2006-2007  Chair, Vaccine Technology Working Group, College of Engineering
2006  Invited Participant, Spring Midnight Breakfast, Georgia Institute of Technology, Atlanta, GA, April 2006, Fall 2006
2005-pres  Member, Corporate Research Leaders Forum, Georgia Biomedical Partnership
2005-2007  Member, Strategic Planning Committee, BME
2005-pres  Director, Laboratory for Craniofacial Plastic Surgery Research, Children’s Healthcare of Atlanta
2005-2006  Member, Cell Biology Search Committee, Biology
2005-2006  Member, Faculty Advisory Committee, BME
2005  Member, Strategic Planning Task Force for the Georgia Tech Physiology Research Laboratory
2005  Member, Sigma Xi Graduate Student Thesis Award Committee
2004-2007  Member, Search Committee for New GTRI Laboratory Director
2004-2008  Chair, BME Reappointment, Promotion and Tenure Committee
2004-2006  Member, College of Engineering Reappointment, Promotion and Tenure Committee
2004  Panelist, ADVANCE-WST Career Planning/Strategizing Panel October
2002-2008  Deputy Director for Research, Georgia Tech/Emory Center for the Engineering of Living Tissues
2002-pres  Member, Steering Committee, Institute of Bioengineering and Biosciences
2002-pres  Member, Graduate Program Committee, BME
2002-2004  Member, Bioengineering Graduate Program Committee, BME
2002-2003  Member, Executive Advisory Committee, BME
2000-2002  Member, Georgia Tech / Emory Center for the Engineering of Living Tissues, External Advisory Board, Atlanta, GA

C. Other Contributions

The University of Texas Health Science Center at San Antonio
University

2001  Member, Ad Hoc Committee-instrumentation Services, Educational Research and Instrumentation Advisory Committee
1998  Member, Ad Hoc Committee for Intellectual Properties/Technology Transfer
1998  Member, Search Committee, Chairman of Anesthesiology
1997-2001  Chair, Tissue Engineering Task Force, COHRCID
1997-1998  Ad Hoc Member, Institutional Strategic Research Planning Committee
1997-1998  Member, Subcommittee on Future Trends in Interdisciplinary Research, Accreditation Committee
1993-1994  Faculty Advisor, S.H.A.R.E. Committee, Office of Student Services Substance Abuse Task Force
1991-pres  Member, Conflict of Interest Committee
1987-1988  Member, PET Committee
1986-1991  Chairman, Industry-University Cooperative Research Center Industry Advisory Board
1985-1987  Member, President's Task Force on an Institutional Travel Desk
1984  Member, Ad Hoc Committee for Center for Aging Research
1982-1984  Chairman, Health Science Center Women's Faculty Group Umbrella Committee
1981-1988  Member, Institutional Research Grants Committee
1979-1981  Member, Subcommittee on Academic and Behavioral Standards

Medical School

1996-2002  Member, Executive Committee, Howard Hughes Medical Institute Program
1995  Member, Ad Hoc Committee for Focus on Research, Medical School Self Study for Liaison Committee for Medical Education (LCME)
1994  Member, Ad Hoc Committee for the Medical School Self Evaluation [Americans with Disabilities Act (ADA)]
1991-1996  Chairman, Department of Orthopaedics, Promotion and Tenure Committee
1988-1992  Chairman, Department of Orthopaedics, Animal Use Committee

Dental School

2001-2004  Member, Dental School Faculty Development Committee
2000-2002  Member, Principal Committee on Research (Subcommittee), Accreditation Steering Committee
1997-2002  Chair, Executive Committee, Dental Materials Program Project
1997-2002  Member, Executive Committee, Comprehensive Oral Health Research Centers of Discovery Proposal
1994-1995  Member, Steering Committee, Dental School's 25th Anniversary International Symposium
1993-1994  Member, Search Committee for Biomaterials, Dept. of Restorative Dentistry
1986-1987  Member, DSRDP Committee (Practice Plan), Department of Periodontics
1983-1987  Chairman, Financial Planning Committee, Department of Periodontics
1985-1986  Chairman, Intramural Research Seminar, Department of Periodontics
1981-1983  Director, EM Facility, Department of Periodontics
1993-1994  Member, Task Force on Tenure and Appointments, Dental School
1988-1989  Member, Ad hoc Committee on Biomaterials, Dental School
1988-2001  Member, Ad hoc Dean's Advisory Committee on Research, Dental School
1988-1989  Member, Accreditation Sub Committee on Research, Dental School
1985-1987  Chairman, Dental Research Committee
1984-1988  Member, NIH Summer Dental Student Training Grant Committee
1983  Member, Dental Student-Faculty Relations Committee - Curriculum Subcommittee
1982-1986  Executive Committee, Women's Faculty of the Dental, Graduate and Medical Schools; Member, Corresponding Secretary; Chairman, Professional Development Committee
1981-1984  Coordinator (Drs. Leinfelder, Schachtele, Sela), Distinguished Dental Scholars Lecture Series
1981-1982  Ex-officio Member, Dental Research Committee
1981  Chairman, Ad hoc Dental School Space Allocation Advisory Committee
1979-1981  Secretary, Dental Postgraduate/Graduate Faculty Advisory Committee
1978-1979  Member, Dental Postgraduate/Graduate Faculty Advisory Committee

University of Texas Health Sciences Center at San Antonio
Administrative Responsibilities
Department
2001-2002  Vice Chair for Research, Orthopaedics
2000-2002  Chairman, Promotion and Tenure Committee, Orthopaedics
1990-1996  Chairman, Promotions and Tenure Committee, Orthopaedics
1988-2002  Director, Division of Orthopaedic Research
1988-2002  Coordinator, Mineralized Tissue Group Journal Club
1985-1988  Coordinator, Periodontics Intramural Seminar
1984-1988  Director, Periodontics Tissue Culture Facility
1983-1986  Chairman, Financial Planning Committee, Periodontics
1981-1984  Coordinator, Periodontics Research Seminar
1982-1984  Coordinator, Periodontics Research Journal Club
1982-1983  Coordinator, Table Clinic Presentations

Dental School
1985-1987  Chairman, Dental School Research Committee
1986  Provisional Director, Research Center for Oral Biology (1/1/86-7/1/86)
1984-1985  President, San Antonio Section/American Association for Dental Research
1981-1984  Supervisor, Electron Microscopy Laboratory, UTHSCSA Dental School
1976-1981  Supervisor, Electron Microscopy Laboratory, Dental Science Institute, Houston
1976-1981  Executive Advisory Committee, Dental Science Institute, Houston

University
1992-2001  Director, Center for the Enhancement of the Biology/Biomaterials Interface at San Antonio
1986-2001  Director, Industry/University Cooperative Research Center

The University of Texas Health Science Center at Houston
Graduate School of Biomedical Sciences
1979-1981  Member, Academic Standards Committee (GSBS)

Dental School
1979-1980 Member, Ad Hoc Human Biology Review Committee
1978-1981 Member, Committee on Research, Dental Branch
1977-1981 Member, Developmental Biology Topic Committee, Dental Branch
1979-1981 Chairman, Subcommittee on Graduate/Postgraduate Curriculum
1976-1978 Member, Executive Review Committee, Dental Science Institute

**Other Activities (not updated)**

- 2004-2005 Atlanta Task Force on Combination Products, Medical Technology Leadership Forum
- 2002 Faculty, Emory University Mini Medical School
- 2000 Session Program Leader, "Why Are Boys Taller than Girls?", Northside ISD Gifted and Talented Program, October 30, 2000, San Antonio, TX
- 1994-1996 Member, Imagineer Awards Committee, Mind Science Foundation, San Antonio, Texas
- 1994-2000 Member, School Advisory Team, Holmgreen Junior/Senior High School, San Antonio, TX
- 1993-2000 Mentor, Holmgreen Junior/Senior High School, San Antonio, Texas
- 1993-2000 Member, San Antonio Health Care Task Force, City of San Antonio
- 1993 Member, Records Management Preservation Advisory Committee, Government Technology Conference, Austin, Texas, February 10-12
- 1992 Invited speaker, "Mechanistic Aspects of Calculus Formation and Control," American Association for Dental Research
- 1992 Member, Vision 20/20 Task Force, City of San Antonio
- 1992 Chair, "Biotechnology: Miracle Workers and the New Wildcatters Explore the Last Frontier," Leadership America, Houston Symposium
- 1991-1992 Member, Advisory Board, Quatros Caminos, Greater San Antonio-Greater Austin Corridor Council
- 1991 Co-chairman, Athenaeum, Leadership Texas Alumnae Association
- 1989-1990 Elected San Antonio Regional Representative, Alumnae Board, Leadership Texas
- 1989 Selected to "Leadership America" supported by the Foundation for Women's Resources, Washington, D.C.
- 1988 Selected to "Leadership Texas" supported by the Texas Foundation for Women's Resources, Governor's Office, Austin, Texas
- 1988 Member, Economic Development/Business Formation, Committee of the Technology Industry Legislative Task Force (TILT)
- 1987-pres Elected to membership in the San Antonio 100
- 1987-1988 Member, Board of Directors, Volunteer Department, Bexar County Hospital District
- 1987-1988 Treasurer, The University of Texas Health Science Center Club
- 1987-1988 Member, Scientific Advisory Board, Texas Research Park
- 1986 Witness, Texas Legislature on the role of Texas government in fostering biotechnology
- 1985 Speaker, Women's Fair Forum, Mayor's Commission on the Status of Women, San Antonio, Texas
- 1985 Scientific Expert on Biochemistry of Fluoride, City Council, San Antonio, Texas
- 1985 Invited Speaker, Texas Women's Resources, "Technology Spectrum: Opportunities for Women," Dallas, Texas
1984  Speaker, Women in the 80's Symposium, Mayor's Commission on the Status of Women, San Antonio, Texas
1984  UTHSCSA Representative to local organizations for the Permanent University Fund
1983-2002  Member, Women's Faculty Association of the Dental, Graduate and Medical Schools Executive Committee; Chairman, Health Science Center Umbrella Committee (1983-1985); Corresponding Secretary (1983-1985); Chairman, Professional Development Committee (1985-1986)
1983  Judge, Northside School District Science Fair
1982-2002  Advisor, Alpha Omega International Dental Fraternity, San Antonio Chapter
1982-1984  UTHSCSA Representative, Ed White Middle School Career Day

**Invited Lectures (not updated)**

Invited Speaker, 10th Annual Army Force Health Protection Conference, August 5-10, 2007.
Invited Speaker, “Biological Basis for SLActive”, ITI Brazil Congress; Sao Paulo, Brazil, September 2006.
Invited Faculty, American College of Spine Surgeons Annual Meeting, Riverside, CA, July, 2005.
Invited Speaker, ITI Annual Meeting, Munich, Germany, June, 2005.
Invited Speaker, “Biomedical Engineering Seminar Series”, Mayo Clinic College of Medicine, Rochester, Minnesota, May, 2005.
Invited Speaker, ”Annual Update on Women’s Health Research: Discoveries and Implications, Ninth Annual Scientific Advisory Meeting, Society for Women’s Health Research, Washington, DC, October, 1999.
Invited Speaker, ”Influence of Surface Roughness on Osteoblasts, ETH, Zurich, Switzerland, August 10, 2000.
Invited Speaker, Annual Update on Women's Health Research: Discoveries and Implications, Ninth Annual Scientific Advisory Meeting, Society for Women's Health Research, Washington, DC, October, 1999.
Invited Speaker, "Matrix Vesicle Proteases in Mineralization," Division of Rheumatology and Immunology, University of Miami School of Medicine and Geriatrix Research, Education, and Clinical Center, Miami Veterans Affairs Medical Center, Miami, FL, May, 1998.
Invited Speaker, "Vitamin D Metabolism in the Growth Plate," Basic Science Teaching Series, Rhode Island Hospital, Brown University School of Medicine, Providence, RI, May, 1998.
Invited Speaker, Combined Meeting of the German Society for Endocrinology, the Orthopaedic Society for Osteology, and the Austrian Society for Osteology, Germany, February, 1999.
Invited Speaker, "Sources for Alternate Funding," AAOS, Grant Writing Symposium, October, 1997.
Invited Speaker, "Spin-off Opportunities for University-based Biomedical Research in Texas," Texas Technology Summit, Austin, September, 1997.
Invited Speaker, "The Synergistic Effects of Vitamin D3 Metabolites on Costochondral Chondrocytes Are Mediated by Increases in PKC Activity," Session I - TGFβ Signaling, Department of Surgery Works in Progress Symposium, UTHSCSA, October, 1997.
Invited Speaker, "Growth Plate Chondrocytes Store Latent TGFβ in Their Matrix Through Latent TGFβ Binding Protein," Session V - TGFβ, Mismatch Repair and Other Cytokines, Department of Surgery Works in Progress Symposium, UTHSCSA, October, 1997.
Invited Speaker, "Cartilage Repair," Orthopaedic University Hospital of Zurich, Balgrist, Switzerland, May, 1997.
Invited Speaker, "Particle Imaging," Wear and Its Consequences in Total Joint Prostheses Short Course, Society for Biomaterials Annual Meeting, April, 1996.
Invited Speaker, Northern Rockies Joint Workshop on Osteoporosis and Osteoarthritis, 8/25-30/96.
Invited Speaker, "Are the Biological Actions of 1a,25(OH)2D3 and 24,25(OH)2D3 in Chondrocytes and their Matrix Vesicles Genomic or Nongenomic?," Ninth Workshop on Vitamin D, Orlando, FL, February, 1994.
Invited Speaker, "Development of an in Vivo Model of Endosteal Bone Healing," Miles Institute, Miles Inc., West Haven, CT, 1993.
Invited Speaker, "Regulation of Endochondral Ossification," Miles Institute, Miles Inc., West Haven, CT, 1993.
Invited Speaker, Grand Rounds, Department of Orthopaedics, Baylor College of Medicine, Houston, TX, 1993.
Invited Speaker, Boehringer-Mannheim DePuy, Warsaw, IN, 1993.
Invited Speaker, American Biogenetic Sciences, Inc., South Bend, IN, 1993.
Invited Speaker, Department of Biochemistry, Rush Presbyterian St. Luke's Medical School, Chicago, IL, 1992.
Invited Speaker, Conference on Tissue Interfaces in the Musculoskeleton in Health, Disease and Repair, Gordon Research Conference on Bioengineering and Orthopaedic Surgeons, August, 1992.
Invited Speaker, "Technology Transfer in the Biotech Industry," Technology Transfer Study Group, Austin, TX, April, 1990.
Invited Consultant, "Development of an Industry-University Cooperative Research Center in Hospital Administration," The Western Network for Education in Health Administration, January, 1990.
Invited Speaker, "Regulation of Endochondral Ossification," Eastman Dental Center, September, 1989.
Invited Speaker, "Regulation of Endochondral Ossification," Emory University, August, 1989.
Invited Speaker, "Hormonal Regulation of Membrane-Mediated Biologic Calcification," American Chemical Society Symposium, Dallas, TX, 1989.
Invited Speaker, "Mechanism of Vitamin D Regulation of Endochondral Ossification," Department of Biochemistry, University of Toronto, 1989.
Invited Speaker, "Direct Effects of Vitamin D Metabolites on Membranes," Department of Pharmacology, UTHSCSA, 1989.
Invited Speaker, "Endochondral Bone Growth," Campbell Soup Institute, Fayetteville, AR, February, 1988
Invited Speaker, "Role of Proteolipids in Calcification of Cartilage," Department of Chemistry, University of South Carolina, March, 1988.
Invited Speaker, "Vitamin D Regulation of Chondrogenesis," Advances in Mineral Metabolism, Snowmass, CO, April, 1988.
Invited Speaker, "Dental Calculus Formation and Prevention," La Academia Mexicana de Odontopediatrica, Mexico City, Mexico, October, 1987.
Symposium Organizer and Speaker, "The Role of Membranes in Biologic Calcification," AAAS, Austin, TX, March, 1987.
Invited Speaker, "Implant Tissue Interactions," University of North Carolina Dental Research Institute, April, 1987.
Invited Speaker and Symposium Chair, "Calcium: Metabolism, Transport, and Binding Proteins", SWARM Division of AAAS, April, 1987.
Invited Speaker, "Matrix Vesicle Biogenesis," Department of Pathology, University of Kansas Medical Center, May, 1986.
Invited Speaker, Fourth International Symposium on Calcium Binding Proteins in Health and Disease, Trieste, Italy, May, 1983.
Invited Speaker, Fifth International Workshop on Calcified Tissues, Kiryat Anavim, Israel, March, 1982.
Invited Speaker, Calcific Disease Mini Symposium, FASEB, New Orleans, LA, April, 1982.
Invited Speaker, Third International Symposium on Matrix Vesicles, Spoleto, Italy, June, 1981.
Invited Speaker, First International Conference on the Chemistry and Biology of Mineralized
Connective Tissues, Chicago, IL, May, 1981.

VI. Grants and Contracts since 2005

As Principal and Co-principal Investigator

ACTIVE

R01 AR052102-05 (Boyan) 3/2011-2/2016 2.0 calendar months
NIH/NIAMS
Mechanisms of Cell/Surface Interaction
Goal: This grant studies the mechanisms that mediate the responses of mesenchymal cells to biomaterials.

Atlantic Pediatric Device Consortium 9/2013-8/2018 0.5 calendar months
FDA
Goal: To develop pediatric devices.

UL1 RR025008 (Stephens) 2009-2012 0.5 calendar months
NIH/NCRR
Atlanta Clinical and Translational Science Institute
Goal: The overall goal of the CTSA award is to provide structural support to facilitate transfer of technology from bench to bedside. Funds to Georgia Tech are used to support stipends and tuition for an MS degree in Clinical and Translational Research, to support faculty teaching in the bioethics course, and to support research in biomedical informatics related to clinical research.

U.S. Department of Defense (Boyan) 9/1/08 to 8/31/14 2.0 calendar months
Center for Advanced Engineering for Soldier Sustainability
Goal: The major goal of this grant is the development of stem cell delivery technologies.

U.S. Department of Defense (Guldberg) 2008-2013 0.5 calendar months
Armed Forces Institute of Technology Subproject $1,000,000 total costs
Spatial and Temporal Control of Vascularization and Innervation of Composite Tissue Grafts
Goal: This project is developing a rat segmental defect model for testing materials used to treat composite injuries.

Children’s Healthcare of Atlanta (Boyan) 7/1/10 to 6/30/15 2.0 calendar months
Children’s Healthcare of Atlanta’s $5,000,000 total costs
Center for Pediatric Healthcare Technology Innovation
Goal: This funds supports the Laboratory for Craniofacial Plastic Surgery through 2012; provides administrative support to manage the Georgia Tech/CHOA seed grant program, and funds seed grants to develop technologies for use in children. No funds are used to support cell/Ti interaction research.

Price Gilbert, Jr. Foundation (Boyan) 2006-2010
Goal: Development of an ERp60 Knockout Mouse

PENDING FUNDING

1 R01 AR060896-01 (Boyan) 4/1/2011-3/31/2016 1.8 calendar months
NIH/NIAMS 2,498,606.00 total costs
Membrane Mechanisms of Vitamin D Action in Bone and Cartilage
Goal: This project examines the molecular actions of 1,25-dihydroxy vitamin D3 in osteoblasts and chondrocytes.

PAST FUNDING

R01 AR052102 (Boyan) 8/2006-7/2011 2.0 calendar months
NIH/NIAMS $240,000 (direct)
Mechanisms of Cell/Surface Interaction
Goal: This grant studies the mechanisms that mediate the responses of mesenchymal cells to biomaterials.

U.S. Department of Defense (Guldberg) 2009-2012 0.5 calendar months
Engraftment Strategies for Functional Repair of Composite Musculoskeletal Injuries
Dr. Boyan receives $37,000 per year to offset costs related to the development of decellularized muscle grafts.

Protocol 06143006 2007-2010
U.S. Army Institute of Surgical Research $1.6 million total costs
Adipose-derived Mesenchymal Stem Cells for treatment of Large Bone Defects
PI: Barbara D. Boyan

ITI Grant 490-2006 2007-2009
ITI Foundation $149,000 direct
Mechanisms of Endogain Action in Peri-Implant Osteogenesis
PI: Barbara D. Boyan

Boston Scientific Corporation 2007-2008
Restoration of Bone Marrow Compartment in Aged Rats Phase I $193,000 total costs
PI: Barbara D. Boyan

Georgia Research Alliance Challenge Grant 9/1/06 to 8/31/07
Adipose-derived Mesenchymal Stem Cells to Treat Large Bone Defects $50,000 total costs
Co-PI: Barbara D. Boyan; Co-PI: Clifton Baile

NIH/NCI #1U54CA119338-02 9/1/05 to 8/30/10
NIH Center of Cancer Nanotechnology Excellence (Shuming Nie, PI) $35,000 direct
Annually
Project #2 - Activatable Nanoprobes for Cancer Detection and Analysis
Gang Bao, PI; Barbara Boyan, Co-PI
Education Core, BDB, Co-PI

Children’s Healthcare of Atlanta 7/1/05 to 6/30/09
CHOA Laboratory for Craniofacial Plastic Surgery Research $2,000,000 total costs
PI: Barbara D. Boyan

NSF #103573 2/1/06 to 7/31/08
In Vitro Dissolution, Resorption, and Biocompatibility $300,000 total costs
Laurie Gower, PI, Subcontract to BDB
Price Gilbert, Jr. Foundation  
Development of an ERp60 Knockout Mouse  
5/1/06 to 4/30/08  
$200,000 gift

ITI Project 2003  
ITI Foundation  
Multifunctional Titanium Implant Surface  
Marcus Textor, PI; Subcontract to BDB  
9/1/04 to 8/31/07  
$37,000 direct annually

Various Donors (Boyan)  
Assessment of Osteoinduction Activity of DBM Formulations  
approximately $100,000

BIOMET  
Effect of Pulsed Electromagnetic Fields on Bone and Cartilage Cells  
Pl: Barbara D. Boyan  
$100,000 annual gift

NSF EEC9731643 (Nerem)  
1998 – 2008  
Georgia Tech/Emory Center for the Engineering of Living Tissue  
“Design Requirements for Musculoskeletal Tissue Engineering” (BDB subgrant)  
“Preclinical Studies of a Hydrogel Spinal Disc Prosthesis” (BDB subgrant)  
“Bioreactor Conditions to Enhance Architecture of Tissue-Engineered Cartilage for Improved Material Properties” (BDB subgrant)  
“In Process Cryopreservation of Tissue Engineered Cartilage” (BDB subgrant)

1R41 AR051254  
NIH/NIAMS  
Development of Hydrogel Spinal Disc Replacement  
Pl: Barbara D. Boyan  
9/1/04 to 8/31/06  
$107,000 total costs

Georgia Research Alliance  
Integration of Biomaterials with Biologic Tissues: Disc Annulus Repair Patch  
Pl: Barbara D. Boyan  
9/1/05 to 8/31/06  
$50,000 total costs

Georgia Research Alliance Eminent Scholar Challenge Grant  
Investigation of Vitamin D receptors in Adipocytes from Bone Marrow and Fat Pads  
Pl: Barbara D. Boyan  
Co-PI: Barbara D. Boyan; Co-PI: Clifton Baile  
9/1/05 to 8/31/06  
$50,000 total costs

NIH (Gall/Boyan)  
Soft tissue Orthopaedic Fixation with Shape Memory Polymers  
2006-2010
David Brenner
CURRICULUM VITAE
David Allen Brenner, M.D.

Business Address  UCSD Health Sciences
9500 Gilman Drive (MC0602)
1318A Biomedical Sciences Building
La Jolla, CA  92039-0602
Telephone: (858) 534-1501; Fax: 858-822-0084
E-mail:  dbrenner@ucsd.edu

Professional Experience:

June 1973 – January 1974
Scientific crew, Lamont-Doherty Geological Observatory, Oceanographic Research Ship, R.V. Vema
September 1971 – May 1975
B.S. Cum laude with Departmental Honors in Biology, Yale College, New Haven, CT
September 1975 – May 1979
M.D. Yale University School of Medicine
Student Editor, Yale Journal of Biology and Medicine
Recipient, Harry S.N. Greene Prize for outstanding thesis (Advisor, J.R. Bloomer)
June 1979 – June 1982
Resident, Department of Internal Medicine, Yale-New Haven Medical Center, New Haven, Connecticut
July 1982 – June 1985
Medical Staff Fellow Research Associate, Genetics and Biochemistry Branch (Advisor, R.D. Camerini-Otero) National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, Maryland
June 1985 – June 1986
Gastroenterology Fellow, University of California, San Diego, California
June 1986 – June 1990
Assistant Professor of Medicine in Residence, University of California, San Diego, California
July 1987 – December 1992
Staff Physician, Veteran's Administration Medical Center, San Diego, California
June 1988 – June 1989
Acting Assistant Chief of Medicine, Veteran's Administration Medical Center, San Diego, California. Recipient, Chief Medical Resident's Teaching Award
June 1990 – December 1992
Associate Professor of Medicine, University of California, San Diego, California
Clinical Investigator, Veteran's Admin Med Ctr, San Diego, California
January 1993 – March 2003
Professor of Medicine and Biochemistry and Biophysics, Chief, Division of Digestive Diseases and Nutrition, University of North Carolina at Chapel Hill
Co-Director, Center for Gastrointestinal Biology and Disease, University of North Carolina at Chapel Hill and North Carolina State University
June 1998 – June 1999
Kenan Fellow in support of sabbatical
June 2000 – June 2003
Nina C. and John T. Sessions Distinguished Professor of Digestive Diseases and Nutrition
Editor-in-Chief, Gastroenterology
June 2002 – March 2003
Director, UNC Center for Digestive Diseases and Nutrition
March 2003 - February 2007
Samuel Bard Professor and Chairman, Department of Medicine, Columbia University
June 2003- February 2007
   Member: Herbert Irving Comprehensive Cancer Center: Experimental Therapeutics, Gastrointestinal Cancer.
December 2003 - February 2007
   Member, Columbia University Institute of Nutrition
February 2007-June 2018
   Dean, UCSD School of Medicine, University of California, San Diego, California
February 2007-present
   Vice Chancellor, Health Sciences, University of California, San Diego, California
   Distinguished Professor, Department of Medicine, University of California, San Diego, California
December 2014-present
   Adjunct Professor, Salk Institute for Biological Studies

**Board Certification:**
   American Board of Internal Medicine, 1982
   Subspecialty, Gastroenterology, 1986

**Professional Membership:**
   Association of American Physicians, councilor, secretary, and president (2005-)
   American Federation for Clinical Research, National Counselor (1989-92)
   American Society for Clinical Investigation
   Fellow, American College of Physicians
   American Clinical and Climatological Association (2009-)
   Alpha1 Foundation, Board of Directors (2004-2013), Executive Board of Directors (2006-2013)
   Alcoholic Beverage Medical Research Foundation, Board of Directors (2006-)
   Association of Professors of Medicine
   Rady Children’s Hospital and Health Center Board of Trustees (2007-)
   California Institute for Regenerative Medicine, Citizens Oversight Committee (2007-)
   CONNECT Board of Directors (2007-)
   BioCom Board of Directors (2009-2014)
   National Academy of Medicine (2012-)
   San Diego Symphony Board of Directors (2013-)
   UCSD Athletics Board Member (2013-)
   National Institutes of Health Advisory Council, NIDDK (2014-)
   American Liver Foundation (Distinguished Scientific Achievement Award 2019).

**Reviewer:**
   NIH ALCB-1 Alcohol Biomedical Research Review Committee (1991-1995)
   Crohn's and Colitis Foundation of America Research Career Development Committee (1990-1995)
ALF Grant Review Committee and Scientific Advisory Committee (1994-1997)
GMA2 Review Committee (ad hoc)
Veterans Administration Merit Review (ad hoc)
Journal of Clinical Investigation, Journal of Cell Biology, Molecular and Cell Biology, Molecular Endocrinology, Biochemistry, Gastroenterology, Hepatology
Alcoholic Beverage Medical Advisory Committee (1998-2004)
Alpha1 Foundation’s Grant Advisory Committee (2008-)

Editorial Board Member:

American Journal of Physiology, Associate Editor (1997-2000)
Archives of Biochemistry and Biophysics (1991-2001)
Hepatology (1997-2001)
FASEB Journal (2002-2007)
GI & Hepatology News, Associate Editor (2007-2012)

Sources of Research Support:

Pew Scholar in the Biomedical Sciences (1986-1991)
March of Dimes (1987-1990)
University of California Academic Senate (1986-1989)
National Institutes of Health (1988-present)
Veteran’s Administration (1987-1992)
Bayer Pharmaceuticals (1996-1999)
Signal Pharmaceuticals (2001)
Janssen (2017-present)
Second Genome (2018-present)

Research Interests:

Regulation of Gene Transcription
Hepatic Fibrogenesis
Porphyrias

Grants

ACTIVE

2 P50 AA011999-17 (Brenner) 04/01/09 – 12/31/18 1.20 calendar
NIH/NIAAA/USC (Subaward) $75,459
The Southern California Research Center for ALPD and Cirrhosis – Res Proj 2

Major goals: To identify the molecular factors that may prevent HSC activation into myofibroblasts, or revert HSC activation into quiescent-like state.

**5 U01 AA021856-03 (Schnabl/Brenner)**
06/01/13 – 05/31/18  1.20 calendar
NIH/NIAAA  $329,485

Microbiome as Therapeutic Target in Alcoholic Hepatitis

Major goals: To investigate the mechanism by which alcohol facilitates changes in the intestinal microflora in alcoholic hepatitis.

**2 P42 ES010337-16 (Tukey)**
07/01/2017-03/31/2022  0.6 calendar
NIH/NIEHS  $191,250

Detection and Models of Toxicant Exposure

Major Goals: To study the exacerbating effects of CCl4 in promoting liver fibrosis in animal models that are already developing liver disease. We will also create early detection systems in mice. The tools developed will provide new models and tools to examine the contribution of Superfund toxicants towards the initiation of liver toxicity.

**1 R44 DK115242-01 (Chen/Brenner)**
07/18/2017-12/31/2019  1.20 calendar
Organovo/NIH  $38,409

Development and validation of a novel 3D human in vitro model of nonalcoholic steatohepatitis to be used for novel therapeutic screening and research on disease mechanism.

Major Goals: To develop and validate an in vitro model of nonalcoholic steatohepatitis (NASH) using the ExVive™ Human Liver Tissue, an in vitro 3D bioprinted liver model comprised of primary human hepatocytes, hepatic stellates (HSCs) and endothelial cells that better recapitulates native human liver biology over an extended time in culture.

**HORTON JPI MRA (Brenner)**
07/01/2017-06/30/2022  1.80 calendar
Janssen 20155015  $1,009,644

HORTON JPI MRA: Obesity and its metabolic complications

Major Goals: To use Inactivated Hepatic Stellate Cells as a Platform for Target Identification and Validation, Optimize Model to Study the Progression and Regression of NASH, and Mixing and Matching of Liver Cells

**Patents**
Compositions and Methods For Treating Steatohepatitis, Liver Fibrosis, and Hepatocellular Carcinoma (HCC)
T Kisseleva, D Brenner
US Patent 20,150,004,133

**Publications** (ORCID identifier 0000-0003-2573-525X)

**Original Articles:**


106. Lindquist JN, Kauschke SG, Stefanovic B, Burchardt ER, Brenner DA. Characterization of the interaction between alphaCP(2) and the 3'-untranslated region of collagen alpha1(I) mRNA. Nucleic Acids Res. 28:4306-4316, 2000.


Invited Articles, Reviews, and Chapters:


Amr Elnashai
March 1, 2020

Search Committee
Position of President of the University of Central Florida

Dear Search Committee Members,

I write to express my keen interest in the position of President of the University of Central Florida. I have observed and admired UCF since my first visit in March/April 2014. I have had the honor of talking with President Hitt at that time, met with several faculty and staff members, and enjoyed a magnificent tour of the campus. I have visited UCF twice since, the last visit was in April 2019. The campus looked even more spectacular than before, and the expansion of the academic programs and the medical enterprise is breathtaking. The dual objective and confluence of ‘scale’ and ‘excellence’, articulated in the UCF strategic plan Creating our Collective Impact, as the pathway to changing the world, is being successfully implemented. I have argued for years that almost all universities have strategies, but very few actually implement their strategy. UCF stands out as a supreme example of effectively turning the strategic goals into actionable projects, associated with continuously monitored accomplishment metrics. That the institution has built such a culture of strategic planning, implementation and accountability makes this opportunity exceptionally attractive to me. As the UCF strategy enters its fifth year, this is a historical opportunity for the new president to collaborate with the Board, and other internal and external stakeholders to renew and craft the next phase of strategy and implementation, to continue the meteoric rise of this great metropolitan university. I hope that I will have the opportunity to discuss with the search committee thoughts on how to ensure not only the continuation, but also the acceleration, of UCF’s ascent to the top echelons of academe, both nationally and globally.

I have studied the position prospectus and have reviewed the recent and current metrics of the University. I have also researched the statistics of the City of Orlando, and the State of Florida in comparison with other leading US cities and states. UCF has achieved a great deal in recent years, in terms of reaching an impressive size student body of nearly 70,000, as well as achieving Carnegie Tier 1 Research University status in 2011. UCF has a healthy percentage of graduate-to-undergraduate students of about 16%. The undergraduate program teaching rank of 49th is also a very good starting point, taking into account the intense competition from other universities, the rapid expansion of the UCF undergraduate student body, and the levels of investment that some schools have access to. The next phase at UCF could be the consolidation of the undergraduate program and focusing on excellence, to complement its scale. There are also great opportunities for UCF to climb the research ranking ladder without compromising its student access policy, by making full use of convergence research based on synergies between all colleges and especially with the college of medicine in basic medical/biomedical as well as clinical research. Working to expand existing and creating new revenue streams is a very important at this stage of UCF’s march of excellence.

Located in the vibrant and expanding city of Orlando, ranked 3rd for future growth, 5th for manufacturing growth, and the 2nd most competitive business location (KPMG), there are great opportunities for UCF, as Orlando’s university, for continued rapid ascent to higher levels of accomplishment and recognition. Effectively managing enrollment and further enhancing the student experience are important objectives that go beyond reportable measures. Student experience includes assessment of the quality of the learning environment as defined by financial, academic, mentoring, well-being, and placement support, and inclusive of regional, national and
international experiences. Emerging tools of data science are ready for deployment in tracking student success, identifying social determinants of retention and timely graduation, and structuring policies and practices to improve both of these two important metrics of student success. With the collective intellect and experience of the faculty, staff, administrators, Board, alumni, friends and supporters, working closely with Florida’s legislature, there is no doubt that the excellence dimension of the undergraduate, graduate, research, and technology transfer aspects will successfully meld with the scale that UCF has achieved.

The expectations from the new president will be quite substantial, in order to capitalize on the accomplishments of this great public university thus far, and to take the next leap to much higher ranking and recognition, challenges that I very much look forward to. I consider that the new president should be an academic leader, a strategic and executive leader, a political and moral leader, and an empathetic leader. As an academic leader, the president should have a comprehensive understanding of academic affairs, faculty objectives, and student requirements, especially in public universities. The president should have a deep appreciation of the value of teaching, scholarship, and community service, to engender a learning environment full of excitement for an endless frontier of excellence and accomplishment. The president should be in a position to establish and adhere to academic priorities which focus on new programs and thrusts that are critical to local and regional Orlando and Florida society, to assess the quality, cost-effectiveness, and relevance of programs to the UCF mission, and to play a role in top faculty recruitment and retention. The president should also be prepared to stay the course. It is widely agreed that a decade or longer is required for presidents to implement and assess the success of the vision that emerges from community engagement under their leadership.

As a strategic and an executive leader, the president should lead the review and renewal of the UCF vision and strategy, as well as an implementation plan—with milestones, timelines, and resource allocations to achieve the vision, alongside metrics for measuring the degree of success, as discussed above. The plan should be flexible, adaptable and evolving, with a focus on excellence in every aspect. The president should develop and implement an assessment process that measures quality, capacity, and breadth of academic programs. The president should be fiscally savvy, managing costs, decentralizing resource management, generating revenue, and working tirelessly to expand the UCF endowment. The president should set milestones and metrics, and empower teams to execute the vision, to be a rapid and steady decision-maker, especially under pressure, to recognize talent and build leadership teams with complementary skills, to integrate, to arbitrate, to serve, and to lead. The president should certainly cultivate close and collaborative relationships with the UCF governing board and Florida state legislatures, and to protect and enhance the university infrastructure. A collaborative relationship with the faculty union based on mutual trust is also critical to the effective operation of all aspects of academic affairs at UCF. As a political and a moral leader, the president should display abilities to cooperate with Orlando, state of Florida, and federal government, to make compelling cases for important political decisions that support the university and advance its interest, to advertise its success, to stay away from controversies, to remain impartial to political divisions, and to have the breadth of mind and determination to cooperate with state and federal government of any political denomination. Presidents are the face of their universities, and as such, interacting with the media in a respectable manner that balances openness with intrusion is necessary. We all want to see a presidency that analyzes political threats and plans for them, maintains a dialogue with politicians at all levels, and errs toward more rather than less information and openness. Moreover, holding the moral high ground is of critical importance to establishing clear positions on behavioral and ethical issues, to supporting equity, diversity and inclusion in their broadest expressions, and social harmony. Moral leadership should also be exercised in managing our university athletics within the American Athletics Conference, in a non-commercialized environment that protects the academic careers of student-athletes, while still allowing them to compete effectively and supporting them with quality management and resources.

Finally as an empathetic leader, the president should invest the time and energy to project beyond the confines of the traditional presidency to the daily lives of the thousands who strive for the university’s well-being at all levels. In conjunction with the president’s team at UCF and all of the stakeholders, I am confident that I can
provide comprehensive leadership and quality management of the university. I plan to devote a significant part of my day to engaging with various communities in person, to undertaking extensive listening sessions, and to investing in forging a culture of inclusion, partnership and collective destiny. The strengths of UCF are numerous, and the opportunities available to it are very substantial. Capitalizing on these strengths and taking advantage of these opportunities require thoughtful planning and execution.

I started my academic leadership career as department head of the top-ranked civil and environmental engineering department at the University of Illinois at Urbana-Champaign. During my tenure CEE at Illinois became strategy-driven, its metrics rose considerably and its year-end financial carry forward increased very substantially. All academic programs were reviewed and modernized. Moreover, integrative UG majors, minors, MS, and PhD programs focused on societal challenges were successfully launched. Three intensive faculty hiring seasons resulted in 14 top quality professors 42% of whom were women. Thereafter I was fortunate to be selected to lead the College of Engineering at the Pennsylvania State University. The team I led at Penn State created and implemented a new 5-year strategy alongside a 5-year functional budget that plugs into the strategic goals and underpins their fulfilment. While reviewing and modernizing the undergraduate program, sixteen new masters degrees were launched, a development that boosted the academic performance metrics of the College and created a new significant revenue stream. We hired 72 top faculty in 3 search seasons, and increased the size of the faculty by 28 new lines. We raised the admission GPA in all departments while not only maintaining enrollment numbers, but also significantly increasing them. I helped close the $120M college fundraising campaign, designed and launched the next College of Engineering campaign (at $179 million). I helped attract a major gift of $22M. With my colleague in charge of the PSU Commonwealth campuses, I launched a multi-campus research experience for undergraduates that directly increased retention and graduation rates of Commonwealth campuses’ students. I also designed and implemented a plan to double the size of the biomedical engineering department, in partnership with the Hershey College of Medicine, Eberly College of Science, and the Huck Institute for Life Sciences. As Vice President and Vice Chancellor for Research and Technology Transfer at the upwardly mobile and high achieving University of Houston, I work very closely with the President/Chancellor as well as the Provost. The division of research that I lead is managed on a daily basis through 12 strategic goals that are implemented rigorously and reported on quarterly. I reconfigured, rebranded and relaunched the UH technology park, previously named Energy Research Park, under the name of The Technology Bridge, with a five-year management and marketing plan. This rebranding led to a 40% increase in the number of on-site startups, reaching 32 companies at the current time. In close cooperation with the Chancellor and the Provost, we designed a campaign for increasing all intellectual outputs of the university by 50% in 5 year, under the title of 50-in-5. The campaign, alongside comprehensive proposal-writing training, strategic use of data, and faculty connectivity trips to DC, resulted in an increase in research expenditure of just over 10% this year. I was also the co-author, with the Chancellor, Provost, Chief Energy Officer, and VP for Development, of a proposal to a donor that resulted in a $50M research gift, the largest ever at UH.

I have always been a keen observer of university leaders, and I have benefited from regular discussions with several highly successful presidents in the USA and Europe. I hope that I will have the opportunity of meeting the search committee and discussing further the above and other ideas for effectively leading a great and aspiring public metropolitan university such as UCF. I am sure that whoever your committee and the Board will select will move the university forward and I hope to successfully compete for this immense privilege.

Amr Elnashai
CAREER SUMMARY

Fellow of the British Royal Academy of Engineering Amr Elnashai is Vice Chancellor and Vice President for Research and Technology Transfer at the University of Houston System and the University of Houston, respectively. The UH System has 74,000 students and over 3000 professors. Amr manages the research enterprise of the University and the System, with an annual 2019 research expenditure of $195M, and an IP income of $65M (highest university IP income in the USA for institutions without a college of medicine). The Division of Research has a total of 175 employees and an annual operating budget of $145M. He is also in charge of seven university-level research centers, and the UH Technology Bridge (UH innovation park) that occupies over 74 acres, 750,000 square feet of built space, currently hosts 28 startups, 3 large advanced technology companies, and several research laboratories. Prior to his current position, he was Dean of Engineering at the Pennsylvania State University, and the Harold and Inge Marcus Endowed Chair of Engineering. As dean, Amr was responsible for all aspects of operation and leadership of the College of Engineering, with 11,000 students, 300 professors, 400 staff, $240M total budget, $137M research expenditure, over $210M endowment, 12 departments, 2 institutes and 20 research centers. He was previously head of the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign (June 2009 to December 2013) and the Bill and Elaine Hall endowed professor. He was Director of the NSF multi-institution interdisciplinary Engineering Research Center (ERC), MAE Center (2004-2009). He was also Director of the NSF Network for Earthquake Engineering Simulations (NEES) Laboratory at Illinois (2002-2009). His total research expenditure during his 13 years at Illinois was in excess of $20M.

Amr obtained his Bachelor of Science degree from Cairo University followed by MSc and PhD degrees from Imperial College, University of London. Before joining the University of Illinois in June 2001, Amr was Professor of Earthquake Engineering and Head of Division at Imperial College. He was Visiting Professor at the University of Surrey, UK, the University of Tokyo, the University of Southern California, McGill University, and the European School for Advanced Studies in Reduction of Seismic Risk, Italy.

Amr’s research interests are multi-resolution distributed analytical simulations, network analysis under stress and disruption, large-scale fire ignition and spread modeling, hybrid testing and field investigations of the response of complex networks and structures to earthquakes. He has advised 47 PhD students and over 100 MS thesis students. He published 148 refereed journal papers, 3 books, 11 book chapters, and a number of research and field investigation reports.
UNIVERSITY OF HOUSTON BIOGRAPHICAL DATA

Division of Research

Department (% appnt): Civil and Environmental Engineering (zero %)  Date: July 22, 2017

Name: Elnashai, Amr S.  Birth Date: 5/8/1954  Citizenship: USA

Present Academic Rank: Professor

Tenure Status: Indefinite Tenure

Administrative Title: Vice President/Vice Chancellor for Research and Technology Transfer

Immediate Previous: Dean of the College of Engineering, The Pennsylvania State University
Harold and Inge Marcus Endowed Chair

Degrees

1. BSc, Distinction, Cairo University (Cairo, Egypt), July 1977, Civil Engineering
2. MSc, Distinction, Imperial College (London, UK), August 1980, Concrete Structures and Technology
3. DIC, Imperial College (London, UK), August 1980
4. Ph.D., Imperial College (London, UK), July 1984, Unwin Prize - Best PhD in Civil and Mechanical Engineering

Academic Positions

1. Vice President/Vice Chancellor for Research and Technology Transfer, July 2017 to present
2. Dean of Engineering, December 2013 to July 2017
3. Head, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, June 2009 to December 2013
4. Director of Hybrid Simulation, NEES@Illinois Simulation Facility, June 2009 to December 2013
5. Consultant, Mid-America Earthquake (MAE) Center, June 2009 to present
6. Director, College of Engineering, Council on Global Engineering Initiatives, June 2008 to October 2010
7. Director, Mid-America Earthquake (MAE) Center, April 2004 to June 2009
8. Director, NEES@Illinois Simulation Facility, September 2003 to June 2009
9. Acting Director of the Mid-America Earthquake (MAE) Center, September 2003 to April 2004
10. Professor of Structural Engineering, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, June 2001 to Present (adjunct since December 2013)
11. Associate Director of the Mid-America Earthquake (MAE) Center, June 2001 to September 2003
12. Visiting Professor, Civil and Environmental Engineering Department, University of Surrey, United Kingdom, April 1995 to October 2014
13. Head of Engineering Seismology and Earthquake Engineering Division, Civil Engineering Department, Imperial College, September 1994 to June 2001
14. MS Course Director, Civil Engineering Department, Imperial College, September 1987 to June 2001
15. Lecturer, Reader then Professor of Earthquake Engineering, Civil Engineering Department, Imperial College, January 1985 to June 2001
16. Research Assistant, Civil Engineering Department, Imperial College, October 1980 to June 1984
17. Structural Engineering, Cairo University, Instructor (faculty) in Structural Analysis and Mechanics, September 1977 to July 1979
Professional Activities

Professional (non-academic) Employment

2. Senior Engineer – Technical Development Section, Wimpey Offshore, July 1984 to November 1985
3. Design Engineer – Bridge Design Section, Arab Consultants, Cairo, Egypt, February 1978 to May 1979

Consulting Activities

Major worldwide consulting, working for multinational corporations including Shell International, GSK (previously GlaxoWellcome), Nuclear Installations Inspectorate, British Airports Authority, World Bank, others. List available upon request.

Professional Associations

1. Fellow, Royal Academy of Engineering, UK, since 2000
2. Fellow, American Society of Civil Engineers, since 1989
3. Fellow, Institution of Structural Engineers, UK, since 1989
4. Member, British Computer Society, UK, 1984-1993
Honors, Recognition, and Academic Achievements

Professorship and Chairs

<table>
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<tr>
<th>Award Name</th>
<th>Institution</th>
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<tr>
<td>Harold and Inge Marcus Endowed Chair</td>
<td>The Pennsylvania State University, USA</td>
<td>2014</td>
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<td>William and Elaine Hall Endowed Professorship</td>
<td>Department of Civil and Environmental Engineering, University of Illinois, USA</td>
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<td>Donald Biggar Willett Professorship</td>
<td>College of Engineering, University of Illinois, USA</td>
<td>2003</td>
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<tr>
<td>Personal Chair in Earthquake Engineering</td>
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<td>1991</td>
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Instruction

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<td>2007</td>
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<td>List of Teachers Ranked as Excellent by their Students</td>
<td>University of Illinois at Urbana-Champaign</td>
<td>2005</td>
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Research

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<td>Award Name/Organization</td>
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<td>------------------------------------------------</td>
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<tr>
<td>Armstrong Medal for Best PhD Thesis in Civil and Mechanical Engineering</td>
<td>Composite Tubular Connections for Offshore Applications</td>
<td>1985</td>
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</tbody>
</table>

### Resident Instruction, Continuing Education and PhD Committees

**Resident Instruction**

1. Earthquake Engineering (Grad, 4 credits, 2003-2013)
2. Earthquake-resistant design and analysis (Grad, 33 hours and field trip, 1987 - 2001)
3. Introduction to Structural Dynamics (UG and Grad, 4 credits, Fall, 2002)
4. Campus Honors Course in Earthquake Engineering (Freshman, Fall 2002, Fall 2003)
5. Calculation of seismic actions (Grad, 6 hours, 1997 - 2001)
6. Advanced finite elements in inelastic and dynamic analysis (Grad, 33 hours, 1987 - 2001)
7. Finite elements (Grad, 33 hours, 1987 - 1996)
8. Seismic assessment, repair and strengthening (Grad, 6 hours, 1996 - 2001)
9. Earthquake design of steel structures (Grad, 15 hours, 1996 - 2001)
10. Earthquake loading (Grad, 33 hours, 1994 - 2001)
11. Experimental methods in dynamics (Grad, 6 hours 1988 - 1990)
12. Engineering computation (UG, 6 hours, 1989)
13. Tutoring on engineering drawing (UG, 33 hours, 1988)
14. Introduction to seismic hazard (UG, 4 hours, 1988)
15. Advanced numerical methods (Grad, 33 hours, 1987)
16. Advanced inelastic and dynamic FE analysis (Grad, 12 hours, 1987)

### Continuing Education

<table>
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<th>Course</th>
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<th>Number of Students</th>
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<td>Earthquake Engineering</td>
<td>2003-2013</td>
<td>40-75</td>
<td>live, on-site</td>
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<td>Introduction to Structural Dynamics</td>
<td>2002-2003</td>
<td>60</td>
<td>live, on-site</td>
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<tr>
<td>Campus Honors Course in Earthquake Engineering</td>
<td>2002-2003</td>
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<td>live, on-site</td>
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<tr>
<td>Introduction to Structural Engineering</td>
<td>2001</td>
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<td>live, on-site</td>
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</tbody>
</table>

### Other Instructional Activities

1. Consequence-based Risk Management Course (full credit), Four modules contribution to a graduate full credit course at UIUC, also taken by Georgia Tech, 2006
2. Structural Dynamics – MSc and PhD Course, European School for Seismic Risk Reduction, University of Pavia, Italy, May 2002
3. Assessment and Repair of Structures – An Overview, Practical Seismic Design and Repair of Structures, SECED-IC Short Course, September 1999
4. Seismic Analysis of Steel and RC Structures, TEMPUS Course, University of Ljubljana, Slovenia, February 1989
5. Observations from Recent Earthquakes, Short Course on Seismic Design, University of Cairo, December 1989 and 1990
6. Earthquake Loading, MSc Course in Structural Engineering, University of Surrey, April 1991
7. Seismic Design of Steel Structures, Short Course on Seismic Design, University of Cairo, December 1989 and 1990
12. Repair and Strengthening of RC Structures, SERINA Course (EU), Thessaloniki, September 1997
13. Conceptual Seismic Design of RC Bridges, European Association of Earthquake Engineering, 18th Regional Seminar, Egypt, October 1997
15. Earthquake-Resistant Design and Status of European Codes, Advanced Course in Integrated Seismic Risk (EU), Kefalonia, Greece, September 1999

**Preliminary and Final PhD Exams**

<table>
<thead>
<tr>
<th>Doctoral Candidate</th>
<th>Final Exam Date</th>
<th>(Co-) Chair</th>
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<tbody>
<tr>
<td>W. Aritenang (Imperial)</td>
<td>1989</td>
<td>Chair</td>
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<tr>
<td>K. Pilakoutas (Imperial)</td>
<td>1990</td>
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</tr>
<tr>
<td>M. Lopes (Imperial)</td>
<td>1991</td>
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<tr>
<td>A. Elghazouli (Imperial)</td>
<td>1991</td>
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<tr>
<td>A. Salama (Imperial)</td>
<td>1992</td>
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<tr>
<td>B. Izzuddin (Imperial)</td>
<td>1992</td>
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<td>M. Soliman (Imperial)</td>
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<td>E. M. Higazy (USC)</td>
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<tr>
<td>A. Elmesallamy (Imperial)</td>
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<tr>
<td>P. Madas (Imperial)</td>
<td>1993</td>
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<tr>
<td>B. Broderick (Imperial)</td>
<td>1994</td>
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<td>E. Martinez (Imperial)</td>
<td>1996</td>
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<tr>
<td>F. D. Ashtiani (Imperial)</td>
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<tr>
<td>M. Salvitti (Imperial)[MPhil]</td>
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<td>L. Song (Imperial)</td>
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<td>D. Lee (Imperial)</td>
<td>1999</td>
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<td>R. G. Goodfellow (Imperial)</td>
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<td>R. Pinho (Imperial)</td>
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<td>B. Borzi (Imperial)</td>
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<td>A. Mwafy (Imperial)</td>
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<td>A. Manafpour (Imperial)</td>
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<td>Chair Kappos</td>
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<td>M. Tsuji (Imperial)</td>
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<td>T. Rossetto (Imperial)</td>
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<td>Seong-Hoon Jeong (Illinois)</td>
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<td>GunJin Yun (Illinois)</td>
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<td>Oh-Sung Kwon (Illinois)</td>
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<td>Gina Thermou (Greece)</td>
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<td>Jun Ji (Illinois)</td>
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<td>Narutoshi Nakata (Illinois)</td>
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<td>Young Suk Kim (Illinois)</td>
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<td>Himmet Karaman (ITU)</td>
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<td>Sung Jig Kim (Illinois)</td>
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<td>Curtis Holub (Illinois)</td>
<td>2009</td>
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<td>JunHee Kim (Illinois)</td>
<td>2009</td>
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<td>Liang Chang (Illinois)</td>
<td>2009</td>
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<tr>
<td>Omar El Anwar (Illinois)</td>
<td>2009</td>
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<td>Hussam Mahmoud (Illinois)</td>
<td>2011</td>
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<td>Can Unen (Illinois)</td>
<td>2011</td>
<td>Co-Chair Sahin</td>
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<td>Sheng-Lin Lin (Illinois)</td>
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<td>Bora Gencturk (Illinois)</td>
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<td>Adel Abdelnaby (Illinois)</td>
<td>2012</td>
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<td>Do Soo Moon (Illinois)</td>
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<td>Thomas Frankie (Illinois)</td>
<td>2013</td>
<td>Co-Ch. Kuchma/Spencer</td>
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<td>Seliem Serhan (ITU)</td>
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<td>Co-Chair Sahin</td>
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<td>Hazam Al Anwar (Illinois)</td>
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<td>Gaston Fermandois (Illinois)</td>
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<td>Hamed Akbarpour (Penn State)</td>
<td>2019</td>
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Research, Creative, and Other Scholarly Activities

Publications

Original Edition Books


Books Edited or Co-Edited


Chapters in Books (two more chapters under preparation as of January 2020)


Articles In Journals

<table>
<thead>
<tr>
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Articles in Conference Proceedings


46. Assessment of Eurocode 8 seismic force calculation, Elnashai, A.S., IABSE Colloquium, Delft, Basis of design and actions on structures background and application of Eurocode 1, Vol. 74, pp. 149-156, 1996.
95. Multi-axial full-scale sub-structured testing and simulation (MUST-SIM) facility at the University of Illinois at Urbana-Champaign, Elnashai, A.S., Spencer, B.F., Kuchma, D., Ghaboussi, J., Hashash, Y. and Quan, G., Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 2004.


111. Large and small scale simulations on the multi-axial full-scale sub-structured testing and simulation (MUST-SIM) facility at the University of Illinois at Urbana-Champaign, Elnashai, A., Spencer, B., Kuchma, D., Yang, G., Carrion, J., Gan, Q. and Kim, S., NATO Workshop on Seismic Assessment and Rehabilitation of Existing Reinforced Concrete Buildings, Istanbul, Turkey, May 30-June 1, 2005.


Association of Earthquake Engineering (EAEE) and the European Seismological Commission (ESC), Geneva, Switzerland, September 3-8, 2006.


178. Hybrid Simulation with Multiple Support Excitation, Jian Li, Bill F. Spencer, Amr S. Elnashai and Brian F. Phillips, 5th World Conference on Structural Control and Monitoring, Tokyo, Japan, 12-14 July 2010.


**Keynote and Invited Lectures** (including keynotes from above list)

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<tr>
<th>Title</th>
<th>Conference/Organization</th>
<th>Location</th>
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<tr>
<td>1. Seismic Resistance of Composite Structures</td>
<td>U Tokyo, Invited</td>
<td>University of Tokyo, Institute of Industrial Science, Tokyo, Japan</td>
<td>April 1990</td>
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<tr>
<td>2. Ductility of Composite Steel-Concrete Beam-columns</td>
<td>U Tokyo, Invited</td>
<td>University of Tokyo, Institute of Industrial Science, Tokyo, Japan</td>
<td>April 1992</td>
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<tr>
<td>3. Implications of Recent Earthquakes on Earthquake Risk</td>
<td>British Council, Invited</td>
<td>The British Council, Tokyo, Japan</td>
<td>June 1995</td>
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<tr>
<td>4. Damage to Steel Frame Structures in Recent Earthquakes</td>
<td>Keynote - International Conference on Modern Code Development</td>
<td>University of Cairo, Cairo, Egypt</td>
<td>November 26, 1995</td>
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<tr>
<td>6. Simplified Methods for Accounting for Vertical Earthquake Motion in Design</td>
<td>FAU, Invited</td>
<td>Florida Atlantic University, Florida, USA</td>
<td>March 29, 1997</td>
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<td>7. Seismic capacity rehabilitation of RC structures</td>
<td>Keynote - International Conference on Rehabilitation and Development of Civil Engineering Infrastructure Systems</td>
<td>Beirut, Lebanon</td>
<td>June 1997</td>
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<tr>
<td>8. Seismic Risk in the Middle East and Implication for Lebanon</td>
<td>The Order of Engineers Seminars</td>
<td>Beirut, Lebanon</td>
<td>June 16, 1997</td>
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<td>Title</td>
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<td>15. Next generation vulnerability functions for RC structures</td>
<td>Keynote - Response of Structures to Extreme Loading Conference</td>
<td>Toronto, Canada</td>
<td>August 2003</td>
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<td>16. Development of Multi-state Codes; The Experience of Eurocode 8 for Seismic Design,</td>
<td>Keynote - Arab Codes Symposium, HBRC</td>
<td>Cairo, Egypt</td>
<td>21-23 September 2003</td>
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<tr>
<td>17. Newmark Distinguished Lecture: Vulnerability Assessment under Earthquake Action: from Field Observations to Hybrid Simulations</td>
<td>Distinguished Lectures Series</td>
<td>University of Illinois, Urbana-Champaign, Illinois, USA</td>
<td>18 October 2004</td>
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<td>18. Approaches to the Assessment of Earthquake Response of Complex Structural Systems</td>
<td>Keynote - The HBRC 50th Anniversary Conference</td>
<td>Cairo, Egypt</td>
<td>20-22 December 2004</td>
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<td>19. Multi-platform earthquake analysis of geotechnical structural systems</td>
<td>ASCE International Conference on Computing in Civil Engineering</td>
<td>Cancun, Mexico</td>
<td>July 12-15, 2005</td>
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<td>20. Seismic assessment of high rise RC structures using multi-resolution multi-platform analysis</td>
<td>Keynote - The Indonesian Society of Civil and Structural Engineers (HAKI) Conference</td>
<td>Jakarta, Indonesia</td>
<td>August 2006</td>
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<td>22. Recent Developments in Earthquake Engineering</td>
<td>DUT, Invited</td>
<td>Democritus University of Thrace, Greece</td>
<td>October 2007</td>
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<tr>
<td>25. Fragility Analysis of RC Bridges with Soil-Structure Interaction and Liquefaction</td>
<td>Invited UCL</td>
<td>University College London</td>
<td>May 2009</td>
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<tr>
<td>26. Earthquake Impact on Vulnerable Communities and Requirements for Mitigation, Response and Recovery</td>
<td>Keynote - International Symposium of Earthquake Engineering</td>
<td>Sakarya, Turkey</td>
<td>October 2009</td>
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<td>29. Integrated and Interdisciplinary Earthquake Impact Assessment for Mitigation, Response and Recovery</td>
<td>Invited - International Council of Academies of Engineering and Technological Sciences</td>
<td>Mexico City, Mexico</td>
<td>June 2011</td>
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<tr>
<td>31. Analytical and Experimental Investigation of the Effect of Vertical Ground Motion on RC Bridge Piers</td>
<td>Invited UCSD</td>
<td>University of California, San Diego, California</td>
<td>July 2011</td>
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<td>32. Early observations from the Magnitude Mw 7.0 January 12, 2010 Haiti Earthquake</td>
<td>Keynote - Fifth International Conference on Structural Engineering, Mechanics and Computation</td>
<td>Cape Town, South Africa</td>
<td>September 2011</td>
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<td>34. Integrated Seismic Assessment of Plan-Irregular Structures</td>
<td>Invited CSU</td>
<td>Colorado State University</td>
<td>September 2012</td>
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<td>35. Integrated Seismic Assessment of Plan-Irregular Structures</td>
<td>Invited - Distinguished Speakers Series</td>
<td>University of Houston</td>
<td>October 2012</td>
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<td>36. Hybrid Simulation and Optimization of Reinforced Concrete and High-performance Fiber Concrete</td>
<td>Keynote - International Conference on Earthquake Engineering</td>
<td>Skopje, Macedonia</td>
<td>May, 2013</td>
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<td>37. Hybrid Simulation in Earthquake Assessment</td>
<td>Keynote - International Conference on Earthquake Engineering and Seismicity</td>
<td>Skopje, Macedonia</td>
<td>May 2015</td>
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<td>38. Hybrid Analytical-Experimental Simulation and Application to</td>
<td>Keynote - 8th STESSA International Conference</td>
<td>Shanghai</td>
<td>July 2015</td>
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<td>Semi-rigid Steel Frames</td>
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<td>Assessment</td>
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<td>40. Optimized Temporary Housing Assignments after Disasters</td>
<td>Keynote – 9th International Conference on Construction in the 21st Century</td>
<td>Dubai, UAE</td>
<td>March 5-7, 2017</td>
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<td>under Dynamic Loading</td>
<td>Infrastructure Geotechnology”</td>
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<td>42. Analytical assessment of combined and sequential fire and</td>
<td>Keynote – 4th World Congress and Exhibition on Construction and Steel Structures</td>
<td>Atlanta, Georgia, USA</td>
<td>October 16-18, 2017</td>
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<td>earthquake effects on steel structures</td>
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<td>43. Seismic Capacity Assessment of Multi-span RC Bridges by Hybrid</td>
<td>Keynote – Missouri University of Science &amp; Technology Transportation Infrastructure</td>
<td>Rolla, Missouri, USA</td>
<td>December 7-8, 2017</td>
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<td>44. Field Investigation and Back-analysis of the Chile Earthquake of</td>
<td>Civil and Environmental Engineering Seminar Series</td>
<td>University of Houston, Houston, Texas, USA</td>
<td>February 2, 2018</td>
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<td>2010</td>
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<td>45. Integrated framework for analysis of buildings under earthquake</td>
<td>Keynote – 2nd International Conference on Seismic Analysis and Design of Structures and</td>
<td>Brighton, UK</td>
<td>June 4, 2019</td>
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<td>and fire scenarios</td>
<td>Foundations</td>
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</table>

**Magazine Articles**

7. Several more articles in the Civil and Environmental Engineering Department (2009 onwards) and the Mid-America Earthquake Center (2004 to 2009) magazines.
Reports

23. Experimental behavior of composite partially encased beam-columns under cyclic and dynamic loading, Takanashi, K., Elnashai, A.S. and Elghazouli, A.Y., Joint report with Institute of Industrial Science, University of Tokyo, Japan, April 1990.
56. Seismic retrofitting of steel and composite buildings, Di Sarno L. and Elnashai, A.S., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 02-01, September 2002.
57. Seismic vulnerability of flat-slab structures, Eberik, M.A. and Elnashai, A.S., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 03-06, May 2003.
58. Analytical assessment of an irregular RC full scale 3D test structure, Jeong, S-H. And Elnashai, A.S., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 03-02, October 2003.
59. Zeus NL – A system for inelastic analysis of structures, Elnashai, A., Papanikolaou, V. and Lee, D., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 04-01, February 2004.
63. Hybrid test using UI-SimCor, three-site experiment, Spencer, B., Elnashai, A., Park, K. and Kwon, O., Final report to NEESit for Phase I project of hybrid simulation framework development, University of Illinois at Urbana-Champaign, 2006.
67. New Madrid seismic zone catastrophic earthquake response planning, Cleveland, L.J. and Elnashai, A.S., Interim Report 1, Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 07-03, May 2007.
69. Assessment of seismic integrity of multi-span curved bridges in Mid-America, Elnashai, A.S. and Mwafy, A.M., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 07-08, May 2007.
70. Modeling of hysteretic behavior of beam-column connections based on self-learning simulations, Yun, G.J., Ghaboussi, J. and Elnashai, A.S., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 07-13, August 2007.


75. Impact of earthquakes on the Central USA, Elnashai, A.S., Cleveland, L.J., Jefferson, T., Harrald, J., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 08-02, September 2008.

76. Design and Assessment Models and Spectra for Repaired Reinforced Concrete Structures Thermou, Georgia E., Pantazopoulou, Stavroula J., and Elnashai, Amr S., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 09-01, May 2009.

77. Impact of New Madrid Seismic Zone Earthquakes on the Central USA, Elnashai, A.S., Cleveland, L.J., Jefferson, T., Harrald, J., Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 09-03, November 2009.

78. The Maule (Chile) Earthquake of February 27, 2010: Consequence Assessment and Case Studies, Elnashai, Amr S., Gencturk, Bora, Kwon, Oh-Sung, Al-Qadi, Imad L., Hashash, Youssef, Roesler, Jeffery R., Kim, Sung Jig, Jeong, Seong-Hoon, Dukes, Jazalyn, and Valdivia, Angharad, Mid-America Earthquake Center, University of Illinois at Urbana-Champaign, CD Release 10-04, December 2010.

Grants and Contracts

For Research

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<th>Brief Title or Description</th>
<th>Source of Funds</th>
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<td>Masters Training in Earthquake Risk Management</td>
<td>EPSRC</td>
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<td>2002</td>
<td>Structure Retrofit Strategies</td>
<td>NSF-MAE</td>
<td>$420K</td>
<td>$210k</td>
<td>M.B. Hueste</td>
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<td>2002</td>
<td>Response Analysis Tools</td>
<td>NSF-MAE</td>
<td>$368K</td>
<td>$250k</td>
<td>M. Aschheim</td>
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<td>2003</td>
<td>Analytical Assessment of Seismic Performance of Bridges</td>
<td>FHWA</td>
<td>$25K</td>
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<td>2001</td>
<td>Seismic Performance Evaluation Rehabilitation (SPEAR)</td>
<td>European Community</td>
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<td>NSF</td>
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<td>2002</td>
<td>DS-3 Response Analysis Tools</td>
<td>NSF</td>
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<td>2004-2009</td>
<td>MAE Center</td>
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<td>~$22M (external only)</td>
<td>~$4M</td>
<td>Sole PI (many subcontracts to core institutions)</td>
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<td>2004</td>
<td>Enhanced Load Control and Education-Training Features for UIUC NEES Site (equipment)</td>
<td>NSF</td>
<td>$198K</td>
<td>Education, Outreach, Training</td>
<td>Spencer and Kuchma</td>
</tr>
<tr>
<td>2005</td>
<td>Seismic Retrofit Study of Bridge A-1700</td>
<td>Missouri Dept. of Transportation-Jacobs Engineering</td>
<td>$272K</td>
<td>$200K</td>
<td>Hashash</td>
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<tr>
<td>2005</td>
<td>NEESR-SG Bridges</td>
<td>NSF</td>
<td>$1.2M</td>
<td>$285K</td>
<td>4 universities</td>
</tr>
<tr>
<td>2005</td>
<td>Cast iron pilot project with MAE center</td>
<td>Memphis Light Gas &amp; Water</td>
<td>$15K</td>
<td>$10K</td>
<td>Spencer</td>
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<tr>
<td>2006</td>
<td>Loss Model for Illinois</td>
<td>IEMA</td>
<td>$250K</td>
<td>$250k</td>
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</tr>
<tr>
<td>2006-2009</td>
<td>NMSZ Loss Assessment in the Central USA</td>
<td>FEMA (CERL)</td>
<td>$4.5M</td>
<td>$3.5M</td>
<td>2 universities</td>
</tr>
<tr>
<td>2006</td>
<td>MAEviz Impact of Earthquakes on Istanbul Buildings</td>
<td>ITU-Istanbul Municipality</td>
<td>$100K</td>
<td>$100k</td>
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</tr>
<tr>
<td>2006</td>
<td>Pakistan Schools and Hospitals project</td>
<td>USAID-Pakistan</td>
<td>$87K</td>
<td>$50k</td>
<td>Masud, Hajjar</td>
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<tr>
<td>2007</td>
<td>NEESR-SD</td>
<td>NSF</td>
<td>$200K</td>
<td>$100k</td>
<td>Spencer</td>
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<tr>
<td>2007</td>
<td>St. Louis HAZUS analysis</td>
<td>AMEC Earth and Environment</td>
<td>$14K</td>
<td>$14K</td>
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<tr>
<td>2008</td>
<td>Development of MAEVIZ-Laclede</td>
<td>Laclede Gas Company</td>
<td>$90K</td>
<td>$90K</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>Development of MAEVIZ-Centerpoint</td>
<td>CenterPoint Energy</td>
<td>$60K</td>
<td>$60K</td>
<td></td>
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<tr>
<td>2008-2011</td>
<td>Modeling Building Downtime due to Hurricane Impacts</td>
<td>NSF</td>
<td>$32K</td>
<td>$16k</td>
<td>Spencer</td>
</tr>
</tbody>
</table>

**Areas of Research**

1. Investigation of the performance of engineering systems subjected to earthquake ground motion using analysis, testing and field observations. Systems investigated include buildings, bridges, utility networks, transportation
2. Disaster impact assessment, mitigation and recovery on a regional and national levels, and optimization of post-disaster housing
3. Applications of high performance and sustainable materials in earthquake design applications
4. Multi-hazard design of highrise buildings
5. Fire modeling and the effect of interaction between fire and earthquakes on structural performance

**Graduate Thesis Research Advising**

**M.S. Thesis Students**

About 100 MSc thesis students graduated at Imperial College, London. List below is at Illinois only.
<table>
<thead>
<tr>
<th>Student Name</th>
<th>Year Graduated</th>
<th>Thesis Title</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Barry</td>
<td>2005</td>
<td>Semi-rigid Steel Frames</td>
<td>Thornton Tomasetti, USA</td>
</tr>
<tr>
<td>Nick Berdette</td>
<td>2005</td>
<td>Curved Bridges</td>
<td>Ove Arup, UK</td>
</tr>
<tr>
<td>Susan LaFore</td>
<td>2006</td>
<td>Impact of Earthquakes on the State of Illinois</td>
<td>Consulting, USA</td>
</tr>
<tr>
<td>Lisa Cleveland</td>
<td>2006</td>
<td>Impact of New Madrid Earthquakes on the Central USA</td>
<td>Sargent and Lundy, USA</td>
</tr>
<tr>
<td>Bora GencTurk</td>
<td>2007</td>
<td>A New Pushover-Based Fragility Method</td>
<td>U of Houston, USA</td>
</tr>
<tr>
<td>Roberto Suarez</td>
<td>2007</td>
<td>Earthquake Impact on the State of Illinois</td>
<td>Consultant, USA</td>
</tr>
<tr>
<td>David Bennier</td>
<td>2009</td>
<td>Hybrid Simulation of Semi-rigid Steel Frames</td>
<td>HNTB, USA</td>
</tr>
<tr>
<td>Anisa Como</td>
<td>2010</td>
<td>Integrated Impact of Central US Earthquakes</td>
<td>U of Colorado (grad student)</td>
</tr>
<tr>
<td>Thomas Frankie</td>
<td>2010</td>
<td>ANalysis-based Fragility of Masonry Structures</td>
<td>U of Illinois (grad student)</td>
</tr>
<tr>
<td>Gulen Ozkula</td>
<td>2011</td>
<td>Advanced Steel Materials for Seismic Design</td>
<td>UC San Diego (grad student)</td>
</tr>
<tr>
<td>Amanda Lewis</td>
<td>2011</td>
<td>Fragility Analysis of Asphalt Pavement</td>
<td>Consultant, USA</td>
</tr>
<tr>
<td>Elisa Chen</td>
<td>2012</td>
<td>Multi-hazard Assessment of High Rise Buildings</td>
<td>Magnusson Klemencic Associates, USA</td>
</tr>
</tbody>
</table>

**Ph.D. Thesis Students**

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Year Graduated</th>
<th>Thesis Title</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. W. Aritenang</td>
<td>1989</td>
<td>Composite Tubular Connections for Offshore Applications</td>
<td>Ministry of Transportation, Indonesia</td>
</tr>
<tr>
<td>2. K. Pilakoutas</td>
<td>1990</td>
<td>Seismic Performance of RC Walls</td>
<td>Professor, U of Sheffield</td>
</tr>
<tr>
<td>3. M. Lopes</td>
<td>1991</td>
<td>Shear Dominated RC Walls</td>
<td>Professor, U of Lisbon</td>
</tr>
<tr>
<td>4. A. Salama</td>
<td>1992</td>
<td>Repair and Retrofitting of RC Walls</td>
<td>Consultant, Dubai and Egypt</td>
</tr>
<tr>
<td>5. A. Elghazouli</td>
<td>1991</td>
<td>Seismic Behavior of Composite Columns</td>
<td>Professor, Imperial College</td>
</tr>
<tr>
<td>6. B. Izzuddin</td>
<td>1992</td>
<td>Advanced Inelastic Dynamic Analysis of Offshore Platforms</td>
<td>Professor, Imperial College</td>
</tr>
<tr>
<td>7. M. Soliman</td>
<td>1992</td>
<td>Automated Assessment of Seismic Vulnerability</td>
<td>Professor, U of Zagazig, Egypt</td>
</tr>
<tr>
<td>8. B. Broderick</td>
<td>1994</td>
<td>Seismic Behavior of Composite Frames</td>
<td>Professor, Trinity College, Dublin</td>
</tr>
<tr>
<td>9. E.M. Higazy</td>
<td>1993</td>
<td>Shear in RC Beam-column Connections</td>
<td>Professor, Ain Shams U, Egypt</td>
</tr>
<tr>
<td>10. A. Elmesallamy</td>
<td>1993</td>
<td>Three-dimensional Analysis of RC Structures</td>
<td>Professor, U of Mansoura, Egypt</td>
</tr>
<tr>
<td>12. E. Martinez</td>
<td>1996</td>
<td>A New Energy Dissipation Device for RC Buildings</td>
<td>Professor, U of Brighton</td>
</tr>
<tr>
<td>Student Name</td>
<td>Year Graduated</td>
<td>Thesis Title</td>
<td>Placement</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------</td>
<td>-------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>13. F.D. Ashtiani (Imperial)</td>
<td>1997</td>
<td>Experimental and Analytical Study of Semi-rigid Frames</td>
<td>Ministry of Construction, Iran</td>
</tr>
<tr>
<td>14. D. Lee (Imperial)</td>
<td>1999</td>
<td>Flexure-Shear-Axial Interaction in Concrete Columns</td>
<td>Professor, Peche U, Korea</td>
</tr>
<tr>
<td>15. L. Song (Imperial)</td>
<td>1998</td>
<td>Combined Earthquake and Fire Analysis of Buildings</td>
<td>Consultant, Japan</td>
</tr>
<tr>
<td>16. R.G. Goodfellow (Imperial)</td>
<td>1999</td>
<td>High Performance RC Structures</td>
<td>Consultant, Ireland</td>
</tr>
<tr>
<td>17. R. Pinho (Imperial)</td>
<td>2000</td>
<td>Seismic Assessment of RC Structures</td>
<td>Professor, U of Pavia</td>
</tr>
<tr>
<td>18. B. Borzi (Imperial)</td>
<td>2000</td>
<td>Methods and Spectra for Displacement-based Design</td>
<td>Professor, U of Pavia</td>
</tr>
<tr>
<td>19. A. Mwafy (Imperial)</td>
<td>2001</td>
<td>Advanced Inelastic Pushover of RC Buildings</td>
<td>Professor, U of UAE (Al Ain)</td>
</tr>
<tr>
<td>20. A. Manafpour (Imperial)</td>
<td>2002</td>
<td>Refined Analysis Methods for RC Buildings</td>
<td>Consultant, UK</td>
</tr>
<tr>
<td>21. M. Tsuji (Imperial)</td>
<td>2002</td>
<td>Shaking Table Testing of Steel Frames</td>
<td>Nippon Steel, Japan</td>
</tr>
<tr>
<td>22. T. Rossetto (Imperial)</td>
<td>2004</td>
<td>Fragility Analysis of European Buildings</td>
<td>Professor, U College, London</td>
</tr>
<tr>
<td>24. GunJin Yun (Illinois)</td>
<td>2006</td>
<td>Neural Network Solutions for Structural Systems</td>
<td>Professor, U of Akron, USA</td>
</tr>
<tr>
<td>25. Oh-Sung Kwon (Illinois)</td>
<td>2007</td>
<td>Fragility of RC Bridges with Soil-structure Interaction</td>
<td>Professor, U of Toronto, USA</td>
</tr>
<tr>
<td>26. Gina Thermou (Greece)</td>
<td>2007</td>
<td>Strengthening of RC Buildings</td>
<td>Professor, Aristotle, Greece</td>
</tr>
<tr>
<td>27. Jun Ji (Illinois)</td>
<td>2007</td>
<td>Multiplatform Fragility Analysis of High-rise Buildings</td>
<td>Consultant, USA</td>
</tr>
<tr>
<td>28. Narutoshi Nakata (Illinois)</td>
<td>2007</td>
<td>Hybrid Simulation of Skew Bridges</td>
<td>Professor, Johns Hopkins, USA</td>
</tr>
<tr>
<td>29. Young Suk Kim (Illinois)</td>
<td>2007</td>
<td>Optimized Static Transportation and Utility Network Models</td>
<td>Consultant, USA</td>
</tr>
<tr>
<td>30. Himmet Karaman (ITU)</td>
<td>2008</td>
<td>Risk Assessment of Istanbul, Turkey</td>
<td>Professor, Istanbul Technical U</td>
</tr>
<tr>
<td>31. Sung Jig Kim (Illinois)</td>
<td>2008</td>
<td>Effect of Vertical Motion on RC Bridges</td>
<td>Professor, Keimyung U, Korea</td>
</tr>
<tr>
<td>32. Curtis Holub (Illinois)</td>
<td>2009</td>
<td>Testing and Analysis of RC Bridges with Vertical Motion Effects</td>
<td>ExxonMobil, USA</td>
</tr>
<tr>
<td>33. JunHee Kim (Illinois)</td>
<td>2009</td>
<td>Neural Networks Applications to Steel Frames</td>
<td>Professor, Yonsei U., Korea</td>
</tr>
<tr>
<td>34. Omar El Anwar (Illinois)</td>
<td>2009</td>
<td>Optimization of Post-disaster Housing</td>
<td>Professor, U of Washington, USA</td>
</tr>
<tr>
<td>35. Nihan Dogramaci (Yildiz U)</td>
<td>2009</td>
<td>Seismic Behavior of Semi-rigid Frames</td>
<td>Professor, Fatih U, Turkey</td>
</tr>
<tr>
<td>36. Liang Chang (Illinois)</td>
<td>2010</td>
<td>Static and Dynamic Transportation Network Modeling</td>
<td>Consultant, USA</td>
</tr>
<tr>
<td>Student Name</td>
<td>Year Graduated</td>
<td>Thesis Title</td>
<td>Placement</td>
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<tr>
<td>37. Can Unen (ITU)</td>
<td>2011</td>
<td>Interactive Utility networks Modeling in the USA and Turkey</td>
<td>Senior Researcher, ITU, Turkey</td>
</tr>
<tr>
<td>38. Hussam Mahmoud (Illinois)</td>
<td>2011</td>
<td>Hybrid Testing of Steel Frames with Semicrígid Connections</td>
<td>Professor, Colorado State U, USA</td>
</tr>
<tr>
<td>40. Bora Gencturk (Illinois)</td>
<td>2011</td>
<td>Advanced Concrete Materials and Applications in Seismic Design</td>
<td>Professor, U of Southern California</td>
</tr>
<tr>
<td>42. Adel Essam Abdelnaby</td>
<td>2012</td>
<td>Multiple Earthquake Effects on RC Buildings</td>
<td>Professor, U of Memphis</td>
</tr>
<tr>
<td>43. Seliem Serhan (ITU)</td>
<td>2013</td>
<td>Physics-based Fire after Earthquakes Models</td>
<td>Professor, Osmaniye U, Turkey</td>
</tr>
<tr>
<td>44. Xiowen Yao (Zhejiang)</td>
<td>2013</td>
<td>Seismic Performance of RC Arch Dams in China</td>
<td>Senior researcher, Zhejiang</td>
</tr>
<tr>
<td>45. Thomas Frankie (Illinois)</td>
<td>2013</td>
<td>Hybrid Simulation and Fragility of Curved RC Bridges</td>
<td>WJE, Chicago</td>
</tr>
<tr>
<td>46. Hazam Al Anwar (Illinois)</td>
<td>2015</td>
<td>Model Updating in Hybrid Simulation</td>
<td>Professor, Cairo U.</td>
</tr>
<tr>
<td>47. Hamed Akbarpour (Penn State)</td>
<td>2019</td>
<td>Fire Following Earthquake: Analysis, Assessment and Mitigation Design</td>
<td>Post-doc, Penn State</td>
</tr>
</tbody>
</table>

**Editorships of Journals or Other Learned Publications**

2. Natural Disasters, Member of the Board of Editors, 2006 – present
3. Journal of Earthquake Engineering and Engineering Vibrations, Member of the Board of Editors, 2005 – present
6. The Structural Design of Tall Buildings, member of Board of Editors, published by John Wiley and Sons, April 1996
7. ‘European Seismic Design Practice; Research and Application’, Proceedings of the Fifth SECED Conference, Chester, October 27-28, 1995 (A.A. Balkema)

**Post-doctoral Associates and Visiting Scientists**

<table>
<thead>
<tr>
<th>Name</th>
<th>Country of Origin</th>
<th>Permanent Employer</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omar Pineda-Porras</td>
<td>Mexico</td>
<td>National Autonomous University of Mexico</td>
<td>September 2006 – August 2008</td>
</tr>
<tr>
<td>Name</td>
<td>Country of Origin</td>
<td>Permanent Employer</td>
<td>Years</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Zakir Hussain</td>
<td>Pakistan</td>
<td>University of Engineering &amp; Technology, Peshawar</td>
<td>April 2008 – January 2010</td>
</tr>
<tr>
<td>Huseyin Can Unen</td>
<td>Turkey</td>
<td>Istanbul Technical University</td>
<td>February 2008 – May 2009</td>
</tr>
<tr>
<td>Soo-Yeon Seo</td>
<td>Korea</td>
<td>Chungju National University (CJNU)</td>
<td>Jan 2008 – Jan 2009</td>
</tr>
<tr>
<td>Vincent Yang</td>
<td>Taiwan</td>
<td>NCREE</td>
<td>June-August 2008</td>
</tr>
<tr>
<td>Fikri Acar</td>
<td>Turkey</td>
<td>Middle East Technical University</td>
<td>June 08 – June 09</td>
</tr>
<tr>
<td>Young-Sun Choun</td>
<td>Korea</td>
<td>Korea Atomic Energy Research Institute</td>
<td>August 2008 – July 2009</td>
</tr>
<tr>
<td>Giulio Martire</td>
<td>Italy</td>
<td>Department of Structural Engineering, University of Naples &quot;Federico II&quot;</td>
<td>January 2009 - May 2010</td>
</tr>
<tr>
<td>Khan Shaahzada</td>
<td>Pakistan</td>
<td>University of Engineering &amp; Technology, Peshawar</td>
<td>January 2010 - January 2011</td>
</tr>
<tr>
<td>Muhammad Ashraf</td>
<td>Pakistan</td>
<td>University of Engineering &amp; Technology, Peshawar</td>
<td>January 2010 - January 2011</td>
</tr>
<tr>
<td>Cenk Aksoylar</td>
<td>Turkey</td>
<td>Istanbul Technical University</td>
<td>January-June 2011</td>
</tr>
<tr>
<td>Nihan Dogramaci</td>
<td>Turkey</td>
<td>Yildiz Univeristy</td>
<td>January-June 2011</td>
</tr>
<tr>
<td>Changdong Zhou</td>
<td>China</td>
<td>Jaitong University</td>
<td>December 2011- December 2012</td>
</tr>
<tr>
<td>Takashi Miyamoto</td>
<td>Japan</td>
<td>Tokyo University</td>
<td>June-August 2012</td>
</tr>
<tr>
<td>Mahmoud Jabareen</td>
<td>Israel</td>
<td>Tecnion Tel Aviv</td>
<td>August 2015</td>
</tr>
<tr>
<td>Reyhaneh Navazbad</td>
<td>USA</td>
<td>Texas A and M</td>
<td>June 2018-July 2019</td>
</tr>
</tbody>
</table>

**Conferences Organized or Chaired**

1. Chairman of Conference Committee, Society of Earthquake and Civil Engineering Dynamics (SECED) Conference on Seismic Design Codes in the Next Millennium, Chester, 1995
2. Chairman of Conference Committee, 12th European Conference on Earthquake Engineering, London 2002 (chairman from September 1998 to January 2000, then Chairman of the Scientific Affairs sub-committee from January 2000 to June 2002, thereafter member of the Conference Organizing Committee)
4. Co-editor, GeoMEast International Conference, Sharm Elsheikh, July 2017

**External Academic Committees**

1. Member of the three-person Steering and Selection Committee for the Italian Civil Defense Agency for Research in Earthquake Risk (GNDT), 1999-2004
2. Member of the Board of Directors of the International School of Reduction of Seismic Risk (Rose), Pavia, Italy, 2000-present
3. Member of the University Engineering Advisory Committee, University of Hong Kong, 2010-2012
4. External assessor of the CEE Department at Florida International University, USA, 2010
5. Member of the external assessment panel of the School of CE and Environmental Science at University of Florida, Gainesville, USA, 2011
6. Member of the external assessment panel of the Royal Commission of Jubail and Yanbo' University and Technical Institutes in Jubail, Kingdom of Saudi Arabia, 2011
7. Member of the external assessment panel for the CEE Department at the University of Toronto, 2012
8. Member of the external assessment panel for the CEE Department at the University of British Columbia, 2012

Technical and Professional Service

Professional Societies

1. The Royal Academy of Engineering, UK, Fellow, 2000 onwards
2. European Association of Earthquake Engineering, Senior Vice President, 1998 - 2002
5. American Society of Civil Engineers, USA, Fellow, 1997 -
7. Society of Earthquake and Civil Engineering Dynamics, (SECED), (ICE-affiliated), UK, Vice-Chairman, 1990 - 1992
8. Society of Earthquake and Civil Engineering Dynamics, (SECED), (ICE-affiliated), UK, Committee Member 1985 - 1995
10. Structural Stability Research Council, USA, Member-at-Large, 1990 -
12. Earthquake Engineering Research Inst., USA, Member, 1989 -
13. Institution of Structural Engineers, UK, Fellow, 1989 -
14. Engineering Council, UK Member, 1989 -
15. Applied Technology Council-63, Steering Committee Member, 2005 - 2007
18. Member of the Board of Directors of the Institution of Structural Engineers, UK, 2012 - onwards
19. Chi Epsilon, Civil Engineering Honors Society, Honorary Life Member, 2011
20. Life Member of the Penn State University Alumni Society, 2015

CEE at Illinois

1. Awards Committee, Member, 2004 - 2006
2. New Faculty Search Committee, Chairman, 2006
3. Ad Hoc Committee, Promotions and Tenure, Chairman, 2004 and 2008
4. Promotions and Tenure Committee member, 2003 and 2009 (single years in each occasion)

College of Engineering at Illinois

1. College Promotion and Tenure Committee, 2011-2014
2. Named Recognitions Committee, Member, 2011
3. College of Engineering Working Group on Faculty Startups, Member, 2009
5. Dean’s Committee on Global Engineering, Chairman, 2012

University of Illinois

1. Chair of search committee for founding director of the Institute of Energy and Environment
2. Member, University Overheads Distribution Model committee

Penn State University

1. Chair, search committee for dean of Eberly College of Science, 2015
2. Chair, Campus committee on strategic thrust ‘Managing Resources’, 2014-2015
3. Chair, STEM Deans committee on Inclusive Penn State, 2015
4. Member, Case Statement Committee for PSU fundraising campaign (2016-2021), 2015 to present
5. Member, Health Sciences Council, 2014 to present
6. Member, steering committee of the Huck Institute of Life Sciences, and Institutes for Energy and Environment
7. Member, steering committee for Institute for Natural Gas Research

University of Houston

1. Member of President’s Council
2. Member of Space Reallocation Committee
3. President’s Representative on Houston Exponential Advisory Board
4. President’s Representative on Association of Public and Land-grant Universities
5. Chair of the Budget Transparency Sub-committee on Performance
6. Co-Chair of the Budget Transparency Steering Committee on Research Funding and Management

External Service

1. CEN EC8 Drafting Panel (Repair and Redesign) Member, PT4 2000 - 2002
2. CEN EC8 Drafting Panel (Action, RC, Steel etc), Member, PT1, 1999 - 2002
4. Ministry of Housing and Construction, Egypt, Member of Code Drafting Committees, 1999 - 2004
5. Federation Internationale de Beton (FIB), Member, SD Commission, 1999 - 2006
6. Comite Euro-Internationale de Beton (CEB), Member, TG13, 1992 - 1998
7. International Decade for Natural Hazard Reduction Earthquake Working Group, Member, 1992 - 1996
8. Working Group on Seismic Design of Composite Structures, JRC, Ispra, Italy, Member, 1992 - 1996
13. CEN Sub-committee 8, National Tech. Contact, 1991 - 2001
15. Illinois Seismic Safety Task Force, Member, 2008 - 2010
16. Member of University Advisory Committee, Hong Kong University, Hong Kong, 2011-2012
17. Member of PhD Scholarship Committee, Universities Research Council of Hong Kong, 2012-2016
18. Member of the Public Policy Committee of the American Society for Engineering Education, USA, 2016-
20. Departmental Academic Advisor, CEE Department, Hong Kong Polytechnic University, 2017-2022.
21. Referee of Startups and Mentor of engineering students for Royal Academy of Engineering (in collaboration with the US NAE and the Chinese Academy) on Global Grand Challenges Summit, July 2019
Vistasp Karbhari
Vistasp M. Karbhari
Curriculum Vitae

Education 1
University Academic and Administrative Appointments 1
University Service and Major Accomplishments 1
   University of Texas at Arlington 1
   University of Alabama in Huntsville 4
   University of California San Diego 5
Research and Scholarly Expertise 6
Awards and Honors 7
Service on Higher Education Boards and National Task Forces 8
Service on Community Boards 8
Honor Societies 8
Professional Society Memberships 8
Journal and Professional Society Editorial Boards 8
Technical Conference/Workshop Organization 9
Service: External Reviews 9
Courses Taught 10
Graduate Theses Chaired 11
Publications 14
   Op-Eds, Articles on Education 14
   Refereed Journal Publications 15
   Monographs and Book Chapters 27
   Books Edited 28
   Proceedings Edited 29
   Patents 29
   Refereed Discussions in Journals 29
   Articles in Professional Society Magazines and Newsletters 29
   Papers in Conference Proceedings 30
Technical Presentations at Conferences 48
Funded Research 60
VISTASP M. KARBHARI  
Curriculum Vitae

president
The University of Texas at Arlington
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Arlington, TX 76019-0125
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Fax: (817)-272-5656
Email: vkarbhari@uta.edu
Twitter: @VistaspKarbhari

EDUCATION
Ph.D. University of Delaware, 1991 (Dissertation Area: Composite Materials)
ME University of Poona, India, 1985 (Civil, Structures)
BE University of Poona, India, 1984 (Civil Engineering)

UNIVERSITY ACADEMIC AND ADMINISTRATIVE APPOINTMENTS
University of Texas at Arlington (June 2013-present)
President
Professor, Department of Mechanical and Aerospace Engineering
Professor, Department of Civil Engineering

University of Alabama in Huntsville (Sept. 2008 – May 2013)
Provost and Executive Vice-President for Academic Affairs
Professor, Department of Mechanical and Aerospace Engineering
Professor, Department of Civil and Environmental Engineering
University of Alabama (courtesy appointment), Professor, Graduate School, Department of Ed Leadership

University of California San Diego (February 1995 –August 2008)
Chair and Vice-Chair of the Department of Structural Engineering
Professor/Associate Professor, Department of Structural Engineering
Professor, Materials Science and Engineering Program
Assistant Professor, Department of Applied Mechanics & Engineering Sciences

University of Delaware (1991-February 1995)
Scientist/Associate Scientist, Center for Composite Materials
Research Assistant Professor, Department of Civil Engineering

UNIVERSITY SERVICE AND MAJOR ACCOMPLISHMENTS
President, University of Texas at Arlington, June 2013 - Present
Since taking office in June 2013 as the 8th President, the University has been on a tremendous forward-looking trajectory as an urban serving university focused on excellence through enhanced academic quality and reputation, and increased degree attainment and student success, while increasing access and enrollment, and maintaining affordability, following a bold vision set forth in a Strategic Plan (https://www.uta.edu/strategicplan/) focused on enabling a sustainable megacity as the DFW metroplex
increases in size and population to megacity levels, emphasizing engagement and activity through 4 theme areas of Health and the Human Condition, Sustainable Urban Communities, Global Environmental Impact, and Data Driven Discovery. UTA serves students and the community through its main campus in Arlington, Fort Worth Campus in Fort Worth, Outreach Office in Dallas, and the University of Texas at Arlington Research Institute (UTARI) in Fort Worth, in addition to programs taught at multiple international locations. UTA is a leader in high quality online education at the highest levels of rigor and excellence with a focus on working professionals and non-traditional students.

Major achievements by the University during my tenure include

- Designation as a Carnegie R-1 “very high research” institution, one of the top 131 in the nation with a 66% increase in overall research expenditures between FY 13 and FY 19 (over $118 M) and a 36% increase in research expenditures per tenured/tenure-track faculty member
- Designation as a Hispanic Serving Institution, and named as a 2018 Excelencia en Educación finalist
- Ranked as the top institution in the nation for Veterans by Military Times
- Ranked by Washington Monthly as #1 in Texas and #23 in the nation for success/performance of first-generation students
- Ranked as the 3rd fastest growing public doctoral institution in the US by the Chronicle of Higher Education, with a 28.6% increase in enrollment since Fall 2013 with a Fall 2019 THECB (Texas Higher Education Coordinating Board) enrollment of 42,863, with a 12 month IPEDS enrollment of 60,075 degree seeking students in AY 17-18, representing a 25% increase over AY 13-14 (The difference between the THECB and IPEDS enrollment is due to the use of multiple tracks through the year to serve working professionals and online students outside the State, both of which are not counted by THECB)
- 45% increase in degree attainment since AY 12-13 with over 13,700 degrees awarded in AY 18-19, including 40% increase in Baccalaureate degrees, a 55% increase in Masters degrees, and a 50% increase in Doctoral degrees
- 7.5% increase in 4-year graduation rates and 11% in 6-year graduation rates since AY 13-14, with the gap between URM and non-URM graduation rates reduced to just a 1 pct. difference
- Ranked as the 6th most diverse institution in the nation by US News & World Report
- Increased student success with, degree attainment for, under-represented/minority students with the graduation rate gap being less than 1%
  - Ranked #1 in Texas and #11 nationally among all 4-year institutions for the number of Bachelor’s degrees awarded to African American students (an increase of 2% above the previous year and 32.9% since AY 12-13)
  - Ranked #1 in Texas and #14 nationally among all 4-year institutions for the number of Master’s degrees awarded to African American students (an increase of 34% above the previous year and 61.1% since AY 12-13)
  - Ranked #1 in Texas and #17 nationally among all 4-year institutions for the number of Master’s degrees awarded to all minority students (an increase of 41% above the previous year and 81.9% since AY 12-13)
  - Ranked #17 and #11 nationally among all 4-year institutions for the number of Bachelor’s and Master’s degrees, respectively, awarded to Hispanic students with increases of 86.8% and 107.5%, respectively since AY 12-13.
  - Ranked #13 nationally among all 4-year institutions for the number of Bachelor’s and degrees awarded to minority students with an increase of 62.9% since AY 12-13
- 19% increase (114 lines) in the number of tenured/tenure-track faculty lines since AY 14-15,
- Recruitment of 6 members of the National Academies (Sciences, Engineering, Medicine) and election of an additional faculty member to the NAE
- 17 Fellows of the National Academy of Inventors, the highest number at any institution in Texas, and 4th highest in the nation
- 60% increase in endowment ($163 M) since AY 13-14 and substantial increase in the number of endowed Chairs, professorships and faculty fellowships
• **Increased operating budget by 45%** since FY 14 to over $830 M in FY 20 including a 13.6% increase in State appropriations for the current fiscal year, and increases in auxiliary revenues so as to further fund academic excellence

• Maintained a **stable and positive financial condition** for the university (data from UT System 2019 Financial Condition Report)
  - Aa2 rating
  - Annual operating margin increased from 4.5% for 2018 to 5.6% for 2019
  - Spendable cash and investments to operating expenses were 1.05 times for 2019 compared to 1.0 for 2018
  - Spendable cash and investments to total debt ratio was 2.55 times in 2019 compared to 2.30 times in 2018

• Listed in **top 20 most innovative online colleges** in the country by College Consensus, 2019, with nationally ranked programs in Nursing, Education, Engineering, and Social Work.

• Maintained **affordability** of education
  - Median of undergraduate student loan debt as a % of the 1st year wage is the lowest of all universities in the Texas Research and Emerging Research Categories (THECB Accountability Data)
  - Post-graduate earnings for baccalaureate graduates working in Texas is the highest of all UT System academic campuses (UT System Sourcebook, 2019)

• Establishment of two new Colleges – **College of Nursing and Health Innovation**, and the **College of Architecture, Planning and Public Affairs**, and a **Focused Division of Student Success**

• Ranked in the **top 5 in the nation for enrollment of transfer students** by USN&WR with establishment of **unique data sharing agreements** between UTA and the two largest Community College Systems in the metroplex (Dallas and Tarrant County Community College District Systems) enabling sharing of student records for advising, pathways, and smooth transfer

• Establishment of unique **Teacher Academies, STEM Academy, and Early College High School** programs/initiatives between UTA and three surrounding independent school districts (Arlington, Grand Prairie, and Mansfield), in addition to other programs across the region using structured pathways and focused agreements

• Attained all metrics to be designated the next Texas Tier-1 university under the National Research University Fund initiative developed by the Texas legislature

• Focused efforts on enhancing campus climate including through the establishment of **Principles of Community** ([https://www.uta.edu/strategicplan/plan/poc.php](https://www.uta.edu/strategicplan/plan/poc.php)), and the **Community That Cares** ([https://www.uta.edu/communitythatcares/](https://www.uta.edu/communitythatcares/)) campaign, with a focus on mental wellness, sexual assault and relationship violence prevention, bystander intervention, and addressing food and shelter insecurity.

• Establishment of the **Women’s Faculty and Staff Network** ([https://www.uta.edu/wfsn/](https://www.uta.edu/wfsn/)) to empower women Faculty and Staff by advocating for opportunities to advance their professional development in research, teaching, and service, while balancing their personal, career, physical, and mental health demands

• Developed **unique partnerships with other DFW universities** across systems to leverage resources to serve the metroplex
  - Established the North Texas Genome Center at UTA in collaboration with the University of North Texas Health Sciences Center
  - Established joint degrees with the Texas A&M Law School (JD-MBA, JD-MS Taxation)
  - Established academic and research partnership with the Botanical Research Institute of Fort Worth

• Developed international partnerships for academics and research in **Bangladesh** (at the Government and University levels), **China** (University level with UTA offering EMBA and CS degrees in China), **India** (at the University level through 3+1+1 programs), **Jordan** (at the Government and University levels focused on Nursing and Engineering), and **Taiwan** (University level with UTA offering EMBA degrees in Taiwan and through 3+1+1 programs).
• Addition of over $400 M in **new buildings and major renovations** including a new Science and Engineering Innovation and Research facility, 530 Bed Residence Hall, Student Activities Center, Career Development Center, Student Engagement Spaces (including a Park with a stage) and Parking Garage, in addition to substantial renovations and improvement to grounds. Ongoing construction and funded planning for a new Faculty and Support Services Building, Expansion of Ballroom/theatre, and a new Social Work/Nursing Simulation Center Building.

• Successful transition of UTA from the WAC to the Sun Belt Conference; enhancement of athletic facilities (Basketball, Softball, Baseball) to enhance competitiveness, and initiation of a Women’s Golf Team

**University of Alabama in Huntsville**

Served as Executive Vice President for Academic Affairs and Provost with overall responsibility for Academic Affairs, Student Affairs, Student Support Services, Enrollment Services and Management, Computer and Network/Information Services, and Professional and Continuing Education.

• Served as the senior administrator for UAHuntsville from March 2011 to November 2011 (time period between when the previous President resigned and a new President was appointed) with responsibility for day-to-day operations of the University. Ensured stability, developed and submitted university budget request in conjunction with the CFO for state allocation resulting in a 1.5% increase in state allocation, completed annual capital plan, developed university budgets for the 11-12 fiscal year, and led university development efforts. The Chancellor of the UA System (with offices in Tuscaloosa) served as the Interim President.

• Worked with the Vice-President for Research to enable an increase in sponsored research expenditures from $65 million in 2008 to $100 million and to designation as a **Carnegie R-1 institution**

• Worked closely with local legislators to enhance an appreciation for the University’s role in economic and workforce development and facilitated the addition of multi-million dollar allocations in special funds directed by the legislature to the University for specific programs in robotics and aerospace engineering, and for new construction of academic and research buildings.

• Integrated academic affairs and student affairs. This responsibility was added to my portfolio about a year after my arrival at UAHuntsville due to administrative and financial concerns in the latter division.

• Established the Student Success Center to integrate and substantially enhance activities related to student retention and progression, academic tutoring and coaching services, peer assisted study sessions, co-ops, internships and career development services, and the writing center, resulting in a 5% increase in 6-year graduation rates and a 20% increase in baccalaureate degrees attainment

• Raised funds for the development of scholarships for students, fellowships for faculty, new endowed Eminent Scholar Chairs, and an increase in discretionary funds through increases in the university endowment.

• Initiated a freshman experience program resulting in a 5% increase in freshman retention

• Increased graduate enrollment by 16% with 13% and 22% increases in Masters and Doctoral degree attainment

• Together with University leadership, enabled a rapid recovery of the University after the tragic shootings on February 12, 2010. Led successful university efforts to gain federal funding from DoEd and DoJ as well as from other sources. As the senior administrator on campus, led efforts to facilitate the recovery after the tornadoes in May 2011.

• Increased the overall number of faculty by focused hiring of over 80 faculty across all Colleges. Facilitated the recruitment and hiring of senior faculty/eminent scholars and the successful completion of cluster hires in Space-Physics and Supply-Chain/Logistics, as well as strategic increases in Nursing, and Mechanical and Aerospace Engineering.
Facilitated, in conjunction with the Academic Deans, and successfully obtained approval for, several new programs through the Board of Trustees and the Alabama Commission on Higher Education, including MS and PhD in Modeling and Simulation, MS in Information Assurance and Security (jointly offered by the Colleges of Business Administration, Engineering and Science), MA in Organizational Psychology, MS and PhD specializations in Data and Information Sciences, MS and PhD in Aerospace Systems Engineering, BFA to augment the current BA in studio art, BS in Individualized Science Studies, MS in Earth System Sciences, MS in Integrated STEM Education (for in-service teachers), MEd in Differentiated Instruction, BS in Economics and Computational Analysis.

Developed international programs including an interdisciplinary program in Sustainability with academic and research links with CATHALAC in Panama, and a unique agreement between the University of Rostock (in Mecklenburg-Vorpommern, Germany) for academic and research interactions leveraging of ties and resources between the German Aerospace Agency, DLR, and the State of Mecklenburg-Vorpommern.

Increased interaction with the US Army, NASA and corporate entities related to academic programs, continuing education, scholarships, internships and co-op opportunities.

Developed collaboration between UAHuntsville and the Oakridge National Laboratory to enhance educational and research opportunities for students and faculty, with the establishment of a special permanent ORNL office and presence on campus.

University of California San Diego

- **Member, UCSD Program Review Committee, 2007-2008** - principal advisory committee to the Senior Vice-Chancellor-Academic Affairs, for “all instructional, research, and public service programs of the general campus, as well as supporting programs, such as libraries and academic computing, provides recommendations on faculty and TA FTE allocations, operating budget issues, and priorities for capital improvement.”

- **Member, Senate Council, 2001–2002, 2007-2008** - The council oversees the business of the academic senate and monitors and adjusts the work of senate committees, performs duties according to policy on transfer, consolidation, disestablishment and discontinuance of academic programs.

- **Member, Senate Administration Council, 2001–2002, 2007-2008** - The committee serves as the forum for discussion between the senate and the council and deliberates on matters requiring coordination between the faculty senate and the university administration.

- **Chair, Graduate Council, 2007-2008** - Senate committee with responsibility for setting policy and standards for all graduate programs at UCSD, regulating the work of the graduate division, advising the Chancellor regarding relations with educational and research foundations, supervising all forms of graduate instruction and research, and administering the establishment of departments, schools and organized research units. The committee has the administrative function of setting policy, to be administered by the Dean of Graduate Studies.

- **Administrative Internship in the Office of Graduate Studies and Research: 2006** - This was a special position created under the Vice-Chancellor for Research and Dean of Graduate Studies Richard Attiyeh to provide experience in administration and policy. Responsibilities also included taking part in the external review of graduate departments and programs.

- **Member, Capital Outlay and Space Advisory Committee (COSAC), 2006-2008** - I served as the faculty representative on the committee constituted of Vice-Chancellors of UCSD and charged with planning and advising the UCSD Chancellor on aspects related to capital outlay, requests to the State regarding capital projects, and long-range space planning and allocation activities. The committee reviews all project requests for State funds and recommends a rank-ordered five-year program to the UCSD Chancellor and the Office of the President of the University of California.

- **Member, Western Association of Schools and Colleges (WASC) 2005-2009 Accreditation Reaffirmation UCSD Senate-Administration Advisory Committee,**
2004-2008

• Member, Executive Committee – Material Science and Engineering Program, 1999 - 2008 - The executive committee is responsible for administration and enhancement of the graduate level, inter- departmental Materials Science program. The committee sets curriculum, core courses, standards for admissions and passing of the qualifying and senate examinations, and represents the Materials Sciences program in discussions with Deans and the Office of Graduate Studies and Research.

• Co-Chair, UCSD Task Force on Enrollment Management, 2001 – 2006 - Special task-force formed to study issues and develop strategies related to growth and approach to steady state based on aspects including streaming of incoming freshmen, distribution among the divisions, transfer of students between majors, effect of impactedness in popular or facility-intensive majors, inclusion of transfer students, increase of underrepresented populations, and effect of growth in changing budget climates while ensuring maintenance of high levels of education and research excellence.

• Chair, Committee on Educational Policy (CEP), 2001-2002, Member, CEP 1999-2002 - The committee has control concerning matters of educational policy at UCSD; it approves programs and college plans, considers proposals for the establishment, approval or disapproval of new departments, schools and organized research units, changes in existing programs, establishes policies and procedures related to education, conducts periodic reviews of programs. During my year as chair, in addition to routine business and program reviews, CEP established procedures for enrollment management in programs impacted by over-enrollment, initiated development of a new UCSD policy on academic integrity, approved the establishment of an inter-disciplinary program in Bioinformatics (requiring cross-disciplinary coordination), and oversaw the establishment of the 6th undergraduate college dedicated to interdisciplinary exploration of Culture, Art and Technology in an integrated community environment. In addition developed strategies to initiate and maximize the potential of on-line learning while ensuring usage that is consistent with faculty responsibility and the educational mission of the campus.

• Member, Jacobs School of Engineering, Energy, Environment and Sustainability (EES) Committee, 2007-2008

• Member, Jacobs School of Engineering Committee for UC San Diego Educational Collaboration, with DOE/Los Alamos National Laboratory, and co-principal author of Jacobs School of Engineering plan for development of educational interaction and degree on damage prognosis with the Los Alamos Laboratories 2003-2004.

• Member, Jacobs School of Engineering Committee on Academic Integrity, 2000-2001

• Member, Jacobs School of Engineering ABET Committee, 2000-2001

• Member, Jacobs School of Engineering, Aerospace Engineering Executive Committee, 2001

RESEARCH AND SCHOLARLY EXPERTISE
Processing and mechanics of composites, deterioration science of polymers and composites, biomaterials, infrastructure renewal and multi-threat mitigation (including blast), sustainability, impact/damage mechanics and crash energy management, nondestructive assessment of materials and structures, wireless sensing, damage prognosis, and structural health monitoring.

Author/Co-author of 200 refereed archival papers in scientific journals, editor/co-editor of 7 books, author and contributor to monographs, over 260 papers in conference proceedings, in addition to other papers, chapters in books, technical reports, and holder of 1 patent.

PI or Co-PI on over $37M in research projects, in addition to other projects related to institutional and educational objectives
AWARDS AND HONORS

(Technical Keynote, distinguished and plenary lectures are listed in the overall list of Presentations)

- **Elected member of the European Academy of Sciences and Arts, 2019**
- Named to Fort Worth Inc: 400 Most Influential People - 2019, 2018
- Diversity & Inclusion Champion Award, US Pan Asian American Chamber-SW, February 2019
- Global Vision Award, Greater Dallas Taiwanese Chamber of Commerce, January 2019
- Distinguished Visitor Award, Dayananda Sagar Institutions, Bangalore, December 2018
- Champions Education Award, AdvoCare, May 2018
- Vanguard Award (with A. Acosta, THECB Board Member and President/CEO Carcon Industries/STC Engineering), LUNA Awards, Regional Hispanic Contractors Association, October 2017
- Honorary Chair, National Association for Bilingual Education 46th Conference, 2017
- Veterans Community Leadership Award, VetStarts, Arlington, 2017
- International Outreach Activities Award, Hashemite University, Jordan, November 2016
- Honorary Professor, Amity Universities, Gurgaon, India, September 2016
- Distinguished Global Indian Speaker Award, Amity University Gurgaon, India, September 2016
- General Motors Arlington STEM Education Award, May 2016
- SDPS University Award of Excellence, Society for Design and Process Science, Dallas, November 2015
- **Fellow, Structural Engineering Institute of the ASCE, April 2015.**
- Outstanding Leader in the Field of Education Award, US India Chamber of Commerce DFW, September 2014
- Outstanding Scholar/Administrator Award, Indian American Friendship Council, Dallas, TX, May 2014
- Greater Dallas Indo-American Chamber of Commerce Award, Dallas, TX, 2014
- **Fellow, American Society of Civil Engineers, 2014**
- **Fellow, International Society for Structural Health Monitoring of Intelligent Infrastructure, 2014**
- **Fellow, National Academy of Inventors, 2013**
- **Fellow, ASM International, 2011**
- California Department of Toxic Substance Control, California Green Chemistry Science Advisory Panel Recognition, June 2008
- **Fellow, International Institute for FRP in Construction (IIFC), 2006**
- 2006 IIFC President’s Award
- 2006 Best Paper Award, European Workshop on Structural Health Monitoring
- 2003 ASNT Faculty Grant Award
- Best Paper Award, High Temperature and Environmental Effects Division, American Society of Composites, 2000
- Best Paper Award, Composites Institute International Composites Exposition, 1999
- Powell Faculty Fellowship, 1997 - 1999
- CAREER Award, National Science Foundation, 1997
- Civil Engineering Research Foundation Charles Pankow Award for Innovation, Innovative Concept Category, 1996
- Best Paper Award in Materials, 1992 ASM/ESD Advanced Composites Conference
SERVICE ON HIGHER EDUCATION BOARDS & NATIONAL TASK FORCES

- ACE National Task Force on Transfer of Credit, Member (2020-)
- Association of Public & Land-Grant Universities (APLU), Board of Directors (2019-)
- APLU, Powered by Publics Initiative, Metropolitan Cluster (Cluster 7), Lead (2019-)
- Texas Office of the Governor, Workforce Workgroup, Member (2018-)
- Council of Public University Presidents and Chancellors, TX, Member (2013-), Executive Committee Member (2019-), CPUPC-TACC Priority Group, Chair, 2016-2017, Lamar Award Selection Committee, Member, 2017
- Texas International Education Consortium, Board Member (2013-), Executive Committee (2019-)
- Sunbelt Athletic Conference, Board Member (2013-)
- Advisory Committee Member, Cerritos Community College Board – Composites Area (1999-2004)

SERVICE ON COMMUNITY BOARDS

- Greater Arlington Chamber of Commerce, Member, Board of Directors (2013-)
  o Executive Committee (2018-)
  o Member, Entrepreneurship Advisory Council (2019-)
  o Chair, Economic Development Committee (2019-)
- Dallas Citizens Council, Trustee Member (2013-)
- Dallas Regional Chamber, Board of Directors (2013-2019), Chair, University Council (2017)
- Fort Worth Chamber, Ex-Officio Board Member (2013-)
- North Texas Commission, Board Member (2013-)
- North Texas Leaders and Executive Advocating Diversity (LEAD), Board Member (2013-), Chair (2018, 2019)
- Tarrant Transit Alliance, Founders Council Member (2017-)
- Texas Health Resources Community Impact Board (2018-), Southwest Zone Strategic Planning & Deployment Subcommittee Board (2015-2018)
- Alabama India Business Partnership, Member, Board of Directors, (2009-2013)

HONOR SOCIETIES

- Chi Epsilon, University of Texas at Arlington, Chapter Honor Member (2019)
- Golden Key International Honor Society (Honorary Member) 2014
- Phi Kappa Phi Honor Society, UTA 2014
- Beta Gamma Sigma (Faculty Member), UTA, 2015
- Order of Omega, Honors Causa, UTA 2014
- Tau Beta Pi National Honor Society, UCSD

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Association for the Advancement of Science (AAAS)
- American Society of Civil Engineers (ASCE)
- ASM International
- International Institute for FRP in Construction (IIFC)
- International Society for Structural Health Monitoring of Intelligent Infrastructures (ISHMII)

JOURNAL AND PROFESSIONAL SOCIETY EDITORIAL BOARDS

- Associate Editor, Journal of Civil Structural Health Monitoring (2010-present)
- Editorial Board Member, Int. J. of Sustainable Materials and Structural Systems (2010-present)
• Editorial Board Member, ASTM Journal for Testing and Evaluation (2007-present)
• Editorial Board Member, Structural Engineering and Mechanics (2009-2018)
• Editorial Board Member, Composite Structures (2004-2007)
• Editor, International Institute for FRP in Construction (2004-2007)
• Editorial Board Member, Processing of Advanced Materials (1993 -1996)

TECHNICAL CONFERENCE/WORKSHOP ORGANIZATION (As Chair/Co-Chair)
• 3rd International Conference on Durability and Field Applications of Fiber Reinforced Polymer Composites for Construction (CDCC 2007), May 22-24, Quebec City, Canada.
• Workshop on Structural Health Monitoring and Diagnostics of Bridge Infrastructure, San Diego, CA, March 7-8, 2003 (Co-Chairs: V.M. Karbhari and C. Sikorsky)
• 45th International SAMPE Symposium, Long Beach, CA, May 2000 (Co-Chairs: S. Loud, V.M. Karbhari, D.O. Adams and A.B. Strong)

SERVICE: EXTERNAL REVIEWS (Programs and Proposals)
• Engineering and Physical Sciences Research Council, UK
• Israel Science Foundation
• National Science and Engineering Research Council of Canada, Expert Panel for Mid-Term Review of the ISIS Network, Network of Centers of Excellence of Canada, 2005
• National Science Foundation
• Oregon Transportation Research and Education Consortium
• Research Committee, City University of Hong Kong
• Research Grants Council and University Grants Committee, Hong Kong
• Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
• United Arab Emirates University
• US Army Cold Regions Research and Engineering Laboratory
• US Civilian Research and Development Foundation (CRDF) Georgian-US Bilateral Grants Program
COURSES TAUGHT
These only list courses for which I was the primary instructor

At the University of Delaware
• CIEG 211: Statics
• CIEG 212: Strength of Materials
• CIEG 406/606: Structural Materials

At the University of California San Diego
• AMES 121A: Statics
• AMES 121B: Dynamics
• AMES 130A: Solid Mechanics I
• AMES 130B: Solid Mechanics II: Theory of Elasticity
• AMES 138: Design of Composite Structures
• AMES 207: Composites Manufacturing
• AMES 291: Mechanics and Design Seminar
• SE 2: Structural Materials
• SE 87: Freshman Seminar
• SE 101A: Statics
• SE 101B: Dynamics
• SE 142: Design of Composite Structures
• SE 207: Topics in Structural Engineering – Advanced Composite Structures
• SE 207: Topics in Structural Engineering – Composites – Mechanics and Failure
• SE 250 Design of Composite Structures
• SE 251 Processing Science of Composites
• SE 290: Earthquake Engineering Seminar
• SE 291: Advanced Composites Seminar

At the University of Alabama in Huntsville
• MAE 695: Selected Topics – Mechanics of Composite Materials
• MAE 695: Selected Topics – Composites: Materials and Manufacturing
• MAE 678: Mechanics of Composite Materials
• Introduction to Composite Materials and Mechanics (offered through the Division of Professional and Continuing Studies)
GRADUATE THESES CHAILED
(The list only includes students for whom I was the principal advisor)

At the University of Delaware
- Hugh C. Boyle, Bond Strength of Fiber Reinforced Composite Bars to Concrete, Master of Civil Engineering, Summer 1993.
- Diane L. Wright, “Activity-Based Analysis of the Unit-Level Complexity of Resin Transfer Molded Composites, Master of Science in Accounting, Spring 1994.
- Mehernosh P. Engineer, Use of Composites for Rehabilitation of Concrete Beams: Processing, Performance and Durability, Master of Materials Science and Engineering, Fall 1994.
- Ian Howie, A Study n the Use of Composite Wraps for the Rehabilitation of Deteriorated Concrete Columns, Master of Civil Engineering, Fall 1995.
- Richard W. Rydin, Using the Drop Weight Impact Tower to Assess Impact Resistance of FRP Composite Plates, Doctor or Philosophy in Materials Science, Spring 1996.

At the University of California San Diego
- David C. Lee, Rehabilitation of Large Diameter PCCP With Composites, Master of Science in Structural Engineering, 2002.


• **Patrick Wilcox**, Reliability Based Assessment of FRP Rehabilitation of Reinforced Concrete Girders, Master of Science in Structural Engineering, June 2008.

• **Alicia Danyeur**, In situ Expanding Foam Based Carbon/Epoxy Sandwich Jackets for Column Retrofit, Master of Science in Structural Engineering, July 2008.

• **Sung-Jun Jin**, Reliability-Based Characterization of Prefabricated FRP Composites for Rehabilitation of Concrete Structures, Master of Science in Structural Engineering, July 2008


• **Sung Dae Kim**, Prediction of Long-Term Prestress Loss in Concrete Box Girder Bridges, Doctor of Philosophy in Structural Engineering, June 2009.


**At the University of Alabama in Huntsville)**

• **Seth Farrington**, Reliability Based Assessment of E-Glass Epoxy FRPs Under Exposure to Aqueous Solutions, Masters of Science in Engineering, Spring, 2013.

**At Other Universities**

• **Fabio Matta**, Bond Between Steel and CFRP Laminates For Rehabilitation of Metallic Bridges, Tesi di Laurea, Universita Degli Studi di Padova, Italy (Co-Advisor: D. Tinazzi), 2003

• **Michele Gallinelli**, Integrity and Durability of the Bond Between Concrete and FRP – Influence of Temperature and Humidity, Tesi di Laurea, Universita Degli Studi di Brescia, Italy (Co-Advisors: G. Plizzari, G. Benzoni), 2003

**PhD DISSERTATION EXTERNAL REVIEWER AT OTHER UNIVERSITIES**

• Dr. MGR Educational and Research Institute University, Chennai, India

• Indian Institute of Technology, Bombay, Powai, and Kharagpur, India

• National Institute of Technology, Warangal, India

• University of Southern Queensland, Australia
PUBLICATIONS

I. **OP-EDS, ARTICLES ON EDUCATION**


2. Partnering for Texas Students (with Betsy Price and Angela Robinson), Texas Tribune, May 10, 2016. (https://www.tribtalk.org/2016/05/10/partnering-for-texas-students/)


8. Are We Doing Enough to Serve Returning Adult Learners? EvoLLLution, June 20, 2017. (https://evolllution.com/attracting-students/todays_learner/are-we-doing-enough-to-serve-returning-adult-learners/)


12. Transformative Higher Education to Serve a Thriving State, TribTalk: Perspectives on Texas, Texas Tribune, March 5, 2019. (https://www.tribtalk.org/2019/03/05/transformative-higher-education-to-serve-a-thriving-state/)

13. From Academic Preparation, through Skills Development, to the Knowledge Continuum. Chapter 9, in President2President, Ten Challenges Facing Higher Education: Shaping the Student

II. REFEREED JOURNAL ARTICLES

1986

1988

1989

1990

1991


1992


20 V.M. Karbhari and D.J. Wilkins, “Integration of LEFM and Strength Criteria for the Prediction of Notched Strength of Polymeric Composites,” Polymer-Plastics Technology and Engineering, 31[1&2], 1992, pp.103-123.


1993


30 D.A. Steenkamer, D.J. Wilkins and V.M. Karbhari, "Influence of Test Fluid on Fabric Permeability Measurements and Implications for Processing of Liquid Moulded Composites," Journal of Materials Science Letters, 12, 1993, pp. 971-973.


35 D.A. Steenkamer, D.J. Wilkins and V.M. Karbhari, "Resin Transfer Molding II: Tooling and Processing," Processing of Advanced Materials, 3[3], 1993, pp. 181-192.


1994


1995

52 D.A. Steenkamer, D.J. Wilkins and V.M. Karbhari, "The Influence of Preform Joints on the Processing of RTM Composites," Composites Manufacturing, 6, 1995, pp. 23-34.


1996


1997


1998

1999
2000


2001


2002


2003
128 V.M. Karbhari, “Durability of FRP Composites for Civil Infrastructure – Myth, Mystery or Reality,” Advances in Structural Engineering, 6[3], 2003, pp. 243-255.

2004
137 V.M. Karbhari, “Fiber Reinforced Composite Bridge Systems – Transition from the Laboratory to the Field,” *Composite Structures* (invited paper for special issue), 66[1-4], 2004, pp. 5-16

2005

143 D.C. Lee and V.M. Karbhari, “Rehabilitation of Large Diameter PCCP With FRP Composites,” *Advances in Structural Engineering*, 8[1], 2005, pp. 31-44.

2006


2007


2008


2009


2010


2011


2012

III. MONOGRAPHS AND BOOK CHAPTERS


IV. BOOKS EDITED


V. **PROCEEDINGS EDITED**


VI. **PATENTS**


VII. **REFEREED DISCUSSIONS IN JOURNALS**


VIII. **ARTICLES IN PROFESSIONAL SOCIETY MAGAZINES AND NEWSLETTERS**


IX. PAPERS IN CONFERENCE PROCEEDINGS


92 V.M. Karbhari, "Materials Design Considerations for the Use of FRP Composites for Renewal of Civil Infrastructure,” International Composites Exposition ’99, Cincinnati, OH, May 1999, pp. 22A/1-6,

(also published by request of publisher in Plastics in Building Construction, Vol. XXIII, No. 12, pp. 10-12)
<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title and Details</th>
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</table>


**TECHNICAL PRESENTATIONS AT CONFERENCES**
(Including Invited, Keynote and Plenary Lectures)

- Running Problem Sessions in the Sciences, University of Delaware, Center for Teaching Effectiveness, Annual Conference, Newark, DE, August 31, 1988.
- Running Problem Sessions in the Sciences and Engineering, University of Delaware, Center for Teaching Effectiveness, Annual Conference, Newark, DE, August 29, 1989.
- Scale Effects in Fracture of Composites, University of Delaware, Department of Civil Engineering, Newark, DE, October 2, 1989.
- Running Review Sessions in Math and Engineering, (with M. Greenberg), University of Delaware, Annual Conference for Graduate Teaching Assistants, Newark, DE, August 27, 1990.
- Scale Effects in Composites, (with D.J. Wilkins), Center for Composite Materials, 1990 University-Industry Research Symposium, Newark, DE, September 13, 1990.
• Microcrack-Interaction Toughening in Ceramics and CMCs, 6th ASCE Engineering Mechanics Conference, College Station, TX, May 1992.
• Determination of Interfacial Shear and Normal Stresses in Fiber Pull-out, 6th ASCE Engineering Mechanics Conference, College Station, TX, May 1992.
• The Use of Advanced Composites in Civil Engineering – Dreams or Reality?, Department of Applied Mechanics and Engineering Sciences, University of California, San Diego, (UCSD), January 22, 1993, INVITED SEMINAR.
• Civil Engineering (with J.S. McDermott), JTEC Workshop on Advanced Manufacturing Technology for Polymer Composite Structures in Japan, Arlington, VA, February 18, 1993.
• Findings of the JTEC Panel on Advanced Manufacturing Technology for Polymer Composite Structures in Japan, Polymers and Coatings Committee, 1993 SAE International Congress and Exposition, Detroit, MI, March 1, 1993, INVITED TALK.
• Development of Composite Materials and Technology for Use in Bridge Structures, NSF Symposium on Practical Solutions for Bridge Strengthening and Rehabilitation, Des Moines, IA, April 5-6, 1993.
• Composites: Materials and Applications in Civil Engineering, Oak Ridge National Laboratories, Oak Ridge, TN, May 4, 1993, INVITED LECTURE.
• Composites: Materials and Applications in Civil Engineering Infrastructure, SAMPE Wilmington-Philadelphia Chapter, PA, May 20, 1993.
• Resin Transfer Molding and 3D Reinforced Composites, CRCAS Workshop, Melbourne, September 16-17, 1993, PRINCIPLE LECTURER.
• The Use of Composites for Civil Infrastructure, joint meeting of the Australian Composite Structures Society (ACSS) and the Society for the Advancement of Materials and Process Engineering (SAMPE), Melbourne, September 16, 1993, **INVITED TALK.**
• Resin Transfer Molding and 3D Reinforced Composites, CRCAS Workshop, Sydney, September 23-24, 1993, **PRINCIPLE LECTURER.**
• Civil Engineering Applications for Advanced Composites, Defense Conversion Workshop, El Segundo, CA, November 3-4, 1993, **INVITED TALK.**
• Civil Engineering Applications for Advanced Composites, Composites, Composites Technology Center – CTC Cerritos College and GLCC, Cerritos, CA, January 21, 1994, **KEYNOTE SPEAKER.**
• Applications of Composites Materials to Civil Construction and Infrastructure Rehabilitation, Center for Advanced Technology for Large Structural Systems (ATLSS), Lehigh University, April 13, 1994, **INVITED SEMINAR.**
• Issues of Design and Durability for the Use of Composites in Civil Infrastructure, 1994 SEM Spring Conference, Baltimore, MD, June 6, 1994, **PLENARY LECTURE.**
• Strategies for the Use of Composite Wraps on Concrete Columns, Exploratory Workshop on Repair of Concrete Piers by ACM, Ministry of Transportation, Ontario, Toronto, Canada, September 17, 1994, **INVITED LECTURE.**
• Methods for Using Composites in Infrastructure Rehabilitation, Composite Materials for Civil Engineering Applications, 1994 BFRL Building Technology Symposia Series, National Institute of Standards and Technology, October 12, 1994, **INVITED LECTURE.**
• Effect of Sizings on Microscopic Flow Encountered in RTM Processing of S2-Glass Fibers, 10th ASM/ESD Advanced Composites Conference and Exposition, Detroit, MI, November 1994.
• Nonwovens as Reinforcement in Commercial and Infrastructure Composite Applications, IDEA ’95 The International Nonwovens Conference and Exposition, Philadelphia, PA, April 27, 1995, **INVITED PRESENTATION.**
• On the Use of a Modified Peel Test for Determination of Concrete-Composite Bond Durability, 40th International SAMPE Symposium and Exhibition, Anaheim, CA, May 8-11, 1995.
• Composites for Infrastructure Renewal – Issues and Concepts, A New World for Composites, Cerritos College, Norwalk, CA, September 13, 1995, **INVITED TALK.**
• Characteristics of Adhesion Between Composites and Concrete as Related to Infrastructure Rehabilitation, 27th SAMPE International Technical Conference, Albuquerque, NM, October 12, 1995.
• On the Use of Composites in Civil Infrastructure: Renewal and Rehabilitation, Mechanical and Aerospace Engineering Colloquium, San Diego State University, San Diego, CA, November 30, 1995.
• Issues in Joining of Composites to Concrete – Rehabilitation and Retrofit, Composites "96, ASM Manufacturing and Tooling Conference, Anaheim, CA, January 24, 1996, **INVITED TALK.**
• Processing of Composites Using Resin Transfer Molding and Resin Infusion Type Processes, 1996 Spring Seminar, ASM International, San Diego, March 21, 1996, **INVITED TALK.**
• Fabrication and Testing of Fiber-Reinforced Composite Bridge Decks, 4th National Workshop on Bridge Research in Progress, Buffalo, NY, June 19, 1996.
• Effects of Sizings and Interphases on Processing and Performance of Composites: Issues for Large Structural Composites, Special Meeting of the Australian Composite Structures Society, Melbourne, Australia, June 24, 1996, **INVITED TALK.**
• Fiber Reinforced Composites in Civil Engineering and Infrastructure Applications, Cooperative Research Center for Aerospace Structures, Melbourne, Australia, June 25, 1996, **INVITED TALK.**
• Fiber Reinforced Composites and Civil Infrastructure – Towards the 21st Century, Institution of Engineers, Sydney, Australia, June 26, 1996, **INVITED LECTURE.**
• Fiber Reinforced Composites for Renewal of Civil Infrastructure in the 21st Century, 3rd International Conference on Composites Engineering, New Orleans, LA, July 26, 1996, **DISTINGUISHED LECTURE.**
• On the Use of Composites in Bridging, Research and Development Establishment, Dighi, India, August 30, 1996, **INVITED TALK.**
• On the Role of the Interphase in Polymer Matrix Composites, Polymer Composites Group, RD&E and Pune University, Pune, India, September 3, 1996, **INVITED TALK.**
• Large Scale Fiber Reinforced Structures for the 21st Century, Shimizu Institute of Technology, Tokyo, Japan, October 22, 1996, **INVITED SEMINAR.**
• Durability Considerations of Composites for Seismic Retrofit, UDOT Workshop on Composites Retrofit Technology, Salt Lake City, UT, February 5, 1997.
• The Use of Composites in the Japanese Construction Industry, World Technology Evaluation Center, National Science Foundation, Arlington, VA, May 22, 1997. **SPECIAL SEMINAR.**
• Use of Composites for 21st Century Bridge Infrastructure, 8th SICOMP Conference on Manufacturing and Design of Composites, Pitea, Sweden, June 2, 1997. **KEYNOTE LECTURE.**
• Application of Composite Materials to the Renewal of 21st Century Civil Infrastructure, 11th International Conference on Composite Materials, ICCM-11, Gold Coast, Australia, July 15, 1997. **PLENARY TALK.**
• Seismic Applications, FHWA Region 7 Seminar, July 23, 1997.
• Composite Materials and Processing Methods, Workshop on Advanced Technologies for Bridge Infrastructure Renewal, Rome, Italy, November 21, 1997. **INVITED TALK.**
• Use of Composites in Civil Infrastructure, Japan Reinforced Plastics Study Tour, San Diego, CA, January 26, 1998.
• Cross Cutting Technical Challenges in Civil Infrastructure, NIST Workshop on Composites for Infrastructure and Offshore Applications, Gaithersburg, MD, January 29, 1998.
• Use of Composites for the Rehabilitation of Bridge Infrastructure, International Concrete Repair Institute, 3rd Annual Symposium on Repair and Strengthening of Concrete, Pleasanton, CA, May 7, 1998. **INVITED TALK.**
• Design Considerations for FRP Rehabilitation of Concrete Structures, Damstruc ’98, Rio-de-Janeiro, Brazil, May 1998.
• Damage Tolerance and Durability of an Advanced Composite Bridge System, First International Conference on Durability of Fibre Reinforced Composites for Construction, Sherbrooke, Canada, August 6, 1998.
• Rehabilitation of Concrete Structures Using Fiber Reinforced Composites, 2nd RILEM International Conference on Rehabilitation of Structures, Melbourne, Australia, September 23, 1998.
• An Overview of Fiber Composites Usage in Civil and Structural Engineering, Advance Composites in Civil and Structural Engineering Conference, ACCSE "98, Brisbane, Australia, September 25, 1998, KEYNOTE TALK.
• Materials and Design Considerations in FRP Rehabilitation of Concrete Structures, 3rd International Conference on Fracture Mechanics of Concrete and Concrete Structures, Gifu, Japan, October 15, 1998, INVITED TALK.
• FRP Composites Bridges, Composite Fabricators Association – 1998 Polymer Concrete Seminar, San Antonio, TX, October 20, 1998, INVITED TALK.
• Durability of Adhesives for FRP/Concrete Bonding: Microanalysis of the Adhesive Bond Surface, ACI Fall Convention, Los Angeles, CA, October 26, 1998.
• Composites in Cold Regions: Results, Implications, and the Future, US Army Cold Regions Research and Engineering Laboratory, Hanover, NH, November 22, 1998, INVITED SEMINAR.
• Effect of Concrete Based Alkaline Solutions on the Short- Term Response of Composites, 44th International SAMP Symposium, Long Beach, CA, May 27, 1999.
• Composites: Materials, Design, Processing and Durability – Implications for Use in Civil Infrastructure Renewal, Royal Institute of Technology, Stockholm, Sweden, May 29, 1999, INVITED SEMINAR.
• The Renewal of Civil Infrastructure: The Future of Composites, Swedish Institute of Composites, Pitea, Sweden, June 1, 1999, KEYNOTE LECTURE.
• Seismic Retrofitting and Strengthening of Columns with Composite Materials, Infrastructure Regeneration and Rehabilitation, University of Sheffield, Sheffield, UK, June 29, 1999.
• Materials and Process Considerations in the Development of Composite Material Forms for Infrastructure Rehabilitation, Advanced Composites Group, Darby, UK, June 30, 1999, INVITED SEMINAR.
• Composites in Infrastructure, IVW Kaiserslautern, Kaiserslautern, Germany, July 15, 1999, INVITED SEMINAR.
• Developments in Design Standards for Advanced Composites in Infrastructure Applications, Cooperative Research Center for Advanced Composite Structures, Melbourne, Australia, August 17, 1999, INVITED TALK.
• Composites Manufacturing for 21st Century Infrastructure, Australia Composites Structures Society, Melbourne, Australia, August 18, 1999, INVITED TALK.
• Developments in Composites Fueled by 21st Century Infrastructure, Hawker deHavilland, Bankstown, Australia, August 19, 1999, INVITED TALK.
• New Developments in Materials for Transportation and Infrastructure Applications, RTA, Sydney, Australia, August 20, 1999, INVITED TALK.
• Composites in Civil Infrastructure: Implications of Materials, Manufacturing, and Durability, SAMPE Los Angeles Chapter, Los Angeles, CA, October 19, 1999, INVITED TALK.
• Durability of Composites in Civil Infrastructure – Status Overview, CFA, Chicago, October 26, 1999.
• Post-Strengthening of Concrete Slabs, ACI Fall Convention, Baltimore, MD, November 2, 1999.
• Design Considerations for FRP Rehabilitation and Upgrading of Concrete Structures, 2nd International Conference on the Behavior of Damaged Structures, Niteroi, Brazil, June 3, 2000, SPECIAL LECTURE.
• Composites in the Renewal of Civil Infrastructure – Materials, Manufacturing, Design and Durability, 9th US-Japan Conference on Composite Materials, Mishima, Japan, July 4, 2000, PLENARY TALK.
• Characterization of Hybrid FRP Beam-Slab Bridge Systems, 3rd International Conference on Advanced Composite Materials in Bridges and Structures, Ottawa, Canada, August 17, 2000.
• Overview of Composites in Civil Engineering, 1st Fibre Composites Design and Development Conference, Brisbane, Australia, September 14, 2000, PLENARY TALK.
• Retrofit of Existing Civil Structures, 1st Fibre Composites Design and Development Conference, Brisbane, Australia, September 14, 2000.
• Testing Protocols for Composite Bridge Structures, 1st Fibre Composites Design and Development Conference, Brisbane, Australia, September 14, 2000.
• FRP Composites As Materials of Construction, ENCORD Advanced Polymer Composite Materials for Structural Use, Stockholm, Sweden, October 16, 2000, KEYNOTE SPEECH.
• Aqueous Environment Related Moisture Kinetics and Durability of E-glass/Vinylester Composites, ACUN-3 Conference, Sydney, Australia, February 9, 2002. GUEST OF HONOR LECTURE.
• Rational Use of FRP Composites in Civil Infrastructure Renewal, Caltrans, Engineering Services Center, Sacramento, CA, January 17, 2001
• Strengthening and Repair of Concrete Structures Using Composites, Faculty of Civil Engineering and Technology, Universidade Nova de Lisboa, Lisbon, Portugal, March 1, 2001
• Impact on Composite Plates at Moderately High Speeds, Faculty of Civil Engineering and Technology, Universidade Nova de Lisboa, Lisbon, Portugal, March 1, 2001
• Development and Characterization of Modular FRP Bridge Systems, ISIS Canada, University of Manitoba, Winnipeg, Canada, May 24, 2001
• Latest Advances in Advanced Composites for Building Marine Oil Terminals, California State Lands Commission, Martinez, CA, June 27, 2001, INVITED TALK.
• Durability, Damage Tolerance, and Monitoring of FRP Composites Used for Seismic Retrofit and Strengthening of Bridges, International Conference on Composites in Construction, Porto, Portugal, October 11, 2001, KEYNOTE LECTURE.
• Correlation of Laboratory and Field Studies of Ageing Degradation of Composite Systems in Civil Infrastructure, 5th International Conference on Durability Analysis of Composite Systems, DURACOSYS 2001, Tokyo, Japan, November 9, 2001, KEYNOTE LECTURE.
• Durability of FRP Composites in Civil Infrastructure – Myth or Reality, International Conference on FRP Composites in Civil Engineering, CICE 2001, Hong Kong, December 12, 2001, INVITED THEME PAPER.
• Durability of FRP Composites for Civil Infrastructure – Myth, Mystery, or Reality, Conference on Advanced Polymer Composites for Structural Applications, Southampton, UK, April 16, 2002, KEYNOTE LECTURE.
• Beyond Rehabilitation – Use of FRP Composites in New Structural Systems: Laboratory and Field Implementation, Conference on Advanced Polymer Composites for Structural Applications, Southampton, UK, April 16, 2002, KEYNOTE LECTURE.
• Design Allowables and Materials Resistance Factors, 2nd International Conference on Durability of Fibre Reinforced Polymer (FRP) Composites for Construction, Montreal, Canada, May 29, 2002, KEYNOTE LECTURE.
• FRP Composites in Civil Infrastructure – Challenges as Related to Durability and Aging, Ninth International Conference on Composites Engineering, ICCE/9, San Diego, July 1, 2002, DISTINGUISHED LECTURE.
• Design and Validation Testing of the I-5/Gilman Advanced Technology Bridge, 1st International Conference on Bridge Maintenance, Safety and Management, Barcelona, Spain, July 15, 2002
• Mysteries of Durability of FRP Composites in Civil Infrastructure, ACUN-4, Sydney, Australia, July 23, 2002, KEYNOTE LECTURE.
• Composites and Critical Infrastructure – Synergy in the 21st Century, Australian Composites Structures Society, Melbourne, Australia, September 11, 2002, INVITED TALK.
• Field Validation and Monitoring of Bridge Renewal Using FRP Composites, IABSE Symposium, Melbourne, Australia, September 12, 2002
• A Review of Durability Based Safety Factors for the use of FRP Composites in Civil Infrastructure, 10th US-Japan Conference on Composite Materials, Stanford, Ca, September 16, 2002, SESSION KEYNOTE PAPER.
• Carbon Fiber Composites in Civil Infrastructure – From the Laboratory to Field Applications, Carbon Fiber 2002, Raleigh, NC, October 22, 2002, INVITED TALK.
• Results of Laboratory and Field Tests From the HITEC Program on Column Wrap, 2003 CFA Technical Conference, Las Vegas, NV, April 23, 2003.
• Synergistic Hygrothermal Effects on Durability of E-Glass/Vinylester Composites, 6th International Symposium on Fibre-Reinforced Polymer Reinforcement for Concrete Structures, Singapore, July 8, 2003.
• Composite Structural Systems – From Characterization to Field Implementation, 6th International Symposium on Fibre-Reinforced Polymer Reinforcement for Concrete Structures, Singapore, July 9, 2003.
• Comprehensive Evaluation and Monitoring of Strengthening Using FRP Composites, International Symposium of the Japan Concrete Institute on Latest Achievement of Technology and Research on Retrofitting Concrete Structures, Kyoto, Japan, July 2003, KEYNOTE LECTURE.
• Characterization and Durability of T700/Epoxy Composites for Civil Infrastructure Rehabilitation, 5th Canadian International Composites Conference, Ottawa, Canada, August 21, 2003.
• FRP Reinforced Steel Free Modular Deck System, ACI Fall Convention, Boston, Sept. 28, 2003.
• Web-Based Structural Health Monitoring of a FRP Composite Bridge, 1st International Conference on Structural Health Monitoring and Intelligent Infrastructure, Tokyo, Japan, November 14, 2003 INVITED SPECIAL PRESENTATION
• Fiber Reinforced Composite Bridge Systems – Transition from the Laboratory to the Field, 12th International Conference on Composite Structures, ICCS 12, Melbourne, Australia, November 18, 2003. INVITED KEYNOTE
• NCHRP-514 Results – Bonded Repair and Retrofit of Concrete Structures Using FRP Composites, Canadian Highway Bridge Design Code FRP Committee, Ottawa, June 13 2004.
• Constructions Specifications for Bonded Repair and Retrofit of Concrete Structures Using FRP Composites, National Academies NCHRP Project 10-59A Workshop, Woods Hole, MA, June 30-July 1 2004 (with A. Mirmiran and M. Shahawy)
• Development of FRP Composite Modular System for Slab-on-Girder Bridges,” 4th International Conference on Advanced Composite Materials in Bridges and Structures, ACMBs IV, Calgary, Canada July 23, 2004.
• Fibre Reinforced Polymer Composites: Building Materials for the Renewal of Civil Infrastructure,” Reinforced Plastics Asia, Bangkok, Thailand, September 2, 2004, INVITED PRESENTATION.
• Advanced Materials and Technologies for Bridge Infrastructure Renewal, Autonomous University of Baja California (UABC) Mexicali, Baja California, Mexico, September 20, 2004, Key Note Speaker at the Inauguration of the Academy of Information for Highways (as part of collaboration between FHWA, Caltrans and the Mexican Highway Department)
• Field Applications: Examples of Repair, TRB Workshop 143 on Construction Specifications for Bonded Repair of Concrete Structures Using Fiber Composites, 84th Annual Meeting of the Transportation Research Board, Washington, DC, January 9, 2005.
• Durability and Defect Assessment of FRP Materials Used in Rehabilitation of Concrete and Application to Reliability Analysis, TRB Committee AFF80, 84th Annual Meeting of the Transportation Research Board, Washington, DC, January 10, 2005.
• Rapid Post-Hazard Assessment (with S. Saiidi), FHWA Virtual Team Meeting, San Diego, CA, March 7, 2005.
• The Myths, Mystery and Reality of Durability of FRP Composites in Civil Infrastructure, Composites 2005, American Composites Manufacturers Association, Columbus, Ohio, Sept. 29, 2005.
• Durability Assessment Using Combined Environmental Exposure and Bending Strains, FRPRCS-7, Kansas City, Nov. 9, 2005

• Durable, Reliable and Effective FRP Structures – How Do We Know and What Information Do We Need? ACMA, Sacramento 2006: Building the State, Building in Industry, April 3, 2006 (INVITED PRESENTATION).

• Durability of FRP Composites – From Materials to Structures, Structures Seminar, Department of Civil & Environmental Engineering, University of California, Irvine, May 18, 2006.


• Durability Based Design of FRP Jackets for Seismic Retrofit, ACMA, Composites & Polycon 2006, St. Louis, MO, October 18, 2006.


• From Replacement Components to the Development of Large-Scale Artificial Living Environments – Use of FRP for Intelligent Sustainable Infrastructure Systems, International Conference on Recent Advances in Composite Materials, New Delhi, India, February 22, 2007 (INVITED PRESENTATION).

• Durability of FRP Composites for Civil Infrastructure, Composites Committee, California Department of Transportation, Sacramento, April 17, 2007 (INVITED PRESENTATION).

• Rapid Renewal of Bridge Decks Using FRP Stay-In-Place Structural Formwork With Steel-Free Concrete, ACMA 2007 Conference on Construction, Corrosion and Infrastructure: Tomorrow’s Structures Today, Las Vegas, NV, April 25, 2007 (INVITED PRESENTATION).

• FRP Composites – A 21st Century Solution to the Renewal of Civil Infrastructure, ACMA Board Meeting, San Diego, April 30, 2007 (INVITED PRESENTATION).


• Polymers, Composites and Prestress Losses – Results and Implications, California Department of Transportation, Earthquake Engineering Committee, Sacramento, CA, May 31, 2007 (INVITED PRESENTATION).

• Progressive Failure and Rehabilitation of RC Deck Systems With Composites, 16th International Conference on Composite Materials, Kyoto, Japan, July 11, 2007 (KEYNOTE LECTURE).

• Defect Criticality in FRP Strengthening, 8th International Symposium on Fiber-Reinforced Polymer Reinforcement for Concrete Structures – Patras, Greece, July 16, 2007.

• Durability Based Design for FRP Rehabilitation of Concrete, Defect Criticality in FRP Strengthening, 8th International Symposium on Fiber-Reinforced Polymer Reinforcement for Concrete Structures – Patras, Greece, July 17, 2007.

• FRP Structural Stay-in-Place Formwork as a Means of Rapid, Durable and Cost-Effective Construction and Rehabilitation, International Conference & Exhibition of Reinforced Plastics (ICERP), Mumbai, India, February 8, 2008.

• Composites and Infrastructure Renewal – Past, Present and the Future Towards a Sustainable Built Environment, Composites Australia/Composites CRC 2008 Annual Conference, Melbourne, Australia, March 13, 2008 (KEYNOTE LECTURE).
- The Changing Roles of Universities and Knowledge in a Technologically Advanced Society, 5th International Conference on Technology, Knowledge and Society, Huntsville, Al, Feb 1, 2009 (PLENARY TALK).
- The Changing Roles of Universities, Instruction and Knowledge, Scholars Institute: Transforming Higher Education at Net Speed, Huntsville, AL, May 19, 2010 (KEYNOTE)
- Temporal Thermal Response of Carbon Fiber Reinforced Polymer Composites – An Assessment of Durability and Integrity, ICCE-18, Anchorage, Alaska, July 7, 2010 (KEYNOTE)
- Composites in Civil Infrastructure: Challenges & Opportunities, Duracosys 2016, Arlington, Texas, June 14, 2016 (KEYNOTE)
- FRP Composites and Structures: Myths, Mysteries and the Future (As we approach 40 years of use), 6th Asia Pacific Conference on FRP in Structures, Singapore, July 20, 2017 (KEYNOTE)
**Funded Research**

(The list only includes awards on which I am the PI/Co-PI and does not include (a) projects in which I was just a participant, (b) donations of equipment and/or resources, (c) funding provided to the University in my administrative capacity)

**University of Alabama in Huntsville**

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<td>$246,419</td>
<td>Assessment of Durability and Reliability of Seismic Response Modification Devices, California Department of Transportation, August 2010–December 2011</td>
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<td>$160,426</td>
<td>Assessment of Long-Term Durability of FRP Composite Materials, subcontract from UCSD, July 2009-December 2010</td>
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<td>$39,804</td>
<td>Evaluation of Long-Term Performance of Epoxy Bonded Couplers, California Department of Transportation, January 2009-December 2009</td>
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**University of California, San Diego**

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<td>$669,055</td>
<td>Assessment and Reliability of Seismic Response Modification Devices In-Service, California Department of Transportation, May 2008 – December 2010 (Co-PI: G. Benzoni)</td>
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<td>$1,970,947</td>
<td>Dumbarton Bridge Test Program, California Department of Transportation, May 2008 – June 2009</td>
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<td>$60,000</td>
<td>Investigation of the use of Near Surface Mounted FRP Bars for Rehabilitation, California Department of Transportation, January 2008-June 2008.</td>
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<td>$147,876</td>
<td>Viscous Damper Forensic Study, California Department of Transportation, October 2007-June 2008.</td>
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<td>Gift for R&amp;D and educational activities in the area of thermal effects and durability, Fyfe Corporation, LLC.</td>
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<td>$300,000</td>
<td>Assessment of Long-Term Field Durability of FRP Composites for Infrastructure, California Department of Transportation, August 2006-December 2009.</td>
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<td>$58,000</td>
<td>Composites from Renewable Resources – New Approaches to High Performance and Sustainable Development through the Investigation and Formulation of Multifunctional Materials, San Diego Foundation and Blasker Foundation.</td>
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<td>$150,000</td>
<td>Scripps Foundation for Science and the Environment (UCSD PI for collaborative venture – total multi-year funding)</td>
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<td>$150,000</td>
<td>Anti-Corrosion Coatings, DuPont, 2006-2008.</td>
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<td>$25,000</td>
<td>Gift for R&amp;D and educational activities in the area of Dental Materials. Ribbond Inc.</td>
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<td>$31,473</td>
<td>FRPP Walls for Blast, Naval Air Warfare Center AD (LKE), October 2005 – April, 2006.</td>
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<td>$56,000</td>
<td>Low Energy Polymer Curing, L3 Photonics and Space and Naval Warfare Systems Center (SPAWARSYCE), October 2005 – December 2006.</td>
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$3,000  Gift for R&D in the Field of Composites for Infrastructure, Fyne Co. LLC, April 2005

$250,000  Structural Response to Blast Loading, Phase 1, California Department of Transportation, March 2005 – June 2007 (Phase 1 of a Two-Phase $750,000 program)


$700,000  Investigation of Time-Dependent Losses in Materials, California Department of Transportation and FHWA Pooled Fund Program, January 2004-June 2010.


$640,000  Los Alamos – UC San Diego Educational Collaboration, DOE/Los Alamos National Laboratory, August 2003 – August 2004 (Co-PI: F. Seible).

$50,000  Unrestricted funds, Jacobs School of Engineering, UCSD


$215,000  Anti-Corrosion Coating Technology, Dupont


$5,000  Award, Durability of Composites in Infrastructure, Western Chapter of the Composites Fabricators Association (CFA), August 2002.

$300,000  Design of Smart Composite Material Systems, National Science Foundation, July 2002 – June 2005 (with Stanford University, co-PI at Stanford F-K. Chang, UCSD share $145,898)


$71,441  Instrumentation for Wireless Monitoring of the Kings Stormwater Channel Bridge, California Department of Transportation, May 2002 – December 2002


$569,973  Assessment and prediction of long-term durability of FRP composites for bridge structures, California Department of Transportation, February 2002 – December 2007


$175,000  Assessment of durability of E-glass/Vinylester composite materials, California Department of Transportation, June 2001 – September 2002.


$100,000  Verification test and structural monitoring of Kings Stormwater Channel composite bridge, Texas A&M University, January 2001 – August 2002.


Supplementary studies in support of the I5/Gilman advanced technology bridge, California Department of Transportation, December 1999 – June 2000 (co-PI: F. Seible).

Research in dental materials, Ribbond Corporation, September 1999-open.

Comparison of NOL burst tests on filament wound and fabric wrapped NOL rings, Aerospace Corporation, September 1999 – October 1999.

Composites rehabilitation of reinforced concrete bridge decks – Byron Road Bridge, California Department of Water Resources, August 1, 1999 – August 31, 2003.

Web based instructional tools for relativistic learning in freshmen engineering design, UCSD VCAA, June 15, 1999 – June 14, 2000 (co-PI: F. Seible)


Full-scale characterization, testing and durability of large diameter PCCP, California Department of Water Resources, April 1, 1999 – August 31, 2003.


Characterization and Connection of Modular Carbon-Glass Hybrid Composite Tube System, National Science Foundation, May 1998 – April 2002 (co-PI: F. Seible)


Processing of large composite structures fabricated using the resin infusion family of processes, National Science Foundation, CAREER Award, July 1997 – June 2002

Fiber reinforced composite retrofit of large diameter prestressed concrete cylinder water pipe (PCCP) for water transmission, California Department of Water Resources, July 1997 – March 1999 (co-PI: F. Seible)

Enhancing computing/control facilities: Research and education related to seismic effects on structures, Intel Corporation, June 1997 – December 1998


Development of Polymer modified concrete matrix-based fiber retrofit technique, Fluor Daniel Corporation, September 1996 (co-PI: F. Seible)


Environmental test chamber, Fluor Foundation, December 1995.


**University of Delaware**


$10,000: Studies on resin transfer molding of CMCs, Dow Corning Corporation, April 1994.


$100,000: Rehabilitation of Steel Infrastructure, Transportation Research Board under the NCHRP program, 1993 – 1995 (co-PIs: J.W. Gillespie and D.R. Mertz).


$20,000: Composite armored vehicle program, General Dynamics Land Systems Division, March 1993 – December 1993.

$100,000: Studies on resin transfer molding (CMCs), Dow Corning Corporation, December 1992 – December 1993.

$10,000: Design and development of cardiac catheters using carbon fibers, Schneider (USA), November 1992 – April 1993 (co-PI: R.F. Eduljee).


Richard Larson
February 29, 2020

To: UCF President Search Committee
c/o Alberto Pimentel, Managing Partner
Sal Venagas, Senior Associate
Storbeck/Pimental & Associates

Re: President of University of Central Florida

Dear Search Committee Members:

I offer my credentials for your consideration for the President of the University of Central Florida. This opportunity is a perfect fit with my strongest values of wanting to impact and accelerate the trajectory of academic, research and athletic excellence, enhance student access and success, address workforce needs for a state, close the achievement gap, build partnerships and foster innovation. Florida has an economic outlook that is among the brightest in the US- UCF promises to be the leader in supporting that growth.

I am recognized as an academic leader, senior executive, educator, researcher, business developer, and MD, PhD with a combination of academic and health care leadership during my 24 years at the University of New Mexico, a leading Hispanic-serving university in the US. I have focused on leading and developing aspects of our public university and academic health center with ~2100 faculty, 18,500 staff, and 17,000 full-time students with 5 branch campuses and 2 HSC sites.

I have played a key role developing the institution into one with a world-class research mission, expansive educational programs, high impact economic development, and a robust academic health center. My greatest contributions have been creating the vision, strategy and relationships to unlock and integrate university capabilities. I have not done this alone. It takes many people who share my commitment and development of a high caliber leadership team to create world-class facilities and platforms for faculty development and student education. Yet, I’m proud to have been called the “coalition-builder” known for connecting peers, universities, donors, legislators, and business into a universe of committed stakeholders. These skills and experiences will be a great asset to leading UCF.

My experience includes development and fundraising, governmental affairs, and local and regional engagement. I have initiated multiple programs to develop state and local economies; overseen the transfer of knowledge and intellectual property into the marketplace; and launched community outreach programs that have contributed to the well-being of communities across the state. I have a proven history of key capabilities for this role:

- **Communicating and inspiring a vision** to create alignment and partnership among the university, and community and business stakeholders that enhanced our regional and national prominence.
- **Adept leader of complex organizations and relationships** in the public and private sector spanning a variety of competing missions and industries and across a vast geographic area.
- **Transformational, entrepreneurial, and innovative approaches**, that anticipates challenges and inspires buy-in so that high quality programs are instituted across all missions and disciplines.
- **Collaborative leadership and unifying, trusted diplomacy**, balancing diverse stakeholders to build coalitions and outstanding teams alike, by tapping strong negotiation skills and emotional intelligence. Always acting with highest integrity and asking it of others.
EXPERIENCE

A: Leadership Aptitude: Providing Strategic Vision and Long-Range Planning to Enhance the Learning Environment, Access, and Research

Having attended public high school in rural North Carolina during the early days of integration, I became keenly aware of educational inequities. Those experiences fueled my desire to become a leader in public education. Over my career, I have developed an expansive view of university system excellence that includes access, affordability, scholarship and success, economic development, and the social and health impact on the state, region and nation. The UCF President position provides an opportunity to use my broad perspective, skills and experiences to substantially impact the lives of all stakeholders within central Florida and beyond.

In my high school application for the John M. Morehead (Morehead-Cain) scholarship to college, I expressed an interest in pursuing a career that would have broad impact on education, health care and society. My academic career has allowed me to create new knowledge, inventions, and ways of doing things. I first became a full professor with scientific achievements that span 120+ publications and 40+ patents -- several licensed -- and that have resulted in five new companies including a recent IPO on the Australian stock exchange. But early in my career, I came to understand that greater impact could be made as a leader. I have been fortunate to have been given leadership opportunities in which I addressed the continuously changing face of higher education in a low resourced environment- finding new innovative and transformative ways to deliver education, address workforce needs for the state, provide more flexible schedules and online learning for working learners, address technology disruption and curricular changes, build a R1 research enterprise from a low base, and a cadre of other issues.

My commitment to build public education and health care brought me to the University of New Mexico. New Mexico is one of three majority-minority state (45% Hispanic, 42% Caucasian non-Hispanic, 10% Native American, 3% African American). More than 50% of our population lives in rural or frontier regions, with rural regions and minority populations having significant education, income and health disparities. UNM and its Health Sciences Center is the only academic health center (AHC) in the state with a budget of $2.7B, operates from an urban center, and serves a large geographic area that could cover the northeastern US from Maine to Washington, DC. This environment has instilled the importance of trusted and collaborative leadership, vision, and people development in advancing the university.

I have responsibilities for strategic and fiscal planning; diversity and inclusion; research enterprises; educational programs; community outreach and health; public-private partnerships and joint ventures; cross-campus initiatives between university and HSC; economic development; and fundraising. My direct reports include college deans, vice chancellors, CIO, and seven other senior positions. I play a key role in federal and state legislative matters. As Executive Vice Chancellor, I report directly to the Chancellor for Health Sciences. Our focus has been on expanding the impact of our university and health sciences center to significantly improve the education, health, and socioeconomic well-being of all communities statewide.

I have championed innovation in the education mission throughout the state that has increased access and student success-priorities we share with UCF. As a few examples and working with other leaders, we implemented tele-education initiatives. One of several initiatives includes offering online education to individuals in rural and remote areas of New Mexico who can now complete training and earn a BS in Nursing entirely
online- this has led to a 92% retention rate of our BS Nursing graduates in the state; many in more rural areas where workforce needs are greatest. Recently, we have initiated an “early assurance” program for a variety of undergraduate health professional degrees that are only available at UNM. This has increased the accessibility of undergraduate degrees for our residents and led to a significant increase in matriculation. During the 12 years I directed our graduate program, we expanded new degree offerings to include an MD/PhD program, an MS in Clinical Research, and a combined BA/MD/PhD- all programs with high graduation rates and increasing quality and high diversity of students. We have also launched joint programs with other universities in order to enhance accessibility- for instance, a Pharmacy degree that initiates with 2 years at New Mexico State prior to the final years at UNM. We are currently “flattening” our tuition to enhance affordability, and our priority for this year is to obtain state funding to reduce tuition for those residents most in need. The common theme in these initiatives is that I worked with my team to assure cooperation and agreement of multiple universities and colleges; state governmental agencies; and in some cases, private entities such as hospitals or health care providers.

In 2004; 2011; and 2017, I led shifts in university strategy in order to continue to grow and diversity our research portfolio to attract new funding; leveraged existing resources to reduce costs; and collaborated with scientific teams from universities, private industry and federal laboratories in and outside UNM to tackle seemingly intractable issues. Our research enterprise has grown in 14 of the last 15 years, without state support. We increased annual research funding >100% to $204M in 10 years. In FY17, we boosted research funding 24% versus an NIH increase of 9.8% and currently in FY20 we are on track for another record year.

Beyond my direct roles in research, educational, and clinical missions, I also designed and tracked our strategic plan, including health care, research, education, and community engagement working closely with the Chancellor and the Board of Regents to ensure a shared vision and alignment of resources. I facilitate and lead an annual retreat with 40-60 key leaders to review progress and update next year’s action plan. Every four to five years we examine the fundamental strategic goals of our enterprise. I understand issues facing universities and healthcare today including the complexity and escalation of financial pressures and conflicting stakeholder expectations.

B: Unifying Diplomacy: Embracing Collaboration and Values of Stakeholders

As a university leader, we also need to value all possible external contributors and stakeholders to achieve greatest impact on education, healthcare, and economic development. It is hard to witness the disparities that exist in NM since the link to income is already clear. This led me to be a part of many economic development, workforce, and educational initiatives to rectify these inequities.

I helped form several partnerships between local companies and the University, including all aspects of technology transfer -- from patents to corporate start-ups—resulting in 62 new companies since 2004; of which 5 were from my patents. I shepherded a bill through the NM legislature to form a BioScience Authority (2017), the first public-private entity to oversee the state’s development of bioscience companies. The governor, speaker of the house, senate pro temp, and 3 university presidents all appoint 1-2 members to the board of directors. Being a trusted non-partisan advocate and leader, I was elected by the board to be President and Chair. We have launched new initiatives, including a “community-ready” program and co-investment opportunities. The entity strengthens the societal impact of faculty research, creates jobs and provides new educational program opportunities, including education efforts throughout a learner’s life. We are currently seeking a $50M direct investment fund from the state that will be matched by private investment for biotechnology startups in New Mexico.
We addressed the severe shortage of health care workers by working with the state legislature to pass a bill (2012) that required health care licensing boards to collect detailed data from providers. As the data’s steward, UNM became central to statewide health workforce development. I was trusted to chair the **NM Health Care Workforce Committee**, which is composed of 35 statewide stakeholders from education, business, healthcare, and government and to assure that the committee performed its analysis of workforce shortages, practice patterns and diversity in a nonpartisan and scientific manner. **This committee’s recommendations to the Governor and the legislature have been impactful for generating state funding for medical resident positions, doubled funding for the nurse practitioner class, addressed racial inequities in practice locations, enhanced loan repayment and pipeline programs, and added loan-for-service funding.**

I also helped form and lead multi-state university consortia which has given me a deep appreciation for the diverse nature of universities, the need to recognize and promote individual university strengths and the challenges of unified action. As one example, I worked with the Vice Presidents for Research with the support of the University Presidents to form the Mountain West Research Consortium (MWRC;2010), which was created to build regional research capacity, and includes 11 state universities from seven states. We obtained funding for an undergraduate “exchange” summer experience, a mini-sabbatical program and a joint pilot project award to encourage collaboration. Working together, the MWRC won $40 million in NIH awards to build research capacity throughout the region (2013-2023), and a $3.5 million NIH award to fund a regional business accelerator (2018). **The consortium has clearly been more effective than the sum of its parts.** I chaired the Executive Board of this university consortium from 2010-2018 when I passed the torch to a Vice President at Montana State University.

Innovative partnerships are critical to moving a state forward. Business partnerships have overcome substantial challenges in integration and cultural transformation. I was part of a group of eight leaders who formed TriCore Reference Laboratories, a collaboration between two fierce competitors, UNM Health System and Presbyterian Healthcare Services, and which has grown into a $190M enterprise and New Mexico’s 9th largest company. As its Medical Director for five years and a trusted Board member for 17 years including three terms as Board Chair, we’ve been able to preserve the practice of our faculty from outside corporate entities, provide a new statewide service, and reduce university laboratory costs.

**C: Student Access and Success**

The essence of a university rests with concern and respect for students and their success. Student access and success are the primary goal which allows the passage of current knowledge to future generation. Encouraging creativity and innovation of the faculty creates new knowledge that is one of the highest value propositions for universities.

The true measure of **student success** is how well **students** are prepared to accomplish their current and future academic, personal, and professional goals through the development of knowledge, a sense of responsibility and self-reliance, and a connection to the university and the community at large. **In order to promote student success, I have been involved in programs that show genuine interest in the students, create an inclusive learning environment, use technology to enhance the learning environment, oversee a simulation center, creation of interprofessional education program, and creation of active learning environments.**

Greater than 90% of our students are residents of New Mexico. In my current and previous roles, I have worked closely with Deans or directly led several initiatives and programs to enhance student enrollment, access, and success. I offer a few examples.
Enrollment has been steadily declining, mostly due to demographic shifts and perhaps countercyclical nature of higher education. In some cases, growing up in a rural or underserved community does not afford exposure to career opportunities that a university degree would offer; and the increasing cost of tuition is a deterrent for many students. In order to address this challenge, I am currently working closely with the Deans on several initiatives to enhance access:

- **Implementation in 2019 of early assurance programs.** These early assurance programs allow students to feel confident that they will be able to obtain these degrees and don’t have to wait until sophomore year to apply to the college. This has reversed the decline and increased enrolment by > 100 students in the first year.
- **Philanthropic scholars and aggressively pursuing federal funding for disadvantage students.** Particularly impressive from these efforts is that every student in our College of Nursing now receives partial or full tuition support.
- **We have instated distance learning programs.** Particularly impressive is our distance learning program to allows a working nurse with an associate degree nurses to achieve a bachelor’s degree while maintaining their job in their rural community (~150 students per year achieve degree). This has resulted in a dramatic increase in nurses with a BS degree.

Through coordination of my oversight of Information Technology, Library and the Deans of the College, we have recently embarked on two new initiatives: 1) **The assessment of a number of augmented reality tools for the classroom** and 2) **The tacking of student performance in real time so that students at risk can be identified early.**

**D: Diversity, Equity, Inclusion and Belonging**

I believe in the richness of diversity, equity, inclusion, and belonging – first learned and deeply appreciated as a high school athlete in North Carolina. These values were further reinforced when I interacted with students at elite private universities who had only experienced white, homogeneous environments and just couldn’t grasp the importance of these values. My emphasis on diversity and inclusion has fit well in New Mexico since it is one of only three majority-minority states. I believe there must be deliberate, consistent efforts to advance diversity and inclusion and the Vice Chancellor for Diversity is a direct report. Her efforts have resulted in a diverse community of students, staff and faculty that is representative of the state -- 45% Hispanic, 42% Caucasian non-Hispanic, 10% Native American, 3% African American).

I believe that a university can only be effective if its leaders, faculty, staff and students have a mutual sense of purpose and responsibility to measurable outcomes. The UCF President must be committed to this philosophy. As an example of a community partnership, I led the formation of a partnership among our public K-12 school system, our community college, our healthcare system competitor and others, is focused on addressing the income, education, and health disparities in our lowest socioeconomic neighborhoods. The premise is that hiring local, purchasing local and supporting business development in underrepresented communities will lead to higher income, better education and improved health. **“Healthy Neighborhoods Albuquerque”** Includes six local partners -- the Presbyterian Health Plan, UNM Health Plan, Albuquerque Public Schools, the local community college, an FQHC, and city government. Partners have committed to purchase, hire, and support new business development in lower income neighborhoods.

I co-led a USU and APLU initiative that targets pipeline programs that target students of color. The study examines workforce and student diversity and its impact on patient access and best practices. Our white paper on enhancing diversity was recently published and shared nationally with all member universities. **I am certain that**
our success in a low-resourced environment has been fueled by innovation, flexibility, collaboration, and cultural sensitivity.

**E: Fundraising and Philanthropy: Strengthening Financial Position to Ensure Growth**

Our fundraising has been very successful. The challenge at UNM has been the lack of a philanthropic culture and a culture of giving. I have identified, cultivated, solicited, and closed gifts from top corporations and individuals. One example was growing an initial corporate gift from $1.5M for an *Endowed Chair*, to a $2M gift for a new *Kidney Research Institute*, to a $6M gift for a new *Health Disparities Research Center*.

I also expanded our philanthropic culture to physicians and care givers. We developed a new process to identify and solicit “grateful patients” by creating a new partnership with physicians through philanthropic training-a process that is already showing positive results. I have cultivated private donors that led to significant gifts -- even a $5M gift to basic sciences- one of the most challenging areas for fundraising. I co-founded *Cancer Services of New Mexico* (2001), a non-profit organization that provides free services to 1,500+ New Mexicans suffering from cancer. I am a Board Member and President of the Cancer Services of New Mexico Foundation.

The next UCF President must have the highest integrity, be optimistic, high energy, and highly visible, forging strong working relationships and representing the institution’s core values of high integrity and ethics. I am a strategic and innovative thinker who creates a vision and the roadmap to achieve it by collaborating with others. I am a thought leader who is routinely invited to present at national conferences and publish opinions in national media and academic journals. As an ambassador, rarely a week goes by in which I am not addressing the broader academic community, legislature and key stakeholders in the community as an advocate for the university. As a previous Division I student-athlete (All-ACC 4 years in a row), certified USATF coach, and lifetime competitive athlete, I have a deep appreciation for the significant role intercollegiate athletics plays in the life of the university, its students, and the future of its student-athletes, and alumni relations. I am a strong proponent for UCF becoming part of an expanded Power 5.

I am very enthusiastic about the possibilities of this position. Please contact me if I can provide additional information. I look forward to hearing from you.

*Sincerely,*

Richard S. Larson, M.D., Ph.D.
Executive Vice Chancellor
Vice Chancellor for Research
UNM Health Sciences Center
SUMMARY OF QUALIFICATIONS

- Accomplished academic administrator, educator, clinician, and scientific researcher, with career success leading academic, research and clinical program development, expansion, and promotion
- Outstanding capacity to forge new opportunities and foster government, commercial, and academic collaborations
- Adept in university planning, development, and management
- Success record at faculty retention and recruitment while incorporating principles of inclusion and diversity
- Deep expertise in obtaining, allocating, and managing multimillion-dollar funding sources
- Nationally recognized as a thought- and opinion-leader, routinely serving in consulting and advising roles for organizations at the national, state, and local levels
- Versatile leader, with hands-on experience in business planning and development for academic institution, non-profit organizations, and foundations
- Extensive experience in ambassadorial roles

EDUCATION, TRAINING AND CERTIFICATIONS

EDUCATION

1990  MD – Harvard Medical School
1990  PhD Immunology – Harvard University
1984  AB Chemistry with honors, summa cum laude
      University of North Carolina – Chapel Hill
      Morehead Scholarship
POST-GRADUATE AND SPECIALIZED TRAINING

2019 Harvard University Advanced Leadership Program (part-time sabbatical)


1994 – 1996 Fellow in Hematopathology
Vanderbilt University Medical Center

1993 – 1994 Resident in Clinical Pathology
Vanderbilt University Medical Center

1990 – 1993 Resident in Anatomic Pathology
Washington University/Barnes Hospital

HONORARY TITLES AND DEGREES

2020 Honorary Commander, Kirtland Air Force Base

BOARD CERTIFICATION

2014 American Board of Pathology, re-certification in Anatomic and Clinical Pathology

1994 American Board of Pathology, certification in Anatomic and Clinical Pathology

MEDICAL LICENSURE

1996 – Present New Mexico (96-92)

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PROFESSIONAL APPOINTMENTS

EXECUTIVE APPOINTMENTS

2017 – Present UNM Health System Executive Committee

2015 – 2016 Interim Chief Informatics Officer, UNM Health Sciences Center

2012 – Present Executive Vice Chancellor, UNM Health Sciences Center

2009 – Present Vice Chancellor for Research, UNM Health Sciences Center (EVP and VP positions changed to Chancellor title in 2011)

2007 – 2009 Vice President for Translational Research, UNM Health Sciences Center (title change in 2009 eliminated “Translational”)

2006 – 2007 Associate Vice President for Research, UNM Health Sciences Center
2005 – 2012   Senior Associate Dean for Research, UNM School of Medicine

**ACADEMIC APPOINTMENTS**

2012 – 2015    NM Health Disparities Center Fellow

2006 – Present   Professor (tenured), Pathology, University of New Mexico

2002 – 2006    Associate Professor of Pathology (tenured), University of New Mexico

1996 – 2002    Assistant Professor of Pathology, University of New Mexico

**RESEARCH APPOINTMENTS**

2002 – 2006    Hematologic Malignancy Program Director, UNM Cancer Center

2000 – 2002    Director, UNM Office of Biocomputing

**CLINICAL APPOINTMENTS**

2019 – Present    Chairman, Board of Directors, TriCore Reference Laboratories

2015 – 2016

2006 – 2008

2002 – Present    Member, Board of Directors, TriCore Reference Laboratories

2003 – 2013    Member, Finance Committee of the Board, TriCore Reference Laboratories

2002 – 2006    Chief, Division of Clinical Pathology

1998 – 2003    Chief of Clinical Operations, Pathology, University of New Mexico

1998 – 2003    Laboratory Director, University Hospital Rapid Response Lab, TriCore Reference Laboratories

1996 – 1999    Assistant Medical Director of Molecular Diagnostics, University of New Mexico

1996 – 1998    Section Director, Clinical Hematology Laboratory, University of New Mexico

**EDUCATIONAL ADMINISTRATIVE POSITIONS**

2000 – 2004    MD/PhD Admissions Committee, Member

1999 – 2005    Director of Hematopathology Fellowship Research Program, University of New Mexico

2000    Chair, Continuing Medical Education Committee for the College of American Pathologists

1998 – 2000    Vice-Chair, Program and Program Education Committee for the College of American Pathologists (plans National Meetings and Web-based learning programs)

1998 – 2000    Vice-Chair, Technology and Education Committee for the College of American Pathologists (awards pathology resident training awards)
1995 – 2001 Contributing editor to national resident In Service Exam

1987 Second Annual Massachusetts Medical Society Medical Student Research Symposium, Chairperson

1986 First Annual Massachusetts Medical Society Medical Student Research Symposium, Chairperson

CORPORATE AND NON-PROFIT BOARDS

2017 – Present New Mexico Bioscience Authority, President and Chair, Board of Directors

2016 – Present EPSCoR/IDeA Coalition, Board of Directors

2015 – 2016 EPSCoR/IDeA Foundation, Board of Directors

2015 – Present Rhodes Group, Inc., Board of Directors

2014 – Present Innovate ABQ, Inc., Board of Directors

2014 – 2015 CleanSpot, Inc., Board of Directors

2013 – Present Sigma Xi, UNM Chapter Board of Directors

2010 – Present Science and Technology Corp, Board of Directors (Technology Transfer Company)

2008 – 2019 New Mexico Consortium, Board of Directors (National Lab – University Initiative)

2008 – 2010 National Center for Genome Resources, Board of Directors

2007 – Present NMBio (formerly New Mexico Biomedical Business Association), Board of Directors

2005 – Present Foundation of Cancer Services of New Mexico, Founder and President (foundation for 501c3)

2001 Co-Founder, Cancer Service of New Mexico (501c3 organization)

2001 – Present Cancer Services of New Mexico, Founder and Board of Directors

2001 – 2003 Cancer Services of New Mexico, Treasurer

HONORS AND AWARDS

2019 UNM Innovation Award (for patents issued)

2018 Nomination, Federal Laboratory Consortium Excellence in Technology Transfer Award (for work with Sensor-Kinesis Corporation to develop Shear Horizontal Surface Acoustic Wave Biosensor)

2017 UNM Innovation Award

2016 UNM Innovation Award

2015 UNM Innovation Award

2014 Albuquerque Convention and Visitors Bureau Award (for promotion of tourism and economic growth)
2014  Institutional Science Promotion Video Award (NIH)
2014  UNM Innovation Award
2012  UNM Innovation Award
2011  Who’s Who in Technology Award – Intel Corporation and New Mexico Business Weekly
2010  Top 100 Technologies in R&D Magazine
2006  UNM Innovation Award
2006  Chief Scientist Award for Excellence from the Defense Intelligence Agency for contribution to national defense
2004  UNM Innovation Award
2003  Spokesperson training award for College of American Pathologists
2002  Wells Fargo Award for Drug Discovery
2002  Preceptor Award for Student Mentorship
2002  Dean’s Award of Distinction
2001  Lansky Award from the College of American Pathologists for leadership and contribution to field
2001  Manuscript chosen for Yearbook in Pathology and Laboratory Medicine
2001  Faculty Teaching Excellence Award
2001  Preceptor Award for Student Mentorship
2001  Dean’s Award of Distinction
2000  University of New Mexico Regents’ Lectureship (Permanent title and award for clinical research and educational contribution to the university)
2000 – 2003 American Cancer Society, national Designated Research Investigator for Coaches against Cancer and Shoot Hoops for Lymphoma (one individual per year)
2000  Dean’s Award of Distinction
1999  Dean’s Award of Distinction
1999  Nominated for UNM teaching award
1998  Dean’s Award of Distinction
1994  ASIP travel award for molecular diagnosis in pathology course
1992 – 1993 National Research Service Award for Post-doctoral training
1986 – 1990 National Research Service Award for Pre-doctoral training
1985  Harvard Medical School Research Award for Medical Student
1980 – 1984 John Motley Morehead Scholarship
1984  Merck Index Award (given to top three science students at graduation)
1984  Summa cum laude
1984  Degree with honors in chemistry (based on research)
1983  Phi Beta Kappa
1981  CRC Chemistry Award (given to top freshman)
1981  Phi Beta Sigma (academic honor society)
1980 – 1984 All ACC Athlete (12 seasons, cross-country, indoor and outdoor track)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

NATIONAL COMMITTEES AND APPOINTMENTS

2016 – Present  EPSCoR/IDeA Coalition, Board of Directors
2016  White House-Sponsored “Medicine Responds to Addiction” Taskforce, Member
2015 – 2017  USU/APLU Executive Research Committee
2015 – 2016  EPSCoR/IDeA Foundation, Board of Directors
2015 – 2016  USU/APLU Biomedical Research Workforce Action Groups, Member
2013 – Present  USU, University Leadership Representative for UNM
2013 – 2016  Growth & Sustainability Workforce Sub-Committee, AAMC/USU Chair
2013 – 2016 AAMC Forum on Conflicts of Interest Steering Committee
2012 – 2016 AAMC Workforce Learning Collaborative
2010 – Present Children’s Oncology Group T-ALL Study Committee, Member
2007 – 2014 Vice President for Research Executive Planning Committee, AAHC
2005 – 2009 Advisory Council for Western Regional Center of Excellence for Biodefense
2004 – 2009 Served as ad hoc spokesperson for College of American Pathologists
2004 – 2008 External Advisory Board for Moffit Cancer Center
2001 – 2003 American Heart Association Nation Council on Cardiovascular Biology
2000 College of American Pathologists (CAP) Continuing Education Committee, Chair
1998 – 2000 CAP Program and Program Education Committee, Vice Chair
1998 – 2000 CAP Technology and Education Committee, Vice Chair
1997 CAP Future Technology Committee, Chair
1994 – 1997 CAP Committee on Future Technology
1988 – 1990 Massachusetts Medical Society (MMS), committee on long-term planning
1987 Second Annual MMS Medical Student Research Symposium, Chairperson
1986 First Annual MMS Medical Student Research Symposium, Chairperson

STATE AND MUNICIPAL COMMITTEES AND APPOINTMENTS

2016 – 2017 GrowBio (Albuquerque Biotechnology Development Committee), Chair
2013 – Present New Mexico Collaborative Research and Development Council
2012 – Present Mayor’s Council on City Development
2011 – Present Biomedical Research Institute of New Mexico, Member
2010 – 2014 NM Human Services Department Provider/Workforce/Delivery System Stakeholder Advisory Workgroup, Member
2010 – 2014 NM Human Services Department Health Care Information Technology Stakeholder Advisory Workgroup, Member
2005 – Present Academic Affiliation Partnership Council (UNM/VA Affiliation Group)
2005 Governor’s Task Force on Biotechnology Development in NM (BioTEP)
2004 Medical Commercialization Network, Member
2001 Mayor’s Council on Biotechnology Development in Albuquerque
1996 – 2000 Literacy Council of Albuquerque, Board Member

STUDY SECTIONS AND WORKSHOP APPOINTMENTS

2017 NIH Study Section, NCI Special Emphasis Panel (R01)
2016 NIH Study Section, NCI Program Project Meeting I (P01)
2014 NIH Study Section, NCI Program Project Meeting III (P01)
2013 Special Review Panel, Lymphatics in Health and Disease in the Digestive, Urinary, Cardiovascular and Pulmonary Systems
2013 NIGMS Council
2011 – 2014 Special Panel Review for CTSA Grants, Member
2008 – 2012 Special Emphasis Panel Review SPORE Grants, Member
2008 – Present Special Emphasis Panel Review NCI P01 Clinical Studies, Member
2007 – 2010 HHMI Review Panelist Research Training Fellowships
2006 – 2007 NIH Study Section, Tumor Microenvironment, Member
2003 – 2005 American Cancer Society: Leukemia, Immunology and Blood Cell Committee, Chair
2003 NCI Workshop on Leukemia Research
2002 – 2004 NCI Workshop on Bone Marrow Microenvironment
2001 American Cancer Society, Ad hoc Site Reviewer for Clinical Investigator Award
2000 – 2005 American Cancer Society; Leukemia, Immunology and Blood Cell Committee, Member
1997 – 2000  College of American Pathologist, Pathology Education Committee (Reviews Scholars Awards, Technology and Informatics grants)

CLINICAL AND TRANSLATIONAL SCIENCE AWARD RELATED COMMITTEES

2010 - Present  Mountain West Research Consortium Executive Committee, Member
2010 – 2017  Mountain West Research Consortium Executive Committee, Founder and Chair
2010 – 2014  CTSA Consortium Executive Committee, Member
2010 – 2014  CTSA Consortium Steering Committee, Member
2010 – 2014  Strategic Goal 3 Committee, Co-Chair

PROFESSIONAL SOCIETIES, MEMBERSHIP

2015 – Present  Greater Albuquerque Medical Society
2006 – Present  Association for Academic Health Centers (AAHC)
2005 – Present  AAMC GRAND
2001 – Present  Children’s Oncology Group
1997 – 2008  American Association for Cancer Research (AACR)
1997 – 2002  Southwest Oncology Group Leukemia Committee and Leukemia Tumor Biology Committee
1997 – 1999  Association of Molecular Pathologists (AMP)
1995 – 2008  Society for Hematopathology
1994 – 2008  American Society for Hematology (ASH)
1994 – 2008  American Society for Investigative Pathology (ASIP)
1993 – Present  College of American Pathologists (CAP)
1985 – 1990  Massachusetts Medical Society

PEER-REVIEW ACTIVITIES

Current and Previous Editorial Boards
Frontiers for Young Minds
Biomarkers
American Journal of Clinical Pathology

Ad Hoc Reviewer for Peer-Reviewed Journals
American Journal of Clinical Pathology
Blood
Journal of Biologic Chemistry
Journal of Virology
Human Pathology
Journal of Nuclear Medicine
American Journal of Physiology – Heart and Circulation
Journal of Immunology
Nature Biology

COMMUNITY SERVICE

2017 – Present  Corporate Chair, American Lung Association Fight for Air Climb
2005 – Present  Founder and President, Foundation of Cancer Services of New Mexico (foundation for 501c3)
2005  Governor’s Task Force on Biotechnology Development in NM (BioTEP)
2004 – 2009  Serve as ad hoc spokesperson for College of American Pathologists
2004  Medical Commercialization Network, Member
Richard S. Larson, MD, PhD

2001 Co-founder Cancer Service of New Mexico (501c3 organization)
2001 – Present Board Member, Cancer Services of New Mexico
2001 – 2003 Treasurer, Cancer Services of New Mexico
2001 Mayor’s Council on Biotechnology Development in Albuquerque
1996 – 2000 Board Member, Literacy Council of Albuquerque

My wife and I founded Cancer Services of New Mexico in 2001 to reduce cancer suffering in New Mexico. We are the only statewide non-profit organization that looks broadly at addressing gaps in cancer-related services while maintaining a 100% focus on New Mexico. We serve approximately 2000 cancer survivors and their families each year, free of charge. This is the largest organization of its type in the United States. We have programs that include:

1) Family Cancer Retreat. Twice each year, this free three-day educational retreat provides a group of adult cancer patients/survivors and their loved ones with tools and information they need to better manage the survival process. It is the largest general cancer education program in New Mexico, and, to our knowledge, is unique nationwide.
2) Legal and Paperwork Assistance Program. We run weekly “clinics” to assist cancer survivors with understanding their insurance and paperwork related to their care. This program has provided over $5M in cancer care to patients over the last 4 years.
3) Family Cancer Resource Bags. Statewide distribution of free information kits that help newly diagnosed parents and their children aged 13 – 18 cope with the impact of cancer on their families.
4) Zoo Night for Kids with Cancer. A free evening of fun, sharing, and learning held each year for New Mexico’s current and former pediatric cancer patients and their families.
5) New Mexico Cancer Services Survey. First-ever statewide survey to determine cancer survivor perspective on how to improve cancer-related services in New Mexico.

I spun a foundation off of this organization in 2005 that is committed to fundraising for the parent CSNM organization. I am president of the foundation, which has a separate board of directors.

SCHOLARLY PUBLICATIONS AND WORK

BOOKS


ORIGINAL RESEARCH IN REFERRED JOURNALS


Richard S. Larson, MD, PhD


**Brown DC, LARSON RS**. Improvements to parallel flow chambers to reduce reagent and cellular requirements. *Immunology*, 2:9-14, 2001.


Nolte KB, Stewart DM, O'Hair KC, Gannon WL, Briggs MS, Barron AM, Pointer J, LARSON RS. Speaking the Right Language: The Scientific Method as a Framework for a Continuous Quality Improvement Program within Academic Medical Research Compliance Units. Academic Medicine, 83:941-948, 2008. [PMID:18820524]


BOOK CHAPTERS/REVIEW ARTICLES


**BRIEF REPORTS**


**EDITORIAL/LETTER TO EDITORS**


**BOOK REVIEW**


**PHOTOGRAPHY AWARD**


**ABSTRACTS WITH PRESENTATION AT NATIONAL MEETING**


Kaufman A, Chang B, **LARSON RS**, Romero-Leggett V, Roth P. Community Health Workers, the University and Medicaid Managed Care. AAMC Health Workforce Research Conference, Washington, DC, May 2014.


Farnbach Pearson AW, Rayburn WF, LARSON RS, Cordova de Ortega LM. Access to Pediatric Care Across New Mexico Communities: Ratios of Pediatric to Adult Primary Care Physicians and Physicians to Population. AAMC Health Workforce Research Conference, May 2018.


**PATENTS ISSUED or PENDING**

2017

US Patent Application 15/411,576

LARSON RS, Hjelle B, Hall PR, Brown DC, Bisoffi M, Brozik SM, Branch DW, Edwards TL, Wheeler D

Detection of Bioagents Using a Shear Horizontal Surface Acoustic Wave Biosensor

Continuation of US Patent 8,709,791

2016

US Patent Application 15/214,921

Norenberg JP, LARSON RS

Non-Invasive Diagnostic Agents of Cancer and Methods of Diagnosing Cancer, Especially Leukemia and Lymphoma

Divisional of US Patent 8,097,237

2014

US Patent 10,031,135 B2

LARSON RS, Hjelle B, Hall PR, Brown DC, Bisoffi M, Brozik SM, Branch DW, Edwards TL, Wheeler D
Detection of Bioagents Using a Shear Horizontal Surface Acoustic Wave Biosensor
Divisional of US Patent 8,709,791

2014
US Patent 9,546,186 B2
Norenberg JP, LARSON RS
Non-Invasive Diagnostic Agents of Cancer and Methods of Diagnosing Cancer, Especially Leukemia and Lymphoma
Divisional of US Patent 8,834,838

2014
US Patent Application 14/587,925
Selective Efflux Inhibitors and Related Pharmaceutical Compositions and Methods of Treatment

2013
US Patent 8,834,838 B2
Norenberg JP, LARSON RS
Non-Invasive Diagnostic Agents of Cancer and Methods of Diagnosing Cancer, Especially Leukemia and Lymphoma
Divisional of US Patent 8,435,489 B2

2012
US Patent 9,056,111 B1
Selective Efflux Inhibitors and Related Pharmaceutical Compositions and Methods of Treatment

2011
US Patent 8,435,489 B2
Norenberg JP, LARSON RS
Non-Invasive Diagnostic Agents of Cancer and Methods of Diagnosing Cancer, Especially Leukemia and Lymphoma
Divisional of US Patent 8,097,237

2008
US Patent 8,709,791 B2
LARSON RS, Hjelle B, Hall PR, Brown DC, Biosffi M, Brozik SM, Branch DW, Edwards TL, Wheeler D
Detection of Bioagents Using a Shear Horizontal Surface Acoustic Wave Biosensor

2008
LARSON RS, Sklar LA, Edwards BS, Ivnitski-Steele ID, Oprea TI, Lovato DM, Khawaja HM, Winter SS, Young SM
Compounds and Methods for the Selective Inhibition of ABCB1, ABCC1 and ABCG2 Transporters and the Treatment of Cancers, Especially Drug Resistant Cancers and High Throughput Flow Cytometry Assay to Detect Selective Inhibitors

2006
US Patent 8,097,237 B2
Norenberg JP, LARSON RS
Non-Invasive Diagnostic Agents of Cancer and Methods of Diagnosing Cancer, Especially Leukemia and Lymphoma

2005
US Patent 7,309,316 B1
Flynn ER, LARSON R
Magnetic Needle Biopsy
LARSON R, Sillerud L
Tertiary Structures of ICAM-1/LFA-1 Modulators

LARSON RS, Wagner CR
Small Molecules for Inhibition of Function and Drug Delivery to Leukocytes

LARSON RS
Peptide Inhibitors of LFA-1/ICAM-1 Interaction
Continuation-in-part of US Patent 6,649,592

2000  US Patent 6,649,592 B1
LARSON RS
Peptide Inhibitors of LFA-1/ICAM-1 Interaction

PREVIOUS PATENTS (PROVISIONAL or RELATED)

2016  US Patent Application 15/147,648
Selective Efflux Inhibitors and Related Pharmaceutical Compositions and Methods of Treatment

2012  US Patent Provisional Application 61/680,899
Selective ATP-Binding Cassette Sub-family G Member 2 Efflux Inhibitor Revealed Via High-Throughput Flow Cytometry
Established priority claims for US Patent 9,056,111 B1 and Applications 14/587,925 and 15/147,648

2011  US Patent Provisional Application 61/537,199
Selective Efflux Inhibitors and Related Pharmaceutical Compositions and Methods of Treatment
Established priority claims for US Patent 9,056,111 B1 and Applications 14/587,925 and 15/147,648

2009  US Patent SN 61/205,211
Cyclic Peptides for the Inhibition of Andes Virus Infections

2008  US Patent SN 61/205,246
Linear Peptide Inhibitors of Hantavirus Infection

2008  US Patent SN 61/189,849
Small Molecule Inhibitors of Hantavirus Infection

2008  US Provisional Application 61/131,214
Novel ABCB1 Inhibitors
2008       US Provisional Application 61/124,377
High Throughput Flow Cytometry Assay to Detect Selective Inhibitors of ABCB1, ABCC1 and ABCG2 Transporters

2007       US Patent SN 60/900,417
Peptides that Bind and Inhibit Sin Nombre Virus

2007       US Provisional Application 61/004,342
Compounds and Methods for the Inhibition of ABCB1 and the Treatment of Cancers

2007       US Provisional Application 61/009,656
Established priority claim for US Patent 8,709,791 B2

2007       US Provisional Application 60/926,827
Established priority claim for US Patent 8,709,791 B2

2007       US Provisional Application 60/900,416
Ligand Based Biosensor for Detection of Microbes
Established priority claim for US Patent 8,709,791 B2 and Application 14/172,429

2007       US Patent SN 60/880,309
Compounds and Methods for the Inhibition of ABCB1 and the Treatment of Cancers

2006       US Patent SN 60/858,080
Inhibitors of ICAM-1 and Methods of Use

2005       US Provisional Application 60/710,665

2004       US Provisional Application 60/549,501
Magnetic Needle Biopsy
Established priority claim for US Patent 7,309,316 B1

Peptide Inhibitors of LFA-1/ICAM-1 Interaction
Continuation-in-part of US Patent 6,649,592 B1

2003       US Provisional Application 60/495,590

2003       US Provisional Application 60/485,343

2002       US Provisional Application 60/378,536
Drug Discovery Systems and Methods and Compounds for Drug Delivery
Established priority claim for US Patent 6,881,747 B2
          Inhibition of LFA-1/ICAM-2 Dependent Leukemic Cell Aggregation
          Inhibition of LFA-1/ICAM-2 Dependent Aggregation
1990       US Patent Application 08/739,032 Cloning of LFA-1 cDNA

GRANT FUNDING

CURRENT AND ANTICIPATED

Title:         Biomedical Research Facility
PI:            Richard Larson
Agency:    NIH/ORIP C06OD028370
Period:      10/1/2019 – 9/30/2024            Total Award: $4,000,000

Title:         Clinical and Translational Research Infrastructure Network IDeA-CTR
              Clinical Research Design, Epidemiology, and Biostatistics Core
PI:            Parvesh Kumar/UNM Subcontract PI Richard Larson
Agency:    NIH/NIGMS U54GM104944
Period:      8/8/2018 – 6/30/2023            Total Award: $19,686,542

Title:         NCATS Accrual to Clinical Trials (ACT) Project
PI:            Steven Reis/UNM Subcontract PI Richard Larson
Agency:    NIH/NCATS UL1TR001857-03S1
Period:      5/1/2018 – 6/30/2020            Total Award: $151,500

Title:         University of New Mexico Clinical and Translational Science Center
PI:            Richard Larson
Agency:    NIH/NCATS UL1
Period:      7/1/2020 – 6/30/2020            Total Award: ~$23,000,000

Title:         Advanced Biomanufacturing of the Bone-Ligament Interface
PI:            Richard Larson/Co-I Eric Prossnitz
Agency:    NIH/NCATS UL1TR001449-04S1

PAST GRANT FUNDING

Title:         Collaboration to Enhance Naloxone Dispensing in Rural and Underserved Areas (CONSIDER)
Title:         University of New Mexico Clinical and Translational Science Center
PI:            Richard Larson
Agency:    NIH/NCATS UL1TR001449
Period:      8/14/2015 – 6/30/2020            Total Award: $18,038,634

Title:         University of New Mexico Clinical and Translational Science Center
PI:            Matthew Campen/Co-I Richard Larson
Agency:    NIH/NCATS KL2TR001448
Period: 8/14/2015 – 3/31/2020  Total Award: $1,628,164

PI: Richard Larson/Co-I Ludmila Bakhireva
Agency: NIH/NCATS UL1TR001449-04S2

Period: 9/6/2018 – 6/30/2019  Total Award: $298,963

Title: Mechanisms of Immunotoxicity Produced by Uranium, Arsenic, and Combined Exposures
PI: Richard Larson/Co-I Scott Burchiel
Agency: NIH/NCATS UL1TR001449-02S2

Period: 8/15/2016 – 8/14/2019  Total Award: $155,249

Title: Biomarker-Based Incidence Estimation of Hepatitis C Infection in Young Adult Injection Drug Users
PI: Richard Larson/Co-I Kimberly Page
Agency: NIH/NCRR UL1TR001449-02S1

Period: 8/15/2016 – 8/14/2018  Total Award: $187,246

Title: Clinical and Translational Research Infrastructure Network IDeA-CTR Clinical Research Design, Epidemiology, and Biostatistics Core
PI: Parvesh Kumar/UNM Subcontract PI Richard Larson
Agency: NIH/NIGMS U54GM104944

Period: 9/15/2013 – 6/30/2018  Total Award: $19,915,508

Title: Developing a Workforce to Improve Health and Reduce Disparities
PI: Paul Roth/Co-PIs Richard Larson, Art Kaufman
Agency: NIH/NICHD U24MD006960
Association of American Medical Colleges (AAMC)

Period: 1/1/2013 – 6/30/2017  Total Award: $412,349

Title: HOPE Initiative Strategic Plan Development
PI: Ryan Cangiolosi/Co-Investigator Richard Larson
Agency: DOJ DJJ-17P-USA51-0028

Period: 1/4/2017 – 5/1/2017  Total Award: $25,000

Title: SAW Sensor Technology Phases I and II
PI: Richard Larson
Agency: Sensor-Kinesis Corporation

Period: 3/1/2015 – 3/31/2017  Total Award: $548,594

Title: IRB Reliance Supplement
PI: Alan Green/Co-I Richard Larson
Agency: NIH/NCATS UL1TR001086-02S2

Period: 9/20/2014 – 4/30/2015  Total Award: $129,960

Title: University of New Mexico Clinical and Translational Science Center
PI: Richard Larson
Agency: NIH/NCRR UL1RR031977
NIH/NCATS UL1TR000041

Period: 7/1/2010 – 3/31/2015  Total Award: $18,608,568

Title: University of New Mexico Clinical and Translational Science Center
PI: Richard Larson
Agency: NIH/NCRR KL2RR031976
               NIH/NCATS KL2TR000089
Period: 7/1/2010 – 3/31/2015         Total Award: $1,522,856

Title: Enhancing Clinical Research Professionals’ Training and Qualifications
PI: Richard Larson/Co-I Corey Ford
Agency: NIH/NCATS UL1TR000041-05S1

Title: Clinical Trial to Validate Clinical Use of Nanoparticles
PI: Richard Larson
Agency: Senior Scientific
Period: 6/1/2011 – 9/30/2014         Total Annual Award: $270,000

Title: UNM HSC Prediabetes Center
PI: Richard Larson
Agency: CDC Division of Diabetes, NCCDPHP, DDT/ 1H75DP002861-01
Period: 9/1/2010 – 8/31/2013         Total Award: $600,000

Title: Co-Registered Vibrometry and Imaging: A Combined Synthetic-Aperture Rader and Fractional Fourier Transform Approach
PI: Majeed Hyatt/Richard Larson
Agency: NSF IIS-0813747
Period: 9/2009 – 7/31/2012         Total Award: $600,000

Title: Biomagnetic In-Vivo Imaging of Ovarian Cancer (Phase 2)
PI: Richard Larson on SBIR subcontract
Agency: NIH 1R44CA123785
Period: 5/1/2009 – 4/30/2012         Total Annual Award: $336,044
This project focuses on producing nanoparticles coupled to ligands for bindings to cells.

Title: University of New Mexico Clinical and Translational Science Center Supplement
PI: Richard Larson
Agency: NIH/NCRR UL1RR031977-02S2
Period: 9/1/2011 – 3/31/2012         Total Award: $303,740

Title: Use of Nanoparticles in a Magnetic Needle Biopsy (Phase 2)
PI: Richard Larson on SBIR subcontract
Agency: NIH 2R44CA105742
Period: 4/1/2008 – 3/31/2012         Total Annual Award: $478,739
This project focuses on the use of nanoparticles in a magnetic biopsy needle.

Title: Microenvironmental Mechanisms of Leukemia Cell Survival and Patient Prognosis
PI: Richard Larson
Agency: NIH 5RO1CA114589-05
This project focuses on BM stoma supported growth of T-ALL cells and gene microarray analysis and identifies novel prognostic markers and new therapeutic targets.

Title: Force Conformation and Affinity in VLA-4 and LFA-1 Adhesion
Title: Point-of-Care Multiplex Pathogen Detection by Surface Acoustic Wave Biosensors

This project focuses on the development of a miniature, portable, autonomous, near-real-time, multi-sensor detector system for bioagents.

Title: General Clinical Research Center

This project focused on screening for ABCB1 inhibitors in a developed flow cytometry based assay.

Title: Biomagnetic Sensor for Detecting Breast Cancer (Phase 2)

This project focused on the use of nanoparticles in a magnetic biopsy needle.

Title: Biomagnetic Determination of Transplant Rejection (Phase 2)

This project focused on the use of nanoparticles in detection of transplant rejection.

Title: Agents for Specific NMR and SQUID Imaging of Prostate Cancer

This project focused on the isolation of human DNA and RNA.

Title: Integrated Network of Ligand-Based Autonomous Bioagent Detectors

This project focused on designing and building ligand-based biosensors.
Title: Biomagnetic In Vivo Imaging of Ovarian Cancer (Phase 1)  
PI: Richard Larson on SBIR subcontract  
Agency: NIH 1R44CA123785  
Total Annual Award: $336,044  
This project focused on producing nanoparticles coupled to ligands for bindings to cells.

Title: Neutralizing Compounds for Viral Hemorrhagic Fever  
PI: Richard Larson  
Agency: NIAID R56A1063448  
Total Annual Award: $336,375

Title: Selectin Chemokine and Integran Control, of Vascular  
PI: Michael Lawrence  
Subcontract PI: Richard Larson (4% effort)  
Agency: NIH 2R01HL54614-06 (SB)  
Total Annual Award: $98,555  
This project focused on the understanding of how VLA-4 VCAM-1 is involved in B cell lymphoma trafficking.

Title: Cell Entry Inhibitors for Sin Nombre Virus Project  
PI: Hjelle  
Co-PI: Richard Larson (4% effort)  
Agency: NIH/NIAID 1U01AI56618-01  
Total Annual Award: $1,257,997  
This project focused on cooperative research for the development of vaccines, adjuvants, therapeutics, immunotherapeutics and diagnostics for defense.

Title: Diagnosing Alzheimer ‘s disease with Magnetic Nanoparticles  
PI: Richard Larson (SBIR subcontract)  
Agency: NIH 1R43AG029015  
Period: 2/1/2007 – 1/31/2008  
Total Annual Award: $37,500

Title: Clinical and Translational Science Center at the University of New Mexico Planning Grant  
PI: Burge  
Co-PI: Richard Larson  
Agency: NIH/NCRR 1P20RR023493  
Annual Direct Cost: $150,000  
The purpose of this planning grant was to develop a funded Clinical Translational Science Center award at the University of New Mexico Health Sciences Center.

Title: Biomagnetic Sensor for Detecting Breast Cancer (Phase 1)  
PI: Richard Larson (SBIR subcontract)  
Agency: NIH 2R43CA096154  
Total Annual Award: $150,000  
This project focused on the use of nanoparticles in a magnetic biopsy needle.

Title: Use of Nanoparticles in a Magnetic Biopsy Needle (phase 1)  
PI: Richard Larson (SBIR subcontract)  
Agency: NIH 1R43CA105742  
Total Annual Award: $168,708  
This project focused on the use of nanoparticles in a magnetic biopsy needle.
Title: Medical Student Training Award  
PI: Richard Larson  
Agency: ASH  
Total Annual Award: $4,500  
This project focused on identifying a medical student interested in the field of hematology and encouraging research in this area.

Title: Immune Dysregulation in Allergic Asthma  
PI: Mary Lipscomb  
Co-PI on Project 3: Richard Larson  
Agency: NIH/NHLBI 2P50HL56384  
Period: 12/01/2001 – 11/06/2006  
This project focused on adhesion mechanisms involved in Eosinophil localization.

Title: Animal Resources Facility Improvement  
PI: Richard Larson  
Agency: NIH/NCRR 1G20RR017013  
Total Award: $700,000 ($600,000 Institutional Match)  
This project was to improve the ARF facilities.

Title: Biomagnetic Determination of Transplant Rejection (Phase 1)  
PI: Richard Larson SBIR subcontract  
Agency: NIH 1R43AI066765  
Total Annual Award: $22,340  
This project focused on the use of nanoparticles in detection of transplant rejection.

Title: Biologic Ligand-Based Detection Systems for Biodefense  
PI: Richard Larson (5% effort)  
Agency: NSF IIS-0434120  
Total Annual Award: $240,000  
This project was directed at the development of a portable, ligand-based detector system for Bioagents.

Title: Neutralizing Compounds for Viral Hemorrhagic Fever  
PI: Richard Larson  
Agency: NIH/NIAID R21AI53334  
Period: 10/1/2002 – 8/31/2005  
Total Annual Award: $450,000  
This project focused on drug discovery technologies to neutralize Sin Nombre virus.

Title: Neutralizing Compounds for Viral Hemorrhagic Fever  
PI: Richard Larson  
Agency: NIH/NIAID R21AI53334  
Period: 09/01/2003 – 08/31/2005  
Total Annual Award: $225,000

Title: T-ALL Stromal Cell Interaction and Patient Outcome  
PI: Richard Larson  
Agency: NIH/NCI R21CA982511  
Period: 2/1/2003 – 1/31/2005  
Total Annual Award: $300,000  
This project focused on innovative in vitro assays of survival and adhesion receptor defects in samples from T-ALL pediatric subjects, which was then correlated with clinical outcomes.
<table>
<thead>
<tr>
<th>Title</th>
<th>PI</th>
<th>Agency</th>
<th>Period</th>
<th>Total Annual Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>P30 New Mexico Institute of Environmental Health</td>
<td>Richard Larson</td>
<td>NIEHS</td>
<td>2003 – 2005</td>
<td>$300,000</td>
</tr>
<tr>
<td>Core 3 Biocomputing</td>
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</tr>
<tr>
<td>Janson served as Director of Biocomputing Core.</td>
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</tr>
<tr>
<td>UNM Cancer Center Planning Grant</td>
<td>Willman, MD</td>
<td>NIH 1P20CA88339</td>
<td>7/1/2001 – 6/30/2004</td>
<td>$110,000</td>
</tr>
<tr>
<td>Role of LFA-1 in Spread of Normal and Malignant Lymphocytes</td>
<td>Richard Larson</td>
<td>American Cancer Society RPG0009601LBC</td>
<td>1/1/2000 – 12/31/2003</td>
<td>$900,000</td>
</tr>
<tr>
<td>This project focused on developing peptide inhibitor of malignant B lymphocytes metasis and sought to define the role of LFA-1/ICAM-1 binding in normal B lymphocyte extravasations.</td>
<td></td>
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</tr>
<tr>
<td>Inhibitors to LFA-1 and Neutrophil Extravasation</td>
<td>Richard Larson</td>
<td>American Heart Association Grant in Aid 0151298Z</td>
<td>7/1/2001 – 6/30/2003</td>
<td>$110,000</td>
</tr>
<tr>
<td>This project focused on designing and optimizing peptide and small molecules antagonists to LFA-1/ICAM-1.</td>
<td></td>
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</tr>
<tr>
<td>FPW Biosensor Development</td>
<td>Richard Larson</td>
<td>Environmental Protection Agency</td>
<td>4/1/2002 – 10/31/2002</td>
<td>$30,000</td>
</tr>
<tr>
<td>This project focused on development of a novel mass biosensor using ICAM-1/LFA-1 receptor-ligand interaction as prototype.</td>
<td></td>
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</tr>
<tr>
<td>Quartz-Based Biosensor</td>
<td>Richard Larson (subcontract)</td>
<td>TPL, Inc.</td>
<td>4/1/2002 – 9/30/2002</td>
<td>$45,000</td>
</tr>
<tr>
<td>This project focused on production of a biosensor for use in drug discovery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular Biology Institutional Research Training Grant</td>
<td>Richard Larson</td>
<td>NIH/NLHBI</td>
<td>1999 – 2002</td>
<td>$60,000</td>
</tr>
<tr>
<td>Inhibitors to LFA-1 and Leukocyte Extravasation</td>
<td>Richard Larson</td>
<td>American Heart Association (Beginning Grant in Aid)</td>
<td>1999 – 2001</td>
<td>$60,000</td>
</tr>
</tbody>
</table>
Title: Role of LFA-1 Binding in the Survival of T-ALL Cells
PI: Winter Co-PI: Richard Larson
Agency: Bear Necessity Pediatric Leukemia Foundation
Period: 1999 – 2000
Total Award: $10,000

Title: Mechanisms of Leukostasis in Acute Leukemia
PI: Eaton
Agency: NIH/IdeA
Period: 1996 – 1999
Total Award: $163,359

Title: Role of LFA-1 in Leukocyte Localization to Lung
PI: Richard Larson
Agency: American Lung Association
Period: 1998
Total Award: $20,000

Title: Role of LFA-1 in Leukostasis in Lung
PI: Richard Larson
Agency: American Cancer Society
Total Award: $20,000

*Annual amounts are approximate and may have varied from year to year depending on funding source
Academic Leader | Senior Executive | Educator | Research Scientist | Business Developer | Physician

**RESEARCH, ACADEMIC & INDUSTRY HIGHLIGHTS**

**DEMONSTRATED VISION AND LEADERSHIP:** Provide strategy to unlock and integrate organizational capabilities. Establish world-class facilities and support faculty who advance the academic mission via synergy with peers, partner universities, donors, legislators, and businesses. Member of 30+ national, state, and municipal advisory councils and committees; founder of nonprofit Cancer Services of New Mexico.

**INNOVATIVE AND ADAPTABLE COALITION-BUILDER:** Win consensus and buy-in based on skillset and relational power, not position. Recognize and act on second-order challenges and opportunities for mutual success. Known for strong ethics and focus on developing individuals and teams. Envision, create, and foster public-private partnerships that benefit providers and the public, then prepare those organizations to thrive independently. Lauded by peers for winning supporters.

**SUSTAINED RECORD OF ACADEMIC ACCOMPLISHMENT:** Distinguished history of contributions includes research and commercialization of a novel diagnostic nanoparticle for oncology. Faculty in Pathology since 1996, tenured 2002; full professorship since 2006. Awarded 60+ extramural research grants, $38M in current grant funding. Author or contributor to 100+ peer-reviewed articles and editor of three bioscience texts.

**ACADEMIC PREPARATION**

M.D., Harvard Medical School (1990)

Ph.D., Immunology, Harvard Medical School (1990)

A.B., Chemistry, University of North Carolina Chapel Hill (1984)

Summa cum laude with honors, Morehead Scholarship recipient

**CERTIFICATIONS & LICENSURE**

American Board of Pathology, Certification in Anatomic and Clinical Pathology (1994, recertification 2014)

Medical License, State of New Mexico (1996 to Present)

**SPECIALIZED TRAINING**

Advanced Leadership Initiative, Harvard University (2019)


Fellow in Hematopathology, Vanderbilt University Medical Center (1994 to 1996)

Resident in Clinical Pathology, Vanderbilt University Medical Center (1993 to 1994)

Resident in Anatomic Pathology, Washington University Hospital (1990 to 1993)

Executive Appointments at UNM

UNM Health System Executive Committee (2017-Present)

Interim Chief Informatics Officer, UNM Health Sciences Center (2015-16; 2019)

Executive Vice Chancellor, UNM Health Sciences Center (2012-Present)

Vice Chancellor, Research, UNM Health Sciences Center (2009-Present)

Vice President, Translational Research, UNM Health Sciences Center (2007-09)

Associate Vice President, Research, UNM Health Sciences Center (2006-07)

Senior Associate Dean, Research, UNM School of Medicine (2005-12)

HONORS & AWARDS HIGHLIGHTS

64 grants; 5 current grants total $38M

Chief Scientist Award for Excellence from Defense Intelligence Agency (2010)


Albuquerque Convention and Visitors’ Bureau Award for promoting economic growth (2014)

National Institutes of Health Institutional Science Promotion Video Award (2014)

Top 100 technology award, R&D Magazine (2010)

Academic Achievements

Authored or contributed to 100+ peer-reviewed articles, 18 book chapters and review articles, and 80+ presentations at national meetings. Edited three books.

Former Editorial Board member for 3 prestigious journals, including American Journal of Clinical Pathology.

Reviewer for 9 peer-reviewed journals.

Developed 40 issued or pending patents.
Selected Leadership Contributions

Executive Vice Chancellor (2012 to Present) | Vice Chancellor for Research (2009 to Present)
UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER (UNM HSC), Albuquerque, NM

Healthcare leader serving diverse population, including 5 hospitals with ~38K admissions, ~3K births, 130K+ ER visits, 24K+ surgeries, and 1M+ outpatient visits (2017), contributing $1.6B and ~19K+ jobs yearly; 4 academic institutions with 2K+ students across the School of Medicine and Colleges of Nursing, Pharmacy, and Population Health; and research, receiving $200M+ in grants (2017).

As second-highest administrator in the Health Sciences Center, report to the Chancellor while leading strategic initiatives to address the challenging issues facing health care, health sciences, and education. Ensure robust financial health through fundraising and grant procurement. Inspire, motivate, and lead teams.

Provide leadership and vision for university administration, academic programs, curriculum development, research base, and development of faculty, staff, and students to support complete program of university development. Champion diversity and inclusion in complex, matrixed environment demanding rigorous focus on collaboration, innovation, and flexibility.

Led technology and economic development at UNM HSC and in NM. Lead technology transfer and innovation efforts that spawned 54 companies. Lobby to expand state’s bioscience environment, including creation of the New Mexico Bioscience Authority (NMBSA), which enables combined private-public funding for bioscience initiatives. Serve as NMBSA’s first President.

Co-led all Stages of Product Development, Commercialization, and ~$20M Funding for Diagnostic Nanoparticle

Challenge: As the UNM Cancer Center Hematological Malignancy Program director, partnered with physicist Ed Flynn to surpass MRI technology, developing nanomolecular diagnostic tech 1Kx more sensitive. Firm, Senior Scientific, became Manhattan Scientifics subsidiary, then independent public firm, Imagen.

- Performed molecular coding for innovative nanoparticle, enabling targeted application to organs and cancers. New “SQUID” particle enhanced threshold of detection by facilitating noninvasive imaging without radiation.
- Collaborated with principal to raise ~$20M funding from private and public sources, including ~12 grants and $2.5M from investor Bill Miller. Led private-public partnership to tap Small Business Innovation Research grants.
- Demonstrated viability of technology with proof-of-concept for targeting a broad spectrum of oncological and hematological diseases, including Hodgkin’s disease. Attracted and presented to investor who purchased firm.
- Drove commercialization of products after leadership transition of CEO and partner. Worked to expand commercial program and lay foundation for successful IPO on the Australian Securities Exchange (APX).

Established New Mexico Workforce Committee Through Coalition-Building in Complex Political Environment

Challenge: New Mexico faces shortfalls in healthcare professions, including doctors, nurses, pharmacists, social workers, and allied professionals, with limited care in rural areas. Clear vision and its articulation were required to approach the issue; then political consensus was essential to its implementation.

- Lobbied for healthcare workforce development to be a statewide legislative priority. Led 2012 legislative campaign to form New Mexico Workforce Committee (NMWC), a partnership of hospitals, professional societies, academic institutions, and licensing boards charged with analyzing healthcare workforce and advising legislature.
- As a result, New Mexico has the most granular and complete data on healthcare workforce in the US.
  - UNM HSC became sole steward of confidential healthcare licensure and reporting data statewide.
  - UNM College of Nursing grew substantially and became better able to support rural populations.
  - Committee recommendations led to innovative state and private healthcare incentive programs.
  - Analyzing a vast array of new healthcare programs became possible under NMWC umbrella.
- Selected first chair of NMWC, the only appointed position in the organization. Leveraged long-term relationships with healthcare community and multiple legislators to win support from disparate groups concerned that initiative would politicize professional data. Presented to dozens of interim committees.
Grew UNM Health Sciences Research Mission 150% since 2004 without adding faculty

Challenge: UNM research mission had five personnel with little extramural funding (1996). As Senior Associate Dean (2004), tasked by Chancellor and Dean to build world-class research mission. Started work from scratch, evolving UNM HSC from a provider operating a hospital to a true research center where teams could perform consistently. Operating with great autonomy, implemented strategic approaches to funding and faculty development.

- Instilled culture of inter- and intra-departmental partnerships, breaking down silos based on fund allocation. Reorganized into six collaboration-focused programs aimed at getting insights from the lab to the community.
- Invested in key research centers and built platforms for faculty development based on two strategic centers and six signature programs. Led faculty committee that proposed this organizing principle to leadership and won Dean approval. Achieved balanced relationships between departments, colleges, centers, and signature programs.
- Cultivated all six programs to develop and obtain funding for training programs providing education to future physician-scientists, basic scientists, clinician investigators, and community-intervention researcher. Designed programs around strategic funding opportunities and areas of need in public health: cardiovascular, infectious disease, cancer, brain/behavioral health, child health, and environmental health.
- Developed program to secure pilot funds for all programs from extramural sources. Fostered team development by empowering program heads to compete for funding that was unavailable under previous siloed organization.
- Expanded research to 900+ initiatives with $200M+ funding versus $35M in 1996—all from extramural sources. Instituted best practices to make UNM HSC nimble around government funding and build external partnerships.

Founded Joint Venture to Form First Clinical Reference Lab in New Mexico

Challenge: New Mexico’s lack of a clinical reference laboratory led to large volumes of tests being sent out of state, raising error rates and overhead. To address this and stop loss of local physician practices, formed joint venture, TriCore, between UNM HSC Pathology Group, state’s three largest hospitals, and its largest private practice group.

- Won plan buy-in as part of coalition of 8 state clinical leaders and led clinical lab operations for five years.
- Appointed to reference lab Board for 18+ years, with three terms as elected Board Chair, including one currently.
- Grew lab operations from $25M and 390 employees to $190M and 1,300 employees since opening in 1999.
- Mentored current CEO Dr. Michael Crossley, first-ever resident trainee in 1996; he was named CEO in 2018.
- Ended UNM-Presbyterian Hospital rivalry in this space, forging equal ownership agreement and buying third hospital’s stake. Resulted in ~55% cost savings/year—keeping testing cost flat for eight years.
- Negotiated support from local pathology groups that would be threatened if a national lab entered the state.
- Trained and sustained a world-class laboratory workforce with low staff turnover and high skills development.

Brought Community Institutions Together to Improve Career Development and Investment in Albuquerque

Challenge: Increased socioeconomic status improves public health, but many Albuquerque areas are underserved in career development for youths and investment in local businesses. By coordinating efforts of “anchors” like universities and healthcare providers, investment could be directed to improve the situation.

- Founded Healthy Neighborhoods Albuquerque program by proposing coalition between UNM HSC, Presbyterian Hospital, Albuquerque Public Schools, Albuquerque Community Foundation, and Albuquerque Public Schools. Working together, these organizations implemented two signature programs:
  o High school job training program providing pathway to employment in affiliated healthcare systems for students who graduate high school and pass 2-week work/life skills training. Grew program from 5-student pilot to current cohort of 20 annually with further expansion planned.
  o Farm-to-table organic produce for school and hospital cafeterias, leveraging collective purchasing power to buy fresh produce from local cooperatives while providing needed funds to growers. Led on all planning and developed expense carve-out to facilitate buying.
Challenge: Despite great institutions and talented researchers, collaborative scientific inquiry in the Mountain West was relatively undeveloped in 2011. Opening a Mountain West Research Consortium to pool efforts required buy-in from Vice Presidents of 13 major universities in seven states.

- **Leveraged UNM’s size and prestige as largest regional Health Sciences department** to gain support for shared initiatives and launch major cooperative grants. Secured $40M in first seven years, with recent renewal, to build a shared research structure between Mountain West Research Consortium partners.

- **Acquired $3M extramural funding to build business accelerators at every Consortium university.**

- **Contributed to development of research training programs at UNM** used by Consortium partners.

- **Served as Consortium chair from 2011 founding to 2018.** Advised University of Montana successor.

**STRENGTHENED PHILANTHROPY**

Challenge: Lack of philanthropic culture and giving at UNM.

- **Identified, cultivated, solicited, and closed gifts** from top donors, including both corporations and individuals.

- **Built a corporate relationship** over 6 years, initially closing a gift of $1.5M for an endowed chair. Advanced this relationship and closed $2M gift for a new Kidney Research Institute, and then followed with $6M gift for a new Health Disparities Research Center.

- **Expanded philanthropic** culture to physicians and caregivers by developing new process to identify and solicit “grateful patients.” Created new partnership with physicians through philanthropic training. Already showing positive results.

- **Cultivated private donors** leading to substantive gifts, even a $5M gift to basic sciences—one of the most challenging areas for fundraising.

**Research and Clinical Appointments**

<table>
<thead>
<tr>
<th>Position</th>
<th>Institution</th>
<th>Years</th>
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<tbody>
<tr>
<td><strong>Hematologic Malignancy Program Director</strong></td>
<td>University of New Mexico Cancer Center</td>
<td>2002 to 2006</td>
</tr>
<tr>
<td><strong>Director</strong></td>
<td>University of New Mexico Office of Biocomputing</td>
<td>2000 to 2002</td>
</tr>
<tr>
<td><strong>Chairman, Board of Directors</strong></td>
<td>TriCore Reference Laboratories</td>
<td>2019; 2015 to 2016; 2006 to 2008</td>
</tr>
<tr>
<td><strong>Member, Board of Directors</strong></td>
<td>TriCore Reference Laboratories</td>
<td>2002 to Present</td>
</tr>
<tr>
<td><strong>Member, Finance Committee of the Board</strong></td>
<td>TriCore Reference Laboratories</td>
<td>2002 to 2013; 2016-18</td>
</tr>
<tr>
<td><strong>Chief, Division of Clinical Pathology</strong></td>
<td>University of New Mexico Health Sciences</td>
<td>2002 to 2006</td>
</tr>
<tr>
<td><strong>Chief of Clinical Operations, University Hospital</strong></td>
<td>University of New Mexico</td>
<td>1998 to 2003</td>
</tr>
<tr>
<td><strong>Laboratory Director</strong></td>
<td>University Hospital Lab, TriCore Reference Laboratories</td>
<td>1998 to 2003</td>
</tr>
<tr>
<td><strong>Assistant Medical Director of Molecular Diagnostics</strong></td>
<td>University of New Mexico</td>
<td>1996 to 1999</td>
</tr>
<tr>
<td><strong>Section Director, Clinical Hematology Laboratory</strong></td>
<td>University of New Mexico</td>
<td>1996 to 1998</td>
</tr>
</tbody>
</table>

**Private Equity and Angel Investing Experience Snapshot**

Provided pre-seed, seed, and/or Series A-D funding to 30+ startups in technology and bioscience. Evaluated opportunities based on potential market share and proven leadership, particularly CEO’s suitability to growth stage and market climate. Gained deep insight into skills needed to shepherd venture through different stages of evolution—solidifying personal goal to focus on large, mature enterprises (https://angel.co/richard-larson-4)
Cato Laurencin
To whom it may concern:

I was recently nominated to be President of the University of Central Florida. After much thought, I wish to be considered for the position. I’m enclosing my brief biography, my full CV, and a descriptor of my scholarly background gleaned from my CV.

In this letter, I would like to focus on my administrative background.

I am currently the Chief Executive Officer of the Connecticut Convergence Institute for Translation in Regenerative Engineering. In this capacity I’ve had the ability to build new and broad programs across the university with the goal of fostering innovation and delivering action: in research, education, entrepreneurship, mentoring, in the promotion of diversity, and in community outreach. I was previously Vice President for Health Affairs and Dean of the School of Medicine at the University of Connecticut where I oversaw a 1 Billion dollar medical center that included the research enterprise, medical school, dental school, hospital and practice plan. In that role I brought the medical center to profitability, revamped the academic mission, brought a hospital out of probation to full accreditation, achieved record growth in research funding, and gained the support of the legislature for an 850MM building initiative. Previous to that I served as Chair of Orthopaedic Surgery and a Professor of Chemical Engineering at the University of Virginia where I was a leader in UVA’s strategic planning efforts. Previous to that I served as Vice-Chair of Orthopaedic Surgery and Professor of Chemical Engineering at Drexel where I was the faculty leader on the Drexel University Merger Team tasked with merging the University and the medical enterprise of the institution.

I believe my administrative background is broad and deep. In addition to line management responsibilities, I’ve served on the boards of hospitals, medical centers and practice plans, as well as public and private companies and national organizations. In government, I have served on senior advisory boards for the FDA (National Science Advisory Board), the National Institutes of Health (Advisory Committee to the Director) and the National Science Foundation.

I have had the experience of taking on roles with institutions with challenges. My approach is to look to challenges as opportunities, focus on demonstrating high and unquestionable integrity, and act with transparency. Above all, one must be ready to make courageous decisions. This is what I would bring to the position of President of the University of Central Florida.

Thank you for considering me.

Sincerely,

Cato T. Laurencin, M.D., Ph.D.
University Professor
The University of Connecticut
Cato T. Laurencin, M.D., Ph.D. is the University Professor at the University of Connecticut (the 8th to be designated in the institution’s over 135 year history). He is the Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery. He is Professor of Chemical, and Biomolecular Engineering, Professor of Materials Science and Engineering, and Professor of Biomedical Engineering at UCONN. He serves as the Chief Executive Officer of the Connecticut Convergence Institute for Translation in Regenerative Engineering and is the Founding Director of and the Raymond and Beverly Sackler Endowed Center for Biomedical, Biological, Physical and Engineering Sciences at the University of Connecticut.

Dr. Laurencin earned his B.S.E. degree in Chemical Engineering from Princeton University and earned his M.D., Magna Cum Laude from the Harvard Medical School. He earned his Ph.D. in Biochemical Engineering/Biotechnology from the Massachusetts Institute of Technology where he was named a Hugh Hampton Young Fellow.

Dr. Laurencin is a Fellow of the American Academy of Orthopaedic Surgeons, a Fellow of the American Orthopaedic Association, a Fellow of the American College of Surgeons and an elected member of the American Surgical Association. He completed residency training at the Harvard Combined Orthopaedic Surgery Program, where he was Chief Resident in Orthopaedic Surgery at the Beth Israel Hospital, Harvard Medical School. He has been named to America’s Top Doctors for over 15 years.

Dr. Laurencin is known internationally for his work in biomaterials, nanotechnology, drug delivery systems, and a new field he has pioneered, regenerative engineering. He has been funded by the National Institutes of Health, the National Science Foundation, and the Department of Defense. Laurencin has produced seminal studies in a number of areas of biomaterials. He and his colleagues were the first to develop nanofiber technologies for tissue regeneration. The seminal paper on the work was highlighted on the cover of the Journal of Biomedical Materials Research’s Top 25 Biomaterials Papers of the Past 50 Years edition. His group was the first to develop polymer-ceramic systems for bone regeneration. The American Institute of Chemical Engineers specifically cited this achievement in naming him one of the 100 Engineers of the Modern Era at its Centennial Celebration in 2009. His contributions to Biomaterials have been acknowledged by the Society for Biomaterials. He received the Clemson Award from the Society for Contributions to the Biomaterials Literature and the Founder’s Award from the Society for Biomaterials.

As scientist and a practicing surgeon, Laurencin has been in a unique position to develop new biomaterials technologies. Work in the development of engineered systems for bone and ligament regeneration have inspired new technologies that are now available to patients, that are FDA cleared, and/or present in the clinical pipeline. For his work in new technology development, the Society for Biomaterials awarded Dr. Laurencin their Technology Innovation and Development Award. Overall, Dr. Laurencin’s work in nanotechnology, polymer-ceramic systems and engineered tissue regeneration has had a tremendous impact on the field. In that regard, the American Institute of Medical and Biological Engineering awarded him the Pierre Galletti Award, medical and biological engineering’s highest honor, while the Association of Bone and Joint Surgeons awarded him the Nicolas Andry Award for work in tissue regeneration, its organization’s highest honor. His work on engineering tissues was honored by Scientific American Magazine as one of the 50 greatest achievements in science in 2007. In 2012, his work in engineering knee ligament tissue was highlighted by National Geographic Magazine in its “100 Discoveries That Have Changed Our World” edition.
Dr. Laurencin’s groundbreaking work has been recognized by various fields and organizations. Dr. Laurencin was honored at the White House where he received the Presidential Faculty Fellowship Award from President William Jefferson Clinton in recognition of his research work bridging medicine and engineering. Dr. Laurencin is the first individual to receive two Emerging Frontiers in Research and Innovation (EFRI) Awards from the National Science Foundation. In addition, Dr. Laurencin received the NIH Director’s Pioneer Award, NIH’s highest and most prestigious research award, for his new field of Regenerative Engineering. The American Association for the Advancement of Science awarded their highest honor, the Philip Hauge Abelson Prize, given to someone for “signal contributions to the advancement of science in the United States”.

Dr. Laurencin is a Fellow of the American Institute of Chemical Engineers, a Fellow of the Biomedical Engineering Society, a Fellow of the American Institute for Medical and Biological Engineering, and an International Fellow in Biomaterials Science and Engineering. He is a Fellow of the Materials Research Society and a Fellow of the American Chemical Society. Additionally, Dr. Laurencin is a Fellow of the American Association for the Advancement of Science, and a Fellow of the National Academy of Inventors.

Dr. Laurencin is dedicated to mentoring students, especially underrepresented minority engineers and scientists. For his work, he received the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring from President Barack Obama in ceremonies at the White House, the Elizabeth Hurlock Beckman Award for Mentoring, the Alvin H. Crawford Mentoring Award from the J. Robert Gladden Orthopaedic Society, and the American Association for the Advancement of Science’s Mentor Award.

Dr. Laurencin has been active nationally in a number of leadership roles involving science and technology. He has served as Chair of the College of Fellows for the American Institute for Medical and Biological Engineering and as a member of the Council of the Society for Biomaterials as well as a board member for the Biomedical Engineering Society, the Tissue Engineering and Regenerative Medicine International Society, the American Institute of Chemical Engineers and the Regenerative Engineering Society. Dr. Laurencin has served on the National Science Advisory Board for the FDA and the National Science Foundation’s Engineering Advisory Committee. He has been Chair of the Engineering Section for the National Academy of Medicine, and a member of the Health Medicine and Disease (HMD) Division Committee at the National Academy of Medicine. He has been a member of the Peer Committee for Bioengineering for the National Academy of Engineering and a member of the Division on Engineering and Physical Sciences (DEPSCOM) for the National Academy of Engineering. At NIH, he has been a member of the Advisory Committee to the Director of the National Institutes of Health, a member of the NIH Scientific Management Review Board, a member of the NIH National Advisory Council for Biomedical Imaging and Bioengineering, and a member of the NIH National Advisory Council for Arthritis, Musculoskeletal and Skin Diseases.

Dr. Laurencin has two awards named in his honor: The Cato T. Laurencin, M.D., Ph.D. Travel Fellowship Award given by the Society for Biomaterials, and The Cato T. Laurencin Lifetime Research Achievement Award given the Cobb/National Medical Association Health Institute.

Dr. Laurencin is an elected member of both the National Academy of Medicine and the National Academy of Engineering. He is an elected Fellow of the American Academy of Arts and Sciences. Internationally, he is an elected Fellow of the African Academy of Sciences, an elected Fellow (Foreign) of the India National Academy of Sciences, an elected Fellow (Foreign)
of the Indian National Academy of Engineering and is a Fellow of The World Academy of Sciences. Dr. Laurencin is an Academician and Member (Foreign) of the Chinese Academy of Engineering. It should be noted that both the Indian National Academy of Engineering and Chinese Academy of Engineering recognized him as a world leader in materials science as applied to biomedical problems.

Dr. Laurencin is a recipient of the National Medal of Technology and Innovation. It is the highest honor bestowed in America for technological achievement. He was specifically cited for his revolutionary work in the engineering of musculoskeletal tissues, and for his work in promoting diversity and excellence in the fields of medicine and engineering.
Cato Thomas Laurencin, M.D., Ph.D.

Current position and affiliation

University Professor (8th Designated in University History)
Professor of Chemical and Biomolecular Engineering
Professor of Materials Science and Engineering
Professor of Biomedical Engineering
Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery
Chief Executive Officer, The Connecticut Convergence Institute for Translation in Regenerative Engineering
Director, The Raymond and Beverly Sackler Center for Biomedical, Biological, Physical and Engineering Sciences
The University of Connecticut

UConn Health
263 Farmington Avenue
Farmington, CT 06030-3800
Email: laurencin@uchc.edu
Phone: 860-679-6544
860-679-4086
Fax: 860-679-1553

Education
1987 Ph.D. Degree, Biochemical Engineering/Biotechnology, Massachusetts Institute of Technology
1987 M.D. Degree, Magna Cum Laude, Harvard Medical School
1980 B.S.E. Degree, Chemical Engineering, Princeton University
1976 B.A. Degree, Central High School, Philadelphia, PA

Record of professional experience:

<table>
<thead>
<tr>
<th>Company or Institution</th>
<th>Position or Title</th>
<th>Dates</th>
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<tbody>
<tr>
<td>University of Connecticut</td>
<td>University Professor</td>
<td>2011-Present</td>
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<tr>
<td></td>
<td>Professor of Chemical and Biomolecular Engineering</td>
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<td></td>
<td>Professor of Materials Science and Engineering</td>
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<td>Professor of Biomedical Engineering</td>
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<td></td>
<td>Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery</td>
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<tr>
<td></td>
<td>Chief Executive Officer, The Connecticut Convergence Institute for Translation in</td>
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<td></td>
<td>Regenerative Engineering, The University of Connecticut</td>
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</tr>
<tr>
<td></td>
<td>Director, The Raymond and Beverly Sackler Center for Biomedical, Biological,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical and Engineering Sciences</td>
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</tr>
</tbody>
</table>
Dates: 2008-2011
Professor of Chemical and Biomolecular Engineering
Professor of Materials Science and Engineering
Professor of Biomedical Engineering
Vice President for Health Affairs
Dean of the School of Medicine
Albert and Wilda Van Dusen Endowed Chair in Academic Medicine
Distinguished Professor of Orthopaedic Surgery
The University of Connecticut

Dates: 2003-2008
The University of Virginia
University Professor
Professor of Chemical Engineering
Professor of Biomedical Engineering
Lillian T. Pratt Distinguished Professor of Orthopaedic Surgery
Chairman, Department of Orthopaedic Surgery

Dates: 2001-2003
Drexel University
Helen I. Moorehead Distinguished Professor of Chemical Engineering
Clinical Professor of Orthopaedic Surgery
Vice-Chairman, Department of Orthopaedic Surgery

Principal professional society membership (grades) and activities

Engineering and Science Societies

National Academy of Engineering, Elected Member 2011
  Chair, Awards Committee NAE 2016
  Member, Division on Engineering and Physical Sciences (DEPSCOM)
National Academy of Medicine, Elected Member 2004
  Member, Strategic Planning Committee, NAM
  Member, Division on Health, Medicine and Disease Committee (HMD)
American Association for the Advancement of Science, Fellow 2014
American Academy of Arts and Sciences, Fellow 2019
American Institute of Chemical Engineers
  Fellow of AIChE 2012
  Member, Board of Directors, AIChE (Currently)
  Chair/Organizer of first combined AIChE-NOBCChE Meeting 2018
  Organizing Committee SBE Afro-Biotech Meeting 2019
Regenerative Engineering Society (A Community of the American Institute of Chemical Engineers)
  Founder and Chair of the Board of Directors (Currently)
  Founding Editor-in-Chief, Regenerative Engineering and Translational Medicine
American Institute of Medical and Biological Engineering
  Fellow of AIMBE 2000
  Chair of the College of Fellows of AIMBE
  Member of the Board of Directors of AIMBE
  Chair of Nominating Committee
  Co-Chair, Committee on Underrepresented Minorities (CURM)
American Chemical Society
   ACS Fellow 2014
Biomedical Engineering Society
   Fellow of BMES 2010
   Member of the Board of Directors of BMES
Materials Research Society
   Fellow of MRS 2014
Society for Biomaterials
   Fellow of SFB
   International Fellow in Biomaterials Science and Engineering
   Chair of Orthopaedic Biomaterials Special Interest Group
   Chair of the Chairs/Special Interest Groups
   Member, Council (Board of Directors) of SFB

Clinical Societies

American Academy of Orthopaedic Surgeons
   Fellow of AAOS 1998
   Member, Biological Implants Committee
American Orthopaedic Association
   Fellow of AOA 2001
American Surgical Association
   Elected Member (currently only Orthopaedic Surgeon elected) 2006
American College of Surgeons
   Fellow of ACS 1998
W. Montague Cobb/NMA Health Institute
   Fellow, Health Disparities Research
   Co-Founder
   Founding Chair of the Board of Directors 2007
   Founding Editor-in-Chief, The Journal of Racial and Ethnic Health Disparities

Contributions of record - Publications, Patents, and other
Please see CV (Over 500 publications and patents)

Honors and Awards (include awards and prizes, membership in honorary societies and the date the honor was received):

Presidential Awards
   National Medal of Technology and Innovation (Nation’s Highest Honor for Technological Achievement) Awarded by President Barack Obama 2016
   Presidential Award for Excellence in Science, Math and Engineering Mentoring, Awarded by President Barack Obama 2009
   Presidential Faculty Fellowship Award, Awarded by President Bill Clinton 1996
National Academy Awards

Simon Ramo Founders Award, National Academy of Engineering 2019
( Oldest/Highest Award of NAE)
Walsh McDermott Medal, National Academy of Medicine 2019
( Oldest/Highest Award of NAM)

Highest Awards of Societies

American Association for the Advancement of Science 2019
The Philip Hauge Abelson Prize (for signal contributions to the advancement of science in the United States)
American Institute of Medical and Biological Engineering 2010
The Pierre Galletti Award
American Ceramic Society 2018
The Edward Orton Lecture Award
American Society for Cell Biology 2019
Ernest E. Just Medal
Acta Biomaterialia 2020
The Acta Biomaterialia Gold Medal
Association of Bone and Joint Surgeons 2010
The Nicolas Andry Lifetime Achievement Award
Connecticut Academy of Science and Engineering 2016
The Connecticut Medal of Technology
National Organization of Black Chemists and Chemical Engineers 2015
The Percy Julian Medal
Society For Biomaterials 2016
The Founder’s Award

International Prizes

United Nations UNESCO Equatorial Guinea International Prize for Research 2019
For Research in the Life Sciences

Awards Named for Dr. Laurencin

National Medical Association/ W. Montague Cobb/NMA Health Institute since 2012
Cato T. Laurencin Lifetime Research Achievement Award, given at opening ceremonies
Society for Biomaterials since 2018
Cato T. Laurencin Travelling Fellowship Award (for underrepresented minority undergraduates to travel to the Society for Biomaterials Meeting and World Congress), given at opening ceremonies

Other Select Awards

American Institute of Chemical Engineers
Named one of the 100 Engineers of the Modern Era at AICHE Centennial 2009
William Grimes Award, AICHE 2006
Eminent Black Chemical Engineer Award 2012
Pioneer of Diversity Award, AICHE 2015
American Association for the Advancement of Science
American Association for the Advancement of Science (AAAS) Mentor Award 2012

Biomedical Engineering Society
BMES Diversity Award 2011

International Academy Memberships

Fellow, The World Academy of Sciences (TWAS) 2007
Fellow, African Academy of Sciences 2009
Elected Academician and Member, Chinese Academy of Engineering 2015
Fellow, National Academy of Sciences, India 2015
Fellow, National Academy of Engineering, India 2016
Cato Thomas Laurencin, M.D., Ph.D.

Current Position:
University Professor (8th Designated in University History)

Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery

Professor of Chemical and Biomolecular Engineering

Professor of Materials Science and Engineering

Professor of Biomedical Engineering

Chief Executive Officer, The Connecticut Convergence Institute for Translation in Regenerative Engineering

Director, Raymond and Beverly Sackler Center for Biomedical, Biological, Physical and Engineering Sciences

The University of Connecticut

Education:
1987 M.D. Degree, *Magna Cum Laude*, Harvard Medical School
1987 Ph.D. Degree, Biochemical Engineering/Biotechnology, Massachusetts Institute of Technology
1980 B.S.E. Degree, Chemical Engineering, Princeton University
1976 B.A. Degree, Central High School, Philadelphia, PA

Clinical Training:
1993-1994 Fellow, Sports Medicine and Shoulder Surgery
Cornell University Medical Center, The Hospital for Special Surgery
1993 Chief Resident in Orthopaedic Surgery
Harvard Medical School, The Beth Israel Hospital
1988-1992 Resident in Orthopaedic Surgery
Harvard Combined Orthopaedic Surgery Program
1987-1988 Surgical House Officer
The Pennsylvania Hospital, Philadelphia, Pennsylvania

**Certifications, Licenses, and Distinctions:**
- Recertified 2004-2016
- Recertified 2016-2026
- Medical License, Connecticut (Active #046772)
- Medical License, Pennsylvania Active #MD042930E)
- Medical License, Florida (Active #ME91442)

- Fellow, American Academy of Orthopaedic Surgeons, 1998
- Fellow, American College of Surgeons, 1998
- Fellow, American Institute for Medical and Biological Engineering, 2000
- International Fellow, Biomaterials Science and Engineering, 2000
- Fellow, American Orthopaedic Association, 2001
- Elected Member, National Academy of Sciences, Institute of Medicine, 2004 (now National Academy of Medicine)
- Elected Member, American Surgical Association, 2006
- Fellow, African Academy of Sciences, 2009
- Fellow, Biomedical Engineering Society, 2010
- Elected Member, National Academy of Engineering, 2011
- Fellow, American Institute of Chemical Engineers, 2012
- Cato T. Laurencin Lifetime Achievement Award established by the W. Montague Cobb/NMA Health Institute and the National Medical Association, 2013
- Fellow, American Association for the Advancement of Science, 2014
- Fellow, Materials Research Society, 2014
- Fellow, American Chemical Society, 2014
- Awarded NIH Director’s Pioneer Award Grant, 2014
- Fellow (Foreign), India National Academy of Sciences, 2015
- Fellow, The National Academy of Inventors, 2015
- Academician and Member (Foreign), Chinese Academy of Engineering 2015
- Fellow, Indian National Academy of Engineering, 2015
- Cato T. Laurencin, M.D., Ph.D. Travel Fellowship established by the Society for Biomaterials, 2015
- Founder’s Award, Society for Biomaterials, 2016
- Laureate, National Medal of Technology and Innovation, 2016
**Past Employment:**

2008-2011  Vice President for Health Affairs  
            Dean of the School of Medicine  
            Albert and Wilda Van Dusen Endowed Chair in  
            Academic Medicine  
            Distinguished Professor of Orthopaedic Surgery  
            Professor of Chemical and Biomolecular Engineering  
            Professor of Materials Science and Engineering  
            Professor of Biomedical Engineering  
            The University of Connecticut

2003-2008  University Professor  
            Lillian T. Pratt Distinguished Professor of Orthopaedic Surgery  
            Chairman, Department of Orthopaedic Surgery  
            Professor of Biomedical Engineering  
            Professor of Chemical Engineering  
            The University of Virginia

1994-2003  Drexel, MCP-Hahnemann and Allegheny (Clinical)  
            Vice Chairman and Clinical Professor of Orthopaedic Surgery and  
            Director of Shoulder Surgery  
            Drexel University, School of Medicine (2002-2003)  
            Clinical Professor of Orthopaedic Surgery  
            MCP-Hahnemann School of Medicine (2001-2002)  
            Clinical Associate Professor of Orthopaedic Surgery  
            MCP-Hahnemann School of Medicine (1998-2001)  
            Associate Professor of Orthopaedic Surgery  
            Allegheny University School of Medicine (1994-1998)

1994-2003  Drexel University (Engineering)  
            Director, Center for Advanced Biomaterials and Tissue  
            Engineering, Department of Chemical Engineering  
            Helen I. Moorehead Distinguished Professor of Chemical  
            Helen I. Moorehead Professor of Chemical Engineering (1998- 
            2002)  
            Research Professor of Chemical Engineering (1994-1998)  
            Research Professor of Materials Engineering

1993-1994  Research Scientist
Massachusetts Institute of Technology
Division of Health Sciences and Technology

1988-1993  Instructor of Biochemical Engineering
Massachusetts Institute of Technology
Division of Health Sciences and Technology

1988-1989  Research Fellow
Harvard Medical School
Children's Hospital Medical Center, Department of Surgery

**Academic and Other Teaching Experiences:**

2018-  Course Lecture: Biomedical Entrepreneurship
2018-  Course Lecture: Africana Studies Race and Medicine
2017-  Course Co-Instructor: Clinical and Translational Science (MCTR): The Scientific Review (UConn Graduate School)
2017-  Course Co-Instructor: Impact of Race on Health Equity and Medical Research (UConn College of Liberal Arts and Sciences)
2015-  Course Co-Instructor Biomedical Engineering Entrepreneurship (UConn Engineering School)
2014-  Biomedical Engineering: Special Topics- Drug Delivery (UConn Engineering School)
2014-  Special Topics in Regenerative Engineering (UConn Medical School)
2015-2017  Course Lectures: Racism in Medicine (UConn Medical School)
2015-2017  Biomedical Engineering Senior Design (UConn Engineering School)
2013-  Resident Teaching Orthopaedic Surgery Clinical Offices
2013-  Resident Teaching Orthopaedic Surgery Operating Room
2008-2015  Anatomy Course: Upper Extremity Lab Preceptor (UConn Medical School)
2008-2015  Rotator Cuff Tear Pathology Conference Instructor (UConn Medical School)
2007  Instructor/Guest Lecturer Nanotechnology Virginia State Wide Course Bionanotechnology
2007  Guest Lecturer Anthropology: The Health of Black Folks
2005-2008  Instructor/Guest Lecturer Biomaterials Course, Biomedical Engineering (University of Virginia)
2003  Instructor, Advanced Projects in Biomedical Engineering BIOM 454 (University of Virginia)
2002  Instructor, American Academy of Orthopaedic Surgeons Grant Writing Workshop
2001-2003  Instructor and Course Director, Biological Factors in Tissue Engineering, Drexel University
2001-2003  Instructor, Cell-Mediated Tissue Engineering
1999-2003  Instructor and Course Director, Chemical Engineering Energy Processes, Drexel University
1998-2003  Instructor and Course Director, Process Material Balances, Department of Chemical Engineering, Drexel University
1997-1998  Instructor in Shoulder, Allegheny Primary Care Curriculum in Orthopaedic Surgery
1996-1998  Instructor, Orthopaedic Learning Center, Rosemont, IL, Courses on Shoulder
1996-2001  Preceptor, Philadelphia Public School District School to Careers Program
1996-2001  Preceptor, Merck-Astra Summer Clinical Program
1995-1998  Preceptor, Allegheny University of the Health Sciences Summer Minority Research Program
1994-1996  Instructor and Course Director, Allegheny University of the Health Sciences Basic Science Course in Orthopaedic Surgery (for Residents)
1995-1998  Instructor, Allegheny University of the Health Sciences Introduction to Clinical Medicine (Sports Medicine)
1995-2003  Instructor, Biomaterials (Core Materials Engineering Graduate Course for Drexel University)
1995-2003  Instructor and Course Co-Director, Tissue Engineering (Materials Engineering Graduate Course for Drexel University)
1993-1996  Preceptor, Harvard Medical School Clinical Elective Program
1990-1993  Preceptor, M.I.T. Minority Summer Science Research Program
1992  Instructor, Primary Care Orthopaedics, Harvard Medical School
1989-1990  Instructor, Biotechnology and Bioengineering (10.02J) Chemical Engineering Department, Massachusetts Institute of Technology (M.I.T.)
1989-1990  Instructor, Patient/Doctor Course (Introduction to Clinical Medicine), Harvard Medical School
1986-1987  Instructor, Physiology, M.I.T. Introduction to Health Sciences Program
1985-1987  Instructor, Biochemistry, M.I.T. M.I.T.E.S. Program (Excellence in Teaching Award, 1985)
1983  Teaching Fellow, Genetics, Harvard University
1981  Instructor, Microbiology, Harvard Medical School Pre-
Matriculation Program
1981 Teaching Fellow, Cellular Biology, Harvard University

**Scholarly, Academic or Teaching Awards, Honors and Positions:**
2020 Listed as CrossTalk’s 100 Inspiring Black Scientists in America
2020 Recipient of the Acta Biomaterialia Gold Medal
2020 Mike Hogg Award and Lecture, MD Anderson Cancer Center highest honor
2020 Nelson W. Taylor Lecture and Award, Pennsylvania State University
2020 Recipient, UNESCO-Equatorial Guinea International Prize for Research in the Life Sciences
2019 Member, National Academy of Inventors Fellows Selection Committee
2019 Recipient, E.E. Just Lecture Award, American Society for Cell Biology
2019 Recipient, Walsh McDermott Award, National Academy of Medicine
2019 Recipient, Simon Ramo Founders Award, National Academy of Engineering
2019 Chair, National Academies Roundtable on Black Men and Black Women in Science, Engineering, and Medicine
2019 Elected Member, American Academy of Arts and Sciences
2019 Keynote Speaker, Western University of Health Sciences Ray Symposium
2019 Keynote Speaker, 22nd Annual AAPS-Northeast Regional Discussion Group (NERDG)
2019 Recipient, Global Biomaterials Leadership Award, Chinese Association of Biomaterials
2019 Faculty Member, Alpha Omega Alpha Honor Medical Society (UConn Chapter)
2019 Named to America’s Top Doctors (15th consecutive year)
2019 Featured Speaker, AIMBE 2019 Annual Event, Washington, D.C.
2019 Opening Speaker, Helen I. Moorehead-Laurencin, M.D. Sex and Gender Forum, Drexel University
2019 Keynote Speaker, J. Robert Gladden Orthopaedic Society Annual Luncheon, Las Vegas
2019 Member, Committees of the African Academy of Sciences
2019 Selection Committee Member, Johnson & Johnson Dr. Paul Janssen Award for Biomedical Research
Recipient, The American Association for the Advancement of Science Philip Hauge Abelson Prize ‘for signal contributions to science in the United States’

Gustave Dammin Lecturer, Harvard Medical School, Brigham and Women’s Hospital

Edward Orton, Jr. Memorial Lecture (Highest Lectureship), American Ceramic Society

Keynote Speaker, National Science Foundation, Accelerating Engineering Research Center Preparedness Workshop

Plenary Speaker Cooper Medical School at Rowan University Research Day

Elected to Core Faculty, Africana Studies Institute, University of Connecticut

Keynote Speaker, European Orthopaedic Research Society, 2018 Galway, Ireland

Lee Hsun Lecture Award, Shenyang University, Shenyang, China

Plenary Speaker, International Conference on Ceramic Materials and Components for Energy and Environmental Applications

Opening Plenary Speaker, American Association for the Advancement of Science and National Science Foundation Robert Noyce Program

Plenary Speaker and Honorary Keynote Speaker, Global Congress and Expo on Materials Science and Engineering (GCEMSE), Italy

Plenary Speaker, European Society for Biomaterials/Society for Biomaterials Summer Biomaterials Course

Executive Committee Member, Conference on Definitions in Biomaterials, Chengdu, China

Doctor of Science, Honoris Causa, Mt. Sinai University School of Medicine

Chair, Awards Committee, Connecticut Medal of Technology

Named to Visiting Committee, Harvard Medical School

Sheldon Weinbaum Distinguished Lecturer, Rensselaer Polytechnic Institute

Elizabeth D. Rockwell Distinguished Lecturer, University of Houston

Keynote Speaker, ICONSAT Nanotechnology Symposium, India

Craig Lecturer, University of Michigan

Keynote Speaker, M.I.T. Black Student’s Union 50th Anniversary Celebration

Named to America’s Top Doctors (14th consecutive year)

Invited Speaker: Northwestern University Center for Advanced
Regenerative Engineering (CARE) Symposium
2018
Opening Keynote Speaker, Biomedical Engineering Society:
Cellular and Molecular Bioengineering Meeting
2017-
President, National Academy of Inventors, University of
Connecticut Chapter
2017-
Chair, Connecticut Children’s Hospital Medical Center Board of
Directors, Quality Improvement Committee
2017-
Executive Committee Member, Board of Directors, Connecticut
Children’s Medical Center
2017-
National Academy of Medicine, Nominations Committee
2017
Distinguished Engineering Educator Award for 2017 (from the
Engineer’s Council)
2017
Named to America's Top Doctors (over 10 years)
2017
Named to Scientific Advisory Board, Rady Children’s Hospital
Institute for Genomic Medicine
2017
Named to Scientific Advisory Board, SUSTECH University,
Shenzhen, China
2017
Inducted into the Indian National Academy of Sciences
2017
Two Genes Distinguished Lectureship, Northwestern University
2017
Opening Speaker, Helen I. Moorehead-Laurencin, M.D. Sex and
Gender Forum, Drexel University
2017
Opening Keynote Speaker, 39th Annual Conference on the Black
Family Hampton University
2017-2018
Chair of Awards Committee, American Institute for Medical and
Biological Engineering
2017
Distinguished Professor Lectureship, Widener University
2017
Kewaunee Visiting Professor Lectureship, Duke University
2017
Keynote Speaker, Wiley Editor Symposium
2017-
Harvard-M.I.T. Division of Health Science and Technology (HST)
Advisory Board Member
2017
Invited Keynote Speaker, World Frontier’s Forum
2017
Opening Keynote Speaker, American Association of
Pharmaceutical Scientists
2017
Invited Speaker, Materials Research Society
2017
National Academies of Science, Engineering and Medicine
Workshop Chair: The Growing Absence of Black Men in Medicine
and Science
2017
Honoree for Research, Sastra University, Thanjavur, India
2017
Named to America’s Top Doctors (13th consecutive year)
2016-
Governance Committee Member, Children’s Hospital Medical
Center, Board of Directors
2016 National Medal of Technology and Innovation
2016 Fellow of the Indian Academy of Engineering
2016 Fellow of the Chinese Academy of Engineering
2016 Chair, Awards Committee, American Institute for Medical and Biological Engineering
2016 Chair, Awards Committee, National Academy of Engineering
2016 Member, National Academy of Medicine (Round Table on Regenerative Medicine)
2016 Fred Kavli Distinguished Lecturer in Materials Science
2016 Opening Plenary Speaker, Materials Research Society
2016 Global research collaboration for infectious disease preparedness (GLoPID-R) representing the African Academy of Sciences
2016 General Assembly and Plenary Academic Lecturer of the Chinese Academy of Engineering (CAE)
2016 Session Chair, MAC Chemical Engineering Forum AICHE Annual Conference
2016 Named to America’s Top Doctors (12th consecutive year)
2016 Organizer, 2nd Annual National Health Disparities Elimination Summit
2015- Member, National Academy of Medicine Health and Medicine Division Committee
2015 Academician and Member (Foreign), Chinese Academy of Engineering
2015 Fellow (Foreign), Indian National Academy of Sciences
2015 Pioneer of Diversity Award, American Institute of Chemical Engineers
2015 Invited Speaker, Alliance for Accelerating Excellence in Science in Africa (AESA) Nairobi
2015 Living Legend Award, National Medical Association
2015 Cato T. Laurencin, M.D., Ph.D. Travelling Fellow Award established by the Society for Biomaterials
2015 Keynote Speaker, Healthcare Engineering, International Council of Academies of Engineering and Technical Sciences (CAETS), New Delhi, India
2015 Opening Keynote Speaker, Gordon Conference, Biomaterials and Tissue Engineering, Girona, Spain
2015 Session Chair, Biomedical engineering technology for the elimination of health disparities
2015-2018 Visiting Committee, Massachusetts Institute of Technology, Institute for Medical Engineering and Science
2015 Lifetime Achievement Award, West Indian Foundation
2015 Visiting Committee, Massachusetts Institute of Technology, Division of Health Sciences and Technology
2015 Named to America’s Top Doctors (11th consecutive year)
2015 Invited Speaker, M.I.T. Institute for Medical Engineering and Science Distinguished Series
2015 Keynote Speaker, TERMSTEM Conference, Porto, Portugal
2015 Visiting Lecturer, Princeton University, Department of Chemical Engineering
2015 Visiting Professor and Lecturer, University of California, San Diego, Department of Bioengineering
2015 Plenary Speaker and Plenary Award, American Ceramic Society
2015 University of Florida Distinguished Lecturer in BME Leadership
2015 Invited Speaker, T. Leroy Jefferson Medical Society
2015 Invited Speaker, New Hampshire Orthopaedic Institute
2015 NIH Director’s Pioneer Award
2015 Elected Fellow, American Chemical Society
2015 Elected Fellow, Materials Research Society
2015 Torch of Liberty Award, Anti-Defamation League
2015 Percy Julian Award and Medal, National Organization of Black Chemists and Chemical Engineers (NOBCChE)
2014 Academic Entrepreneur of the Year Award, Connecticut Cure
2014 Keynote Speaker, T. Leroy Jefferson Medical Society, Florida
2014 Plenary Speaker, International Conference on Nano Science and Technology (ICONSAT-2014), Chandigarh, India
2014 Keynote Speaker, Biomaterials Day, University of Washington
2014 President’s Distinguished Lecturer, Houston Methodist Research Institute
2014 Keynote Speaker, Biomaterials Day, University of Florida
2014 Zweifach Visiting Professor, City College of New York
2014 Elected to Board of Directors, Biomedical Engineering Society
2014 Plenary Lecture, Chinese Academy of Sciences, International Conference on Engineering Science and Technology, Beijing, China
2014 Scientific Management Review Board, National Institutes of Health
2014 Invited Speaker, Frontiers of Bioengineering Symposium, Illinois
2014 Vice-Chair of Awards Committee, National Academy of Engineering
2014 Invited Lecturer, University of California, San Diego
2014 Co-Chair, Scientific Advisory Board, Burroughs Wellcome Foundation Careers at the Scientific Interface Committee
2014 Invited Speaker, 6th Forum on New Materials, CIMTEC, Tuscany,
Italy

2014 Keynote Speaker, First Robotics Competition, Hartford Connecticut
2014 Invited Speaker, Novartis Corporation Research Institute, Switzerland
2014 Visiting Professor, Columbia University Medical Center
2013 Session Chair and Speaker, Health Disparities: Innovative Approaches to Improved Health
2013 American Association for the Advancement of Science Mentor Award
2013 Technology Innovation and Development Award of the Society for Biomaterials
2013 Dean’s Distinguished Lecturer, University of Colorado Medical Center
2013 Nanostructures for Therapeutic Applications (Guest Editor), Current Bioactive Compounds
2012-2017 Member, National Academy of Engineering Division Committee on Engineering and Physical Sciences
2012 Elizabeth Hurlock Beckman Award for Mentoring
2012 Pirkey Distinguished Lecturer in Chemical Engineering, University of Texas at Austin
2012 Basore Distinguished Lecturer, Auburn University
2012 Selected in the list of “Prominent African-Americans Poised to Make a Big Difference in the United States and the World” by MSNBC
2012 Distinguished Speakers Series, University of California Riverside
2012 Selected in Regenerative Medicine among the “100 Scientific Discoveries That Changed the World”, National Geographic Magazine
2012 10th Alvin Crawford Mentoring Award, The J. Robert Gladden Orthopaedic Society (JRGOS)
2012 Chair, Board of Directors for the W. Montague Cobb/National Medical Association (COBB) Health Institute
2012 Keynote Speaker, Second International Conference on Nanotechnology, Kochi, India
2012 Interviewed by Fox 61 as part of its series “Black History is Everyone's History” celebrating African-American achievements in Connecticut
2013-2016 Appointed to the Advisory Committee to the NIH Director
2012 Dr. Martin Luther King, Jr. Leadership Award, Massachusetts
Institute of Technology

2012 Distinguished Lecturer, University of California Davis
2011-2015 Appointed to the Advisory Council of the National Institute of Biomedical Imaging and Bioengineering (NIBIB)

2011 Invited Speaker, The 11th US-Japan Symposium on Drug Delivery Systems
2011 Invited Keynote Speaker, 25th anniversary celebration of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
2011 Elected Member, National Academy of Engineering
2011 Elected Member, African Academy of Sciences
2011 Invited Speaker, Montana State University
2011 Biomedical Engineering Society's (BMES) Diversity Award
2011 Peter Mack Memorial Lecture, Johns Hopkins University
2011 The Alan S. Michaels Distinguished Lectureship in Medical and Biological Engineering, Massachusetts Institute of Technology
2011 Elected to the Golden Key International Society (Faculty Member from UCONN)
2011 Martin Luther King, Jr. National Day of Observance Speaker for the National Institutes of Health
2011 Chair of the Committee of Visitors, National Science Foundation, EFRI Grant Program
2011 Keynote Speaker, Lea’s Foundation Annual Event
2010 Community Service Award, Urban League of Greater Hartford
2010 Elected Fellow, Biomedical Engineering Society (BMES)
2010 Invited Keynote Speaker, Honorary Series in Biomaterials Science, The American Institute of Chemical Engineers
2010 Keynote Speaker, Musculoskeletal Health Disparities Summit, Washington, DC
2010 Invited Speaker, National Health Disparities Conference, Philadelphia, PA
2010 Invited Speaker, Society for Biomaterials, Grand Challenges for Biomaterials Research and Education
2010 Invited Speaker, Florida Hospital Distinguished Lectureship Series, Tampa, Florida
2010 Plenary Session Speaker, Personalizing Leadership for the Academic Medical Center of the Future in the Era of Health Care Reform
2010 Opening Keynote Speaker, Advances in Tissue Engineering, Rice University
2010 Keynote Speaker, 9th International Conference “Medical
Applications of Novel Biomaterials and Nano-biotechnology,”
Italy
2009
President Award of Excellence in Science, Engineering and
Math Mentoring (presented by President Barack Obama)
2009
Invited Speaker, Karolinska Institute, Nanotechnology and
Nanomedicine Symposium
2009
Pierre Galletti Award, American Institute for Medical and
Biological Engineering (Organization’s Highest Award)
2009
Invited Speaker, 2nd International Medical School Dean’s Meeting,
Beijing, China
2009
150th Commencement Keynote Speaker, Lincoln University
2009
Doctor of Science, Honoris Causa, Lincoln University
2009
Keynote Speaker, the J. Robert Gladden Society, American
Academy of Orthopaedic Surgeon’s Meeting
2009
Physician of the Year, National Medical Association, Region 1
2008
Named one of the 100 Engineers of the Modern Era by the
American Institute of Chemical Engineers
2008
Named one of the 11 Eminent Black Chemical Engineers in
History by the American Institute of Chemical Engineers Minority
Affairs Committee
2008
Awarded the Caribbean American Heritage Award for Excellence
in Science and Technology
2008
Named to “America’s Leading Physicians”, Black Enterprise
Magazine
2008
Mallory-Coleman Visiting Professor, Ohio State University
Department of Orthopaedic Surgery
2008
Invited Speaker, Columbus Orthopaedic Society, Columbus, Ohio
2008
Discovery Lecturer, Vanderbilt University School of Medicine
2008
Keynote Speaker, Holland Scholars Program, University of
Virginia
2008
Visiting Professor, Grand Rounds Speaker, Vanderbilt University, Department of Orthopaedic Surgery
2008
Named to Scientific American 50 Award List
2008
Keynote Speaker, Earnest Just Memorial Symposium, Medical University of South Carolina
2008
Invited Speaker, The Houston Society for Engineering in Medicine and Biology
2007-2008
Vice Chair and Chair National Academy of Medicine Section 1
2007
Who’s Who in Engineering Higher Education (Academic Keys)
2007
America’s Top Doctors Award
2007
America’s Top Surgeons Award
2007  State of Virginia Department of Health Workforce Recognition Award
2007  Dean’s Lecture, School of Medicine, University of Virginia
2007  Plenary Lecturer, U.S. Committee on Biomechanics Summit Meeting, Keystone Colorado
2007  Invited Speaker, National Institutes of Health: NIBIB Diversity Symposium, Keystone Colorado
2007  Co-Chair, American Academy of Orthopaedic Surgery-N.I.H. Workshop on Fracture Repair, Miami, Florida
2007  Chair of the Shoulder Advisory Board, Anesiva Corporation
2007  International Program Committee, 7th International Symposium on Ligaments and Tendons
2007  Team Semi-Finalist, Oak Ridge National Laboratories Nanonexus Competition
2007  Invited Speaker, American Association for the Advancement of Science (Novel Materials and Processes for Medical Prostheses Symposium)
2007  Alvin F. Poussaint, M.D. Lecturer, Harvard Medical School
2007  Grand Rounds Speaker, Harvard Combined Orthopaedic Surgery, Brigham and Women’s Hospital
2007  Grand Rounds Speaker, Brown University, Department of Orthopaedic Surgery
2007  Elected Chair of the College of Fellows, American Institute for Medical and Biological Engineering
2007  Invited Speaker, Helen I. Moorehead-Laurencin, M.D. Research Day, Drexel University
2006  Charles H. Epps Lecturer, Howard University School of Medicine
2006  Fellow, American Academy of Nanomedicine
2006  Invited Speaker, National Academy of Sciences, Institute of Medicine Meeting (Stem Cells and Tissue Engineering)
2006  Nicolas Andry Award, Association of Bone and Joint Surgeons for Significant Achievements in Orthopaedic Surgery
2006  Invited Speaker, BME-IDEA Conference, Biomedical Engineering Society Meeting, Chicago, IL
2006  Named to America’s Top Surgeons
2006  Clemson Award, Society for Biomaterials for Contributions to the Orthopaedic Literature
2006  Named to National Science Foundation Advisory Committee for the Directorate of Engineering
2006  Invited Speaker, Roundtable on Evidence Based Medicine Workshop on The Learning Healthcare System
2006  Named to Institute of Medicine Roundtable on Evidence Based Medicine
2006  Visiting Professor, Marquette University, Department of Biomedical Engineering
2006  Named Co-Chair, National Academy of Sciences, Institute of Medicine Annual Meeting (Theme: Regeneration)
2005  Keynote Speaker, Society for Biomaterials Annual Scientific Meeting
2005  Chairman of the Steering and Oversight Committee (SOC), The NMA W. Montague Cobb Health Institute
2005  Invited Speaker, Regenerate 2005 Meeting, Atlanta, Georgia
2005  Invited Guest Speaker, O, The Oprah Magazine’s Dream Team of Health Experts
2005  America’s Top Doctors 2005
2005  Invited Speaker, National Academies President’s Circle Meeting, Woods Hole, MA
2005  Ribbon Award Winner, Paper Symposium AA, Materials Research Society Fall Meeting
2005  Plenary Speaker, Whitaker Foundation Summit
2004  Named to African Scientific Committee of the African Institute of Science and Technology
2004  Elected to National Academy of Sciences, Institute of Medicine
2004  Who’s Who in America
2004  Invited Participant, Conference on Research at the Interface of the Life and Physical Sciences: Bridging the Sciences (National Science Foundation)
2004  Grand Rounds Speaker, Department of Orthopaedic Surgery, Virginia Commonwealth University, Richmond Virginia
2004  Co-Organizer, National Academy of Sciences Keck Future Initiative in Nanotechnology
2004  America’s Top Doctor Award
2004  Who’s Who in Medicine and Health Care
2004  Lead Symposium Organizer, Materials Research Society, Nanotechnology and Micron Scale Materials Systems
2004  Visiting Professor, Research Day Invited Speaker, The University of Toronto
2004  Invited Speaker, Spinal Skeletal Solutions: A Global Perspective Conference, Maui, HI
2004  Invited Speaker, Running Medicine Symposium, University of
Virginia

2004 Invited Speaker, The OR of the Future workshop, Endicott, MD
2003 Guest Editor, IEEE Medicine and Biology Magazine
2003 Opening Speaker, Nanotechnology and Health Care International Workshop, Thanjavur, India
2003 Award of Appreciation, Student National Medical Association, Region 6
2003 Member, Cancer Center, The University of Virginia
2003 Member, Biotechnology Training Faculty, The University of Virginia
2002 William Grimes Award, American Institute of Chemical Engineers
2002 Provost’s Distinguished Lecturer, University of Texas at Austin
2002-2003 Member, Committee on Sciences & the Arts, The Franklin Institute, Philadelphia, PA
2002 Named to National COX-2 Advisory Board, Pfizer Corporation
2002 Profiled by Philadelphia Tribune/Medical Section
2002 Distinguished Professor Designation Bestowed, Drexel University
2002 Named to National Orthopaedic Sports Medicine Advisory Board, Pfizer Corporation
2002 Physician, United States Olympic Training Center, Lake Placid, New York
2002 Named Top 40 African American Physicians in Region, Black Network Magazine
2002 Named to National Institutes of Health Council on Musculoskeletal and Skin Diseases
2002 Named Professor of the Year, College of Engineering, Drexel University (as voted by students of the College of Engineering)
2002 Drexel University College of Engineering Outstanding Research Award
2002 Graduation Orator, Sastha University, Madras, India
2001 Awarded the 10(6) Award by Drexel University for 2001
2001 Awarded Special Recognition Award by National Medical Fellowships Inc.
2001 Awarded 2001 Leadership in Technology Award by the New Millennium Foundation
2001 Named to Osteoarthritis Advisory Board, Pfizer, Inc.
2001 Named Top 101 Doctors in America by Black Enterprise Magazine
2001 Vice-Speaker, House of Delegates, National Medical Association
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2001</td>
<td>Awarded 2.3MM N.I.H. RO-1 Grant for New Polymeric Materials for Tissue Engineering</td>
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<tr>
<td>2001</td>
<td>Keynote Speaker, Northeastern Bioengineering Conference</td>
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<tr>
<td>2001</td>
<td>Invited Speaker, Pittsburgh Tissue Engineering Legislative Roundtable Discussion Group</td>
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<tr>
<td>2001</td>
<td>Organizer, Helen I. Moorehead, M.D. Women's Health Research Day, MCP-Hahnemann School of Medicine</td>
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<tr>
<td>2001</td>
<td>Named to Mid-Atlantic Orthopaedic Surgery Advisory Board, Merck and Co.</td>
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<tr>
<td>2001</td>
<td>Visiting Professor, Department of Chemical Engineering, University of Iowa</td>
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<tr>
<td>2001</td>
<td>Visiting Professor, Department of Chemical Engineering, University of Pittsburgh</td>
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<tr>
<td>2000</td>
<td>Philadelphia School Districted Retired Employees Award for Teaching and Community Service</td>
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<tr>
<td>2000</td>
<td>Lead Invited Speaker, AO Workshop on Bone Graft Substitutes, Davos, Switzerland</td>
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<tr>
<td>2000</td>
<td>Lead Chair and Organizer, American Society for Testing Materials, American Academy of Orthopaedic Surgeons Workshop on Bone Graft Substitutes</td>
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<tr>
<td>2000</td>
<td>Inducted Into Philadelphia Health Care Hall of Fame</td>
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<tr>
<td>2000</td>
<td>Visiting Professor, Howard University, Division of Orthopaedic Surgery</td>
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<tr>
<td>2000</td>
<td>Men's High Achiever Award, Faith Episcopal Church, Philadelphia</td>
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<tr>
<td>2000</td>
<td>Research Profiled by Orthopaedics Today Magazine</td>
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<tr>
<td>2000</td>
<td>Profiled by Drexel-Link Magazine as National Innovator in Tissue Engineering</td>
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<tr>
<td>2000</td>
<td>Profiled by Philadelphia Tribune/Medical Section</td>
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<tr>
<td>2000</td>
<td>Research Committee, Biomaterials Sub-Committee, American Academy of Orthopaedic Surgeons</td>
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<tr>
<td>2000</td>
<td>Awarded the 10(6) Award by Drexel University for 2000</td>
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<tr>
<td>2000</td>
<td>Keynote Speaker, Central High School Football Awards Dinner</td>
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<tr>
<td>2000</td>
<td>National Medical Fellowships Hall of Fame</td>
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<td>1999</td>
<td>Admissions Interviewer, AUHS Orthopaedic Surgery Program</td>
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<tr>
<td>1999</td>
<td>Profiled by Voice of America Radio Network</td>
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<tr>
<td>1999</td>
<td>Fellow, American Institute for Medical and Biological Engineering (AIMBE)</td>
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<tr>
<td>1999</td>
<td>Scientific Advisory Board, Genzyme Pharmaceutical Co</td>
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<tr>
<td>1999</td>
<td>International Fellow, Biomaterials Science and Engineering, International Union of Biomaterials Societies</td>
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<tr>
<td>1999</td>
<td>Profiled by IEEE in “Scientists of the Millennium” Series</td>
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<td>Year</td>
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<tr>
<td>1999</td>
<td>Center for Advanced Biomaterials and Tissue Engineering Named</td>
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<td>Pennsylvania “Center of Research Excellence” by Ben Franklin</td>
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<td>Technology Program</td>
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<td>1999</td>
<td>Awarded the American Orthopaedic Association’s American,</td>
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<td>British and Canadian (ABC) Traveling Fellowship</td>
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<td>1998</td>
<td>Fellow, American College of Surgeons</td>
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<td>1998</td>
<td>Elected Member, American Orthopaedic Society for Sports Medicine</td>
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<tr>
<td>1998</td>
<td>Visiting Professor, Department of Orthopaedic Surgery, University</td>
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<td>of Texas at San Antonio</td>
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<tr>
<td>1998</td>
<td>Distinguished Alumni Award, Princeton University Association of</td>
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<td></td>
<td>Black Princeton Alumni</td>
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<tr>
<td>1998</td>
<td>Inaugural Address, Musculoskeletal Biomedical Engineering Center,</td>
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<td></td>
<td>University of Texas at San Antonio</td>
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<tr>
<td>1998</td>
<td>Invited Speaker, American Association for the Advancement of</td>
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<td>Science</td>
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<tr>
<td>1998</td>
<td>Invited Instructor in Shoulder Surgery, American Academy of</td>
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<td></td>
<td>Orthopaedic Surgery, Orthopaedic Learning Center</td>
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<tr>
<td>1998</td>
<td>Student National Medical Association, Region VII Award for</td>
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<td></td>
<td>Mentoring</td>
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<td>1998</td>
<td>Appointed to ASTM (Amer. Soc. for Testing Mater.) F04.4 Committee</td>
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<tr>
<td></td>
<td>(Tissue Engineering)</td>
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<tr>
<td>1998</td>
<td>Regular Panel Member, Food and Drug Administration, Orthopaedic</td>
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<td>Devices Panel</td>
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<tr>
<td>1997</td>
<td>Keynote Speaker and Recipient, Community Service Award, LaSalle</td>
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<td></td>
<td>University, Philadelphia, PA</td>
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<tr>
<td>1997</td>
<td>Selected Participant, National Academy of Sciences Frontiers of</td>
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<td>Science Meeting</td>
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<tr>
<td>1997</td>
<td>Fellow, American Academy of Orthopaedic Surgeons</td>
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<tr>
<td>1997</td>
<td>Elected Member, Council of the Society for Biomaterials</td>
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<tr>
<td>1997</td>
<td>Elected Officer, Society for Biomaterials</td>
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<tr>
<td>1997</td>
<td>Board of Managers, Central High School</td>
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<tr>
<td>1997</td>
<td>Visiting Professor, Department of Orthopaedic Surgery, Martin</td>
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<tr>
<td></td>
<td>Luther King Medical Center, Los Angeles, California</td>
</tr>
<tr>
<td>1997</td>
<td>Visiting Professor, Department of Orthopaedic Surgery, Baylor</td>
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<td></td>
<td>College of Medicine, Houston, Texas</td>
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<tr>
<td>1996</td>
<td>Invited Instructor in Shoulder Surgery, American Academy of</td>
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<tr>
<td></td>
<td>Orthopaedic Surgery, Orthopaedic Learning Center</td>
</tr>
<tr>
<td>1996</td>
<td>Board Certification in Orthopaedic Surgery</td>
</tr>
<tr>
<td>1996</td>
<td>Named to Osteonics Corporation Scientific Advisory Board</td>
</tr>
<tr>
<td>1996</td>
<td>Lead Article, Journal of Biomedical Materials Research, March,</td>
</tr>
</tbody>
</table>
1996 Founding Member, The International Cord Blood Society
1996 Visiting Professor, Medical University of South Africa, Republic of South Africa
1996 Member, U.S. Delegation to South Africa in Biomedical Engineering, Eisenhower Foundation Citizen Ambassador Program
1996 The Matilda E. Evans, M.D. Award (Outstanding Professional Achievement), Allegheny University
1995 Presidential Faculty Fellow Award, The National Science Foundation
1995-1998 Admissions Interviewer, AUHS Orthopaedic Surgery Program
1993 Distinguished Service Award, Postgraduate Section, National Medical Association
1993 International Men of Achievement
1992 Who’s Who in Engineering and Science
1991 Lowell Institute Lecturer for Suffolk University
1991 American Orthopaedic Association Award for Resident Research
1988 Ford Foundation Fellowship Award for Biomedical Engineering Research
1987 Recipient, Kaiser Foundation Grant Award for Leadership
1987 Recipient, Robinson Memorial Prize for Surgery (Best Minority Medical Student in Surgery in America)
1984-1987 Recipient, Hugh Hampton Young Memorial Prize (M.I.T.’s only Institute-Wide Competitive Award open to all Graduate Students)
1984 Recipient, Commonwealth Fund Fellowship Award
1982-1987 Recipient, Medical Scientist Training Program (M.S.T.P.) Grant Award, Harvard Medical School, M.D.-Ph.D. Program
1982 American Society of Anesthesiologists Fellowship
1980 Recipient, Certificate of Proficiency in Afro-American Studies at Princeton University
1977-1980 Gulf Oil Honors Scholarship at Princeton University
1976 National Achievement Scholarship Award

Other Service Activities:
2019-2020 Member, ARMI/BioFabUSA Leadership Advisory Council
2019 Host Committee Member, 2019 AIChE Gala
2019 Advisory Board, The HistoryMakers MedicalMakers
2019 Mentor, The AAS Mentorship Scheme, African Academy of Sciences
2019 Honorary Board Member, Society for Science & the Public
<table>
<thead>
<tr>
<th>Year</th>
<th>Role Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Chair, Roundtable on Black Men and Black Women in Science, Engineering, and Medicine</td>
</tr>
<tr>
<td>2019</td>
<td>Advisory Committee Member, Women 100 (A National Celebration of American Women)</td>
</tr>
<tr>
<td>2018</td>
<td>Co-Presenter, Connecticut Medal of Technology</td>
</tr>
<tr>
<td>2017</td>
<td>Chair, Workshop on the Growing Absence of Black Men in Medicine and Science, the National Academies of Science, Engineering and Medicine</td>
</tr>
<tr>
<td>2017</td>
<td>Appointed Commissioner, Boxing, State of Connecticut</td>
</tr>
<tr>
<td>2016</td>
<td>Named to National Medical Advisory Board, USA Boxing</td>
</tr>
<tr>
<td>2015</td>
<td>Member, Institute of Medicine Military Medicine Consensus Committee</td>
</tr>
<tr>
<td>2015</td>
<td>Named Team Doctor USA Boxing Men’s Elite Team Championship of the Americas</td>
</tr>
<tr>
<td>2015</td>
<td>Vice-Chair, Awards Committee, National Academy of Engineering</td>
</tr>
<tr>
<td>2015</td>
<td>Co-Chair, Burroughs Wellcome Fund CASI Research Grant Advisory Committee</td>
</tr>
<tr>
<td>2015</td>
<td>Member Awards Committee, American Institute of Chemical Engineers, Walker Award</td>
</tr>
<tr>
<td>2014</td>
<td>Member, Awards Committee, Materials Research Society</td>
</tr>
<tr>
<td>2014</td>
<td>Board of Directors, Biomedical Engineering Society</td>
</tr>
<tr>
<td>2014</td>
<td>Scientific Management Review Board, National Institutes of Health</td>
</tr>
<tr>
<td>2013-2014</td>
<td>American Association of Medical Colleges (AAMC) Herbert W. Nickens Award Committee</td>
</tr>
<tr>
<td>2013</td>
<td>Chair, Biomedical Engineering Chair Search Committee, University of Connecticut</td>
</tr>
<tr>
<td>2012</td>
<td>Reviewer for Ethical and Scientific Issues in Studying the Safety of Approved Drugs by Institute of Medicine</td>
</tr>
<tr>
<td>2012-2014</td>
<td>National Academy of Engineering Bioengineering Peer Review Committee</td>
</tr>
<tr>
<td>2010</td>
<td>Report Review Committee of the National Research Council (NRC), Controlling Cost Growth of NASA Earth and Space Science Missions</td>
</tr>
<tr>
<td>2008-2011</td>
<td>Vice Chair, Board of Directors University of Connecticut Health Center Finance Corporation</td>
</tr>
<tr>
<td>2008-2011</td>
<td>Secretary-Treasurer, Board of Directors, University of Connecticut Health Center, Munson Road Corporation</td>
</tr>
<tr>
<td>2008-2011</td>
<td>Senior Administrative Team (Cabinet) Member, The University of Connecticut</td>
</tr>
<tr>
<td>2008-2011</td>
<td>Member, Executive Compliance Committee, University of Connecticut</td>
</tr>
</tbody>
</table>
Connecticut Health Center
2008-2011 Chair, Senior Administrative Team, University of Connecticut Health Center
2008-2010 Member, Board of Directors, Osteotech Corporation (NASDAQ)
2008- Member, Board of Directors, Soft Tissue Regeneration
2008 Member, National Science Advisory Board Subcommittee on Office of Regulatory Affairs, U.S. Food and Drug Association
2008 University of Virginia Search Committee, Chair of OB-GYN Department
2007 Appointed to Medical Advisory Board, The LPGA
2007 Elected Chair of the Board, the W. Montague Cobb/NMA Health Institute
2007 Inducted in the Third World Academy of Sciences
2007 Appointed to University of Virginia President’s Leadership Group
2007 Engineering Health Care Symposium Steering Committee, Institute of Medicine
2007 University of Virginia Search Committee, Head, Division of Cardiology, Department of Medicine
2007 Member, National Science Foundation Engineering Advisory Committee (ADCOM)
2007 Committee on Programmatic Initiatives, The Commission on the Future of the University of Virginia
2007 University of Virginia Search Committee, Cardiology Division Head
2006 Clinical Advisory Board, Kuros Company
2006 Clinical Advisory Board, Osteotech Company
2006 Member, Working Group on the Evaluation of the FDA
2006 Member, Institute of Medicine Evidence Application Working Group
2006 University of Virginia Search Committee, Rheumatology Division Head
2006 University of Virginia Search Committee, Emergency Medicine Department Chair
2006 University of Virginia Search Committee, Regenerative Medicine Division Head
2005 O, (Oprah Magazine) Dream Team Guest Expert (Chicago, New York, Atlanta, We Matter Presentations)
2005 Faculty Advisory Board, Drexel University Law School
2005 Reverend Dr. Martin Luther King Day Speaker, The University of Virginia Health System
2005 Focus Group Member- Research, National Academies Committee
on Prospering in the Global Economy of the 21st Century

2005 Ad Hoc Reviewer United States, Israel Binational Science Foundation

2005 NSF Panel Member, Nanoscale Engineering Research Program

2005 Member, Coulter Foundation Early Career Translational Research Panel

2005 Steering Committee Member, Neurosciences Institute

2004 Scientific Advisory Board, Kuros AG

2004 Advisory Committee for the Alvin F. Poussaint, M.D. Visiting Lecture Fund

2004 National Academies KECK Futures Initiative Planning Committee

2004 Search Committee, University of Virginia Associate Dean for Clinical Research

2004 Member, Hugh Hampton Young Fellowship Committee, M.I.T.

2004 Neurosciences Project Steering Committee, University of Virginia

2004 Speaker of the House, National Medical Association


2003-2005 Executive Committee Member, Board of Trustees, National Medical Association

2003-2005 Chairman, Governance Committee, Board of Trustees, National Medical Association

2003 Orthopaedic Research and Education Foundation Career Development Award Review Committee

2003 National Science Board, U.S. Food and Drug Administration

2003 Dean for Clinical Research Search Committee, The University of Virginia School of Medicine

2003-2005 Space Management Committee, The University of Virginia School of Medicine

2003 Executive Committee, Department of Orthopaedic Surgery, The University of Virginia

2003 Search Committee, Department of Orthopaedic Surgery, The University of Virginia

2003 Research Committee, Department of Orthopaedic Surgery, The University of Virginia

2003 Executive Director, University of Virginia Athletic Health Services

2003 Clinical Staff Executive Committee, The University of Virginia Health System

2003 Operating Room Strategic Planning Committee, The University of Virginia Health System
2002 University Merger Transition Committee, Drexel University
2002 National Institutes of Health, National Advisory Council for Arthritis, Musculoskeletal and Skin Diseases
2002 Scientific Advisory Board, ETG (Engineered Tissue Growth) Symposium
2002-2004 External Advisory Board, Pittsburgh Tissue Engineering NIH Training Grant Program (T32)
2002 Member, Research Committee, Drexel University School of Medicine
2002 Drexel University School of Medicine Research Taskforce/Infrastructure Work Group
2002 Member, Financial Oversight Committee, National Medical Association
2002 Executive Committee Member, Region II, National Medical Association (Annual Meeting)
2002 Scientific Advisory Board Member, Gentis Company
2001 Lecturer in Pharmacology, Central High School
2001 Panel Member, Biotechnology and Life Sciences City of Philadelphia Technical Education Workforce Development Summit 2001
2001 Site Visit Team, National Science Foundation Engineering Research Center Program (Georgia Tech)
2001 Invited Participant, National Science Foundation/National Institutes of Health Workshop on Research Training Programs
2001 Advisory Board, Vanderbilt Engineering Research Center Consortium (VaNTH)
2001-2003 Tenure and Promotion Committee, Drexel University College of Engineering
2001-2003 Vice-Speaker of the House, National Medical Association
2001-2003 Member, Finance Committee, National Medical Association
2001-2003 Vice-Chair Research Development Committee, National Medical Association
2000-2003 Mediation and Grievance Panel Member, MCP-Hahnemann School of Medicine
2000-2003 Advisory Council on Councils, MCP-Hahnemann School of Medicine
2000 South Africa Site Inspection Committee, National Medical Association
2000-2003 Biomedical Technology Evaluating Committee, Ben Franklin Technology Partnerships (Eastern Pennsylvania)
2000 Gladden Orthopaedic Surgery Society, Chairman, Research
1999 Study Section Member, National Science Foundation SBIR Award Panel in Tissue Engineering, Biomaterials and Drug Delivery
1999-2001 Reviewer, Drexel Synergy Grant Program
1999-2002 Study Section Member (ad hoc), National Institutes of Health, Orthopaedics
1999-2001 Secretary, House of Delegates, National Medical Association
1999-2001 Medical Society of Eastern Pennsylvania, Director, Educational Programs
1999-2002 Board of Directors, Medical Society of Eastern Pennsylvania
1999 Member, Board of Trustees, National Medical Association
1999-2001 Member, Committee on International Affairs, Board of Trustees, National Medical Association
1999-2001 Member, Grants and Proposals Committee, Board of Trustees, National Medical Association
1999-2001 Member, Educational Affairs Committee, Board of Trustees, National Medical Association
1998 Capitol Hill Visiting Group Member, American Academy of Orthopaedic Surgery
1998-2003 Graduate Committee, Department of Chemical Engineering, Drexel University
1999 Nominations Committee Member, Society for Biomaterials
1997-1999 Contributing Editor, Biomaterials Forum Journal
1998 Advisory Committee Member, Vanderbilt University Biomedical Engineering Research Center
1998-2003 Member, Biological Implants Committee, American Academy of Orthopaedic Surgeons
1998 Member F-04 Committee, American Society for Testing of Materials
1998 Ringside Physician, New Jersey State Boxing Commission
1998-2002 Guest Teacher/Lecturer in Chemistry, Central High School
1997-1999 Chair, Medical Economics Committee, National Medical Association
1997-2000 Member, Orthopaedic Device Panel, Food and Drug Administration
1997 Member, Committee on Biomedical Engineering and Biomedical Implants, American Academy of Orthopaedic Surgery
1997 Ad-hoc Committee Member, Finance Committee, Society for Biomaterials
1997-1998 Council Member, Society for Biomaterials
1997 Chairman, Committee on Special Interests Groups, Society for
1997 **Biomaterials**

Chairman, Society for Biomaterials, Drug Delivery Special Interest Group

1996 **Vice-Chairman, Society for Biomaterials, Drug Delivery Special Interest Group**

1996 **U.S. Delegation to South Africa in Biomedical Engineering**

1997 **Member, Eisenhower Foundation**

1997 **Chairman, Committee on Medical Economics, National Medical Association**

1997 **Member, Committee on Talent Recruitment and Retention, National Medical Association**

1997-1998 **Member, Program Committee, Society for Biomaterials**

1997 **Member, Task Force on Tissue Engineering, Allegheny University of the Health Sciences**

1996 **Study Section Member, National Science Foundation Career Grant Award Panel in Bioengineering**

1996 **National Evaluation Panel Member (Study Section), Ford Foundation Pre-doctoral and Dissertation Fellowships, (Physical Science, Mathematics, and Engineering)**

1996 **Member, Admissions Committee, M.D.-Ph.D. Program, Allegheny University of the Health Sciences**

1996 **Member, Trauma Committee, Allegheny University of the Health Sciences**

1996 **Member, Task Force on Medical Admissions, Allegheny University of the Health Sciences**

1996 **Member, Task Force on Graduate Education, Allegheny University of the Health Sciences**

1995-1998 **Volunteer, Beeber Middle School Career Guidance**

1995-1998 **Physician Volunteer, Philadelphia Special Olympics**

1994-1996 **Member, Limbach Foundation Grants Committee, Allegheny University of the Health Sciences**

1994-1997 **Team Physician, Community College of Philadelphia**

1994-1997 **Physician, USA Boxing**

1994 **Boxing Physician, Pennsylvania State Athletic Commission**

1994-1996 **Study Section Member, N.I.H. S.B.I.R. Multidisciplinary**

1994-1997 **Member, Main Admissions Committee (Interviewer), Allegheny University of the Health Sciences**

1994-1998 **Member, Institute on Aging, Allegheny University of Health Sciences Special Emphasis Group**

1993 **Medical Staff, New York Mets Baseball Team**

1993 **Medical Staff, St. John’s University Football Team**
1993 Medical Staff, St. John’s University Basketball Team
1993-1997 National Evaluation Panel Member (Study Section) National Science Foundation, Bioengineering
1993-2004 Member, Advisory Board, Bristol-Myers Squibb, Commonwealth Fund Fellowship Program
1992 National Evaluation Panel Member (Study Section), National Science Foundation, Bioengineering, (SBIR Program)
1993-1997 Chairman, Committee on Medical Education, National Medical Association
1991-1993 Trustee, National Medical Association
1991-1993 Member, Grants and Proposals Committee, National Medical Association
1991-1993 Member, Centennial Committee, National Medical Association
1991-1993 Member, Membership Services Committee, National Medical Association
1991-1993 Member, Student and Auxiliary Liaison Committee, National Medical Association
1991-1992 Planning Committee Member, Ford Foundation Fellowship Program
1991-1995 Fellow, Francis Weld Peabody Society, Harvard Medical School
1991 “Scientist in Residence” Black Achievers in Science Series, Boston Museum of Science, Boston, MA
1991-1992 Medical Staff, Boston Marathon
1990 Chairman, Planning Committee (Resident), National Medical Association
1990- Senior Affiliate, Eliot House Senior Common Room, Harvard College
1999 Medical Staff, Manufacturers Hanover Road Race
1988-1992 Mentor, Minority Summer Science Program
1988-1992 Member, Admissions Committee Minority Summer Science Program
1982-1988 Member, Board of Pre-Medical Advisors, Harvard College
1985-1987 Member, Admissions Committee, Minority Introduction to Engineering and Science (M.I.T.E.S.) Program
1982-1987 Member, Black Graduate Students Association
1984-1993 Steering Committee Member, Co-Founder, Member Hinton-Wright Biomedical Science Society
1982-1993 Member, Senior Common Room, Eliot House, Harvard College
1982-1987 Chairman of the Pre-Medical Advisory Committee, Eliot House, Harvard College
1985-1987 Consulting Pre-Medical Advisor Harvard University Extension
School
1982-1987 Chairman, Committee on Financial Aid, The Third World Caucus, Harvard Medical School
1981-1985 Member, Harvard Medical School Admissions Committee
1981-1985 Assistant Director, Coordinator of Advising, Advisor
The Harvard Summer Health Professions Program Harvard University
1981-1982 Freshman Advisor and University Proctor Harvard College
(Harvard Yard)
1981 Proctor, Dunster House Harvard Summer School
1980 Editor-in-Chief, Nassau Herald (Yearbook), Princeton University
1979-1980 Editor-in-Chief, Princeton Student Course Guide
1978-1980 Executive Committee Member, University Council
1978-1980 Student Director, Princeton University Libraries
1978-1980 Resident Advisor, Princeton Inn College
1977-1979 Chairman, Academics Committee, National Society of Black Engineers

Scholarly Society Memberships and Offices Held:
- Alpha Sigma Mu, Connecticut Alpha Chapter
- American Association for the Advancement of Science
- American Academy of Orthopaedic Surgeons
- American College of Surgeons
- American College of Sports Medicine
- American Chemical Society (Polymer Chemistry Division and Polymer Science and Materials Engineering Division)
- American Institute for Medical and Biological Engineering
- American Institute of Chemical Engineers
- The American Orthopaedic Association
- The American Orthopaedic Society for Sports Medicine
- The American Society of Bone and Mineral Research
- The American Society of Engineering Educators
- The American Society for Testing Materials
- Association of Bone and Joint Surgeons
- The Biophysical Society
- The Controlled Release Society
- Hartford St. Lucian Lions
- The International Cord Blood Society
- Knights of Columbus
- The Materials Research Society
- Medical Society of Eastern Pennsylvania
- The National Medical Association
- The Old Dominion Medical Society
- The Philadelphia Orthopaedic Society
- The Philadelphia College of Physicians
- The Philadelphia Orthopaedic Sports Medicine Society
- The Orthopaedic Research Society
- Sigma Pi Phi Fraternity
- The Society for Biomaterials
- The Union League of Philadelphia
- USA Boxing
- USA Wrestling

**Editorial Review Board Activities:**
- Regenerative Engineering and Translational Medicine (Editor-in-Chief)
- Journal of Racial and Ethnic Health Disparities (Editor-in-Chief)
- Annals of Biomedical Engineering (Associate Editor)
- Clinical Orthopaedics and Related Research (Advisory Board Editor)
- Regenerative Biomaterials (Associate Editor for North America)
- Applied Biomaterials (Board of Editors)
- Asian Chitin Journal (Board of Editors)
- Biologics: Targets & Therapy (Board of Editors)
- Bioceramics Development and Applications (Board of Editors)
- Bioengineering and Translational Medicine (Board of Editors)
- Biomaterials (Board of Editors)
- Current Biomedical Engineering (Board of Editors)
- Emedicine Orthopaedics Journal (Board of Editors, shoulder)
- Engineering (Board of Editors)
- Expert Review of Medical Devices (Board of Editors)
- International Journal of Nanomedicine (Board of Editors)
- International Journal of Metallurgical and Materials Engineering (Board of Editors)
- Journal of ASTM International (Board of Editors)
- Journal of Biomedical Materials Research (Board of Editors)
- JBMR Part B: Applied Biomaterials (Board of Editors)
- Journal of Biomaterials Science, Polymer Edition
- Journal of Biomedical Nanotechnology (Board of Editors)
- Journal of Biopharmaceutics and Biotechnology (Board of Editors)
- Materials Science and Engineering C: Materials for Biological Applications (Board of Editors)
Recent Patents in Biomedical Engineering (Board of Editors)
Regenerative Medicine (Board of Editors)
Surgery Research and Practice (Board of Editors)
Technology (Board of Editors)
Acta Biomaterialia (Reviewer)
Advanced Materials (Reviewer)
Advanced Functional Materials (Reviewer)
American Journal of Physiology-Cell Physiology (Reviewer)
American Journal of Sports Medicine (Reviewer)
Annals of Biomedical Engineering (Reviewer)
Annals of Internal Medicine (Reviewer)
Annals of Pharmacotherapy (Reviewer)
Applied Biomaterials (Reviewer)
Bioelectromagnetics (Reviewer)
Bioinorganic Chemistry (Reviewer)
Bioinspiration and Biomimetics (Reviewer)
Biomacromolecules (Reviewer)
Biomedical Materials (Reviewer)
Biotechnology and Bioengineering (Reviewer)
Biotechnology Progress (Reviewer)
Bone (Reviewer)
Cell Proliferation (Reviewer)
Chemistry of Materials (Reviewer)
Colloids and Surfaces A (Reviewer)
eLife (Reviewing Editor)
Engineering, Chinese Academy of Engineering (CAE)
European Journal of Histochemistry (Reviewer)
European Physical Journal, Applied Physics (Reviewer)
European Polymer Journal (Reviewer)
European Journal of Polymer Science (Reviewer)
F.E.B.S. Letters (Reviewer)
Frontiers of Chemical Science and Engineering (China) (Associate Editor-in-Chief)
Gene Therapy (Reviewer)
IEEE Engineering in Medicine and Biology Magazine (Reviewer)
International Journal of Therapeutics (Reviewer)
In Vitro (Reviewer)
Indian Journal of Medical Sciences (Reviewer)
Journal of the American Ceramic Society (Reviewer)
Journal of Biomaterials Applications (Reviewer)
Journal of Biomechanical Engineering (Reviewer)
• Journal of Biomedicine and Biotechnology (Reviewer)
• Journal of Biomaterials Science: Polymer Edition (Reviewer)
• Journal of Bone and Joint Surgery (Reviewer)
• Journal of Bone and Mineral Research (Reviewer)
• Journal of Dental Research (Reviewer)
• Journal of the National Medical Association (Reviewer)
• Journal of Microscopy (Reviewer)
• Journal of Orthopaedic Research (Reviewer)
• Journal of Pharmacy and Pharmacology (Reviewer)
• Journal of Trauma (Reviewer)
• Langmuir (Reviewer)
• Materials Research Bulletin (Reviewer)
• Macromolecular Rapid Communications (Reviewer)
• Macromolecules (Reviewer)
• Nature Materials (Reviewer)
• Nanomedicine (Reviewer)
• Pharmaceutical Research (Reviewer)
• Pharmaceutical Science and Technology (Reviewer)
• Polymer International (Reviewer)
• Proceedings of the National Academy of Sciences (U.S.A.) (Reviewer)
• Process Biochemistry (Reviewer)
• Stem Cells (Reviewer)
• Trends in Biotechnology (Reviewer)

Companies Founded (Scientific Founder):
• Healing Orthopaedic Technologies
• Soft Tissue Regeneration
• Healing Orthopaedic Technologies Bone
• Natural Polymer Devices
• Regenerative Engineering, Inc.

Public Company Board Membership:
• Osteotech Company (2008-2010)

Research Grants Support: Principal Investigator:
Polymeric Materials for Controlled Drug Delivery
National Institutes of Health, B.R.S.G. Grant S07RR070470513 1987-1990
Controlled Release of Bone Morphogenetic Substances 1989-1990
The Ford Foundation

Controlled Release of Macromolecules 1989-1992
(Co-Principal Investigator)
National Institutes of Health, GM26698

Effects of Gamma Radiation on Biomedical Polymers 1990-1992
National Institutes of Health, DE09441

Development of Bioerodible Polymer Matrices for Osteoblast Growth and Maturation 1990-1994
National Science Foundation, BCS9011170

(Co-Principal Investigator)
National Institutes of Health, AR41972

Bioerodible Polymer Matrices for Osteoblast Growth 1993-1997
National Science Foundation, BCS9311375/BES9496336

In Vivo Biocompatibility of Polymers (Equipment Grant) 1995-1996
Synthes Incorporated

Tissue Engineered Constructs for Cartilage and Bone 1995-2001
National Science Foundation, BES9553162/BES9817872

Novel Bioerodible Polymers for Orthopaedic Use 1997-1998
Osteonics Corporation

A Novel Treatment for Rheumatoid Arthritis Using Taxol 1997-1999
The Arthritis Foundation

Radiosensitizer Therapy Treatment for Ewing’s Sarcoma 1997-1999
(Co-Principal Investigator)
Allegheny-Singer Research Institute

Age-Related Effects on Osteoblast Function 1997-1998
National Institutes of Health, AG00532 (under Core Grant)

Age-Related Changes Non-Union Healing Using Polymers 1997
Nathan Shock Center of Excellence

**Bioerodible Matrices for Tissue Regeneration**
National Science Foundation, BES9896282 1997-2002

**Research and Curriculum in Tissue Engineering**
National Science Foundation, EEC-9980298 1999-2002

**Tissue Engineered Systems for Anterior Cruciate Ligament Regeneration**
National Institutes of Health, AR46117 1998-2000

**Center for Advanced Biomaterials and Tissue Engineering**
Ben Franklin Technology Center 1999-2002

**Arthritis Outstanding Research Scholarship**
Arthritis Foundation (Eastern Pennsylvania Chapter) 2000-2001

**Gamma and Electron Beam Radiation Effects on Degradable Polymers**
Drexel University/MCP-Hahnemann University Synergy Award 2000-2002

**Acquisition of a complete whole arm manipulator (WAM) Robot System (Co-P.I. with J. Desai)**
National Science Foundation, EIA0079830 2000-2002

**Taxol Based Delivery Systems for the Treatment of Prostate Cancer (Co-P.I. with M. Attawia)**
Drexel University/MCP-Hahnemann University Synergy Award 2000-2002

**Novel Degradable Polymers for Tissue Engineering**
National Institutes of Health, RO-1 AR46560 2001-2006

**Biocompatibility of Nanoparticles for Biomedical Applications**
Drexel University/MCP-Hahnemann University Synergy Award 2001-2002

**Gene Therapy for Bone Regeneration: The Delivery of BMP-2 Producing Cells Using a 3-Dimensional, Biodegradable Matrix**
Department of Defense 2001-2003

**A Proposal for Minority Student Support**
(Co-P.I. with M. Choi) 2001-2006
GEM Foundation

Nanobased fibers for Wound Healing  2001-2003
Department of Defense
National Medical Test, Bed 2000-106500

Polymer Chitosan Matrices for Tissue Engineering  2001-2004
National Science Foundation, INT0115595

Taxol Based Delivery Systems for Cancer Treatment  2001-2004
U.S.-Egypt USDA Grant Program, BIO5-003-004

Bioreactor Based Bone Tissue Regeneration  2001-2005
National Science Foundation BES0115404

Acquisition of an Environmental Scanning Electron Microscope  2002-2004
(Co-P.I. with T. Lowman)
National Science Foundation, BES 0216343

Training in Nanoengineering and Nanoscale Science (IGERT)  2002-2007
(Co-P.I. with Y. Gogotsi)
National Science Foundation

Bioerodible Polymers for Bone Tissue Engineering  2002-2006
National Science Foundation, BES0201923

Adipose Based Tissue Engineering  2003-2006
National Institutes of Health, R21 AR050704

Bioerodible Matrices for Bone Tissue Engineering  2003-2006
National Science Foundation, BES0336736

NASA NRA-01-OBPR-08-B

Nanobased fibers for Wound Healing  2004-2006
Department of Defense (US Army)

Musculoskeletal Tissue Repair and Regeneration  2005-2010
National Institutes of Health, T32 AR050960
Optimization of Bioreactor Based Tissue Engineering of Bone 2005-2008
National Science Foundation, BES0503207

Vascularized Bone Grafts for Tissue Engineering 2006-2010
(P.I. Mentor to Botchwey)
National Institute of Health, K01AR052352

Novel Biodegradable Polymers for Bone Tissue Engineering 2005-2010
National Institutes of Health, RO-1 EB004051

Polymer-Ceramic Composites for Tissue Engineering 2005-2010
National Institutes of Health, RO-1 AR052536

Development of a Novel Injectable Controlled Analgesic 2007-2012

Delivery System for Effective Pain Management 2007-2012
Department of Defense (U.S. Army), PR064604

Universal Smart Coatings for Prosthetics 2007-2009
National Academy-Keck Futures Initiative, NAKFI SP14

Department of Defense (U.S. Army), PR06104002

Novel Structured Nanofibrous Scaffolds for Bone Healing 2007-2009
(Co-P.I.) with X. Yu
Coulter Foundation Grant

Biological, Chemical and Mechanical Surface Cues for Cell Migration, Proliferation and Differentiation: An Integrated Approach to Regeneration of Tissues 2007-2011
National Science Foundation, EFRI -0710321

Mechanically and Biologically Compatible Novel Biodegradable Polymer-Carbon Nanotube Scaffolds for Bone Tissue Engineering 2009-2012
(Co-P.I.) with S. Nukavarapu
UCIG Grant Program

Novel Structured Nanofibrous Scaffolds for Bone Healing 2009-2012
Phase 2 (Co-P.I.) with X. Yu
Coulter Foundation Grant

Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring 2009-2012
National Science Foundation, 083431

Polymer-Ceramic Composites for Tissue Engineering 2008-2014
National Institutes of Health, RO-1 AR52536

Novel Composite Nanostructured Scaffolds for cartilage regeneration 2009-2011
(Co-P.I.) with J. Freeman
Coulter Foundation Grant

Development of A Degradable Interference Screws 2010-2012
(Co-P.I.) with Kumbar
Prototype UCONN-Foundation

Estrogen Receptor Beta Regulation of Mandibular Condylar Growth 2010-2014
(Co-P.I.) with S. Wadhwa
National Institutes of Health R01, DE020097

(Co-P.I.) with D. Rowe
Department of Defense, W81XWH-11-1-0262

Engineered regeneration of bone through a small molecule cyclic adenosine monophosphate 2011-2016
National Institutes of Health, R21 AR060480

Enhanced Osteoinduction and Angioinduction via Polymer/CaO2 2012-2016
Bone Tissue Engineering
National Institutes of Health, R21 AR062711

Enhanced Osteoinduction and Angioinduction via Polymer/CaO2 2013-2016
Bone Tissue Engineering Scaffolds
National Institutes of Health, R21 AR062771-02S1

Functionalized Allograft for Large Scale Bone Defect Healing 2014-2019
Co-PI with Y. Khan
Armed Forces Institute for Regenerative Medicine

**Design and Evaluation of a matrix system with rapid and efficient Cell Loading characteristics for segmental bone defect repair**
Co-PI with S. Nukavarapu
AO Foundation

2012-2016

**NSF-EFRI Supplement, Research Experience and Mentoring (REM)**
National Science Foundation

2013-2020

UCONN Innovation Initiative
State of Connecticut Legislature

2013-2018

**Tissue Engineered Nanofibrous Nerve Grafts for Enhancing the rate of nerve regeneration**
Co-PI with X. Yu
DOD-OR129140

2013-2016

**AIR-Option II: research Alliance Polymer, Polymer-ceramic and Natural polymer systems for soft tissue and bone repair and regeneration**
Co-PI with Dr. Kumbar SG
National Science Foundation, IIP-1311907

2013-2016

**Electrically Mediated Complex Tissue Regeneration**
National Science Foundation, EFRI-1332329

2013-2020

**A translational Approach to Ligament Tissue regeneration**
National Institutes of Health, R01 AR063698

2013-2020

**Novel injectable analgesic delivery system for chronic musculoskeletal pain management**
Co-PI with Drs. Nair and Lo
National Institutes of Health, R21 AR066320

2014-2018

**Regeneration of Shoulder Musculoskeletal Tissues**
Novartis Corporation

2014-2018

**Building Infrastructure Leading to Diversity Phase II**
NIH BUILD Award, 1U54MD009476

2019-2024

**University of Connecticut Innovation Institute for Translation**

2015-2020
State of Connecticut

Rapid and Effective Revitalization of Bone Allografts at the Point of Care 2015-2016
Musculoskeletal Transplant Foundation (MTF)

Regenerative Engineering of Complex musculoskeletal tissues and joints 2014-2020
NIH Pioneer Award, DP1AR068147

Hartford Engineering a Limb Project 2016-2022
Bioscience Trust Fund, State of Connecticut

Academic Plan Grant 2016-2019
Co-PI with Dr. Thanh DN

Bionic Self stimulated cartilage 2017-2020
Co-PI with Dr. Thanh DN
NIH-R21

Rock Star Conference 2013-2020
National Science Foundation

Advanced Regenerative Manufacturing Institute 2018-2025
Department of Defense

Mimetogenesis 1 2017-2020
State of Connecticut Bioscience Fund

Mimetogenesis 2 2017-2020
State of Connecticut Bioscience Fund

Soft-Actuated Bionic Regenerative Engineering 2018-2020
NSF EAGER Grant, 1844660

A novel injectable piezoelectric hydrogel for osteoarthritis treatment 2019-2021
Co-PI with Dr. Thanh DN
NIH-R21

The Connecticut Community Health Science Initiative 2018-2020
Aetna Foundation, 18-8782

The National Roundtable on Black Men and Black Women in Medicine, 2019-2020
### Mentored Research Grants Recipients:

<table>
<thead>
<tr>
<th>Grant</th>
<th>Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.I.H. Minority Research Training Award</td>
<td>Paulos Mengsteab</td>
<td>2014</td>
</tr>
<tr>
<td>N.I.H. Minority Research Training Award</td>
<td>Daisey Ramos</td>
<td>2013</td>
</tr>
<tr>
<td>N.I.H. Research Training Award</td>
<td>Ami Amini</td>
<td>2011</td>
</tr>
<tr>
<td>N.I.H. Research Training Award</td>
<td>Joseph Freeman</td>
<td>2003</td>
</tr>
<tr>
<td>N.I.H. Research Training Award</td>
<td>Duron Lee</td>
<td>2002</td>
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<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Addisu Mesfin</td>
<td>2003</td>
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<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Saddiq El-Amin</td>
<td>2002</td>
</tr>
<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Paul Gittens</td>
<td>2001</td>
</tr>
<tr>
<td>NSF Research Fellow (College)</td>
<td>Alice Gitau</td>
<td>2001</td>
</tr>
<tr>
<td>NSF Research Fellow (College)</td>
<td>Sharron King</td>
<td>2001</td>
</tr>
<tr>
<td>NSF Research Fellow (High School)</td>
<td>Justin Mitchell</td>
<td>2001</td>
</tr>
<tr>
<td>NSF Research Fellow (High School)</td>
<td>Jasmine Benwar</td>
<td>2001</td>
</tr>
<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Duron Lee</td>
<td>2001</td>
</tr>
<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Brian Monroe</td>
<td>2000</td>
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<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Natalee Campbell</td>
<td>2000</td>
</tr>
<tr>
<td>National Institutes of Health Research Service Award</td>
<td>Saadiq El-Amin</td>
<td>1999</td>
</tr>
<tr>
<td>National Institutes of Health Research Service Award</td>
<td>James Cooper</td>
<td>1999</td>
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<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Christopher Taylor</td>
<td>1999</td>
</tr>
<tr>
<td>National Institutes of Health Research Service Award</td>
<td>Christopher Taylor</td>
<td>1998</td>
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<tr>
<td>Association for Minority Physicians</td>
<td>Brian Monroe</td>
<td>1998</td>
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<tr>
<td>University of Rochester, School of Medicine</td>
<td>Fenton Hubert</td>
<td>1998</td>
</tr>
<tr>
<td>Summer Research Grant</td>
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<tr>
<td>Allegheny Minority Summer Research Program</td>
<td>Ashley Barber</td>
<td>1998</td>
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<tr>
<td>Medical Society of Eastern Pennsylvania/ Astra Merck Award</td>
<td>Nykia Walker</td>
<td>1998</td>
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<tr>
<td>Allegheny Minority Summer Research Program</td>
<td>Emily Nichols</td>
<td>1997</td>
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<tr>
<td>Glenn/AFAR Award for Research in the Biology of Aging</td>
<td>Mark Borden</td>
<td>1997</td>
</tr>
<tr>
<td>Alpha Omega Alpha Medical Student Research Award</td>
<td>Kelly Herbert</td>
<td>1997</td>
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<tr>
<td>Alpha Omega Alpha Medical Student Research Award</td>
<td>James Nicholson</td>
<td>1997</td>
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<tr>
<td>Medical Society of Eastern Pennsylvania/Astra Merck Award</td>
<td>Aaron Henderson</td>
<td>1997</td>
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<tr>
<td>Medical Society of Eastern Pennsylvania/Astra Merck Award</td>
<td>Reginald Trammel</td>
<td>1997</td>
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<tr>
<td>Allegheny Minority Summer Research Program</td>
<td>Cheryl Coates</td>
<td>1997</td>
</tr>
<tr>
<td>National Institutes of Health Research Service Award</td>
<td>James Cooper</td>
<td>1997</td>
</tr>
<tr>
<td>Bristol Myers Squibb Research Award</td>
<td>Jay Gorum</td>
<td>1996</td>
</tr>
<tr>
<td>Pfeiffer Foundation Award</td>
<td>Patrick Sennatus</td>
<td>1992</td>
</tr>
<tr>
<td>M.I.T. Minority Summer Scientist Research Award</td>
<td>Edward Botchwey</td>
<td>1992</td>
</tr>
</tbody>
</table>
Bristol Myers Squibb Research Award  
Ruby Skinner  
1992
Pfeiffer Foundation Award  
Raymon Keaton  
1991
Pfeiffer Foundation Award  
Henri Pierre-Jacques  
1990

**Cato T. Laurencin Lifetime Research Achievement Award Recipients:**
Jane Cooke Wright, MD
Griffin Rodgers, MD  
2019

**Ph.D. Thesis Mentored:**
- Mark Borden (1999) Biomedical Engineering,
- Edward Botchwey (2002) Biomedical Engineering,
- Saadiq El-Amin (2002) Cell and Molecular Biology
- James Cooper (2002) Biomedical Engineering
- Swaminathan Sethuranum (2005) Chemical Engineering
- Yusuf Khan (2005) Biomedical Engineering
- Melissa Dupree (2006) Biomedical Engineering
- Subhabrata Bhattacharyya (2006) Chemistry
- Michelle Kofron (2007) Biomedical Engineering
- Eshan Jabbarzesh (2007) Chemical Engineering
- Tao Jiang (2008) Chemical Engineering
- Emily Cushnie (2008) Chemical Engineering
- Justin Brown (2009) Biomedical Engineering
- Qing Li (2010) Chemical Engineering
- Meng Deng (2011) Chemical Engineering
- Roshan James (2012) Biomedical Engineering
- Ami Amini (2014) Biomedical Sciences
- Clarke Nelson (2014) Biomedical Sciences
- Daisey Ramos (2018) Biomedical Sciences
- Paulos Mengsteab (2019)

**Master’s Students Mentored:**
- Carol Morris (1988) Applied Biological Sciences
- Mark Borden (1996) Biomedical Engineering
- Michael Baine (1997) Medical Science
- Joel Horning (2003) Chemical Engineering
- Sam Mohan (2005) Chemical Engineering
- Anthony Wirtel (2007) Biomedical Engineering
- Annamalai Muthiah (2008) Chemical Engineering
- Shaun McLaughlin (2013) Biomedical Sciences
- Keshia Ashe (2015) Chemical Engineering
• Aundrya Montgomery (2019)

**Current Postdoctoral Fellows/Graduate Students:**
• Maumita Bhattacharjee
• Samrin Habbani
• Takayoshi Otsuka
• Kenyatta Washington
• Lei Zhang
• Shiv Shah
• Amir Seyedsalehi
• Nikoo Shemshaki
• Anupama Prabhathachandran
• Guleid Awale
• Paige Holden
• Godwin Dzidotor
• Mohammed Barajaa
• Leila Daneshmandi
• Kenneth Ogueri
• Luis Loza Rojas

**Laurencin Fellows:**
• 2016 – Roberto De Loera, University of Chicago
• 2016 – Dwight Meggie, University of Connecticut
• 2016 – Julian Rose, University of Connecticut
• 2017 – Jeremy Nortey, North Carolina State University
• 2017 – Nicole Friend, University of California San Diego
• 2017 – Taiwo Divinefavor Osinloye, University of Illinois at Chicago
• 2018 – Mary Omotoso, North Carolina A&T State University
• 2018 – Timothy Mason, University of Connecticut
• 2019 – Sydney Wimberley, University of Connecticut
• 2019 – Kai Clarke, Florida Institute of Technology

**Undergraduate M.I.T Theses Mentored:**
• Michael Kwon
• Tommy Thomas
• Jessica Devin

**Residents Trained as Chairman, The University of Virginia:**

<table>
<thead>
<tr>
<th>Trainee</th>
<th>Student, Fellow, Training Period</th>
<th>Present Resident</th>
</tr>
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<tbody>
<tr>
<td>Name</td>
<td>Position</td>
<td>Years</td>
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<tr>
<td>--------------------</td>
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<tr>
<td>Adrian Baddar</td>
<td>Resident</td>
<td>1999-2003</td>
</tr>
<tr>
<td>Sonny Gill</td>
<td>Resident</td>
<td>1999-2003</td>
</tr>
<tr>
<td>Brett Hampton</td>
<td>Resident</td>
<td>1999-2003</td>
</tr>
<tr>
<td>Todd Milbrandt</td>
<td>Resident</td>
<td>1999-2003</td>
</tr>
<tr>
<td>Eric Neff</td>
<td>Resident</td>
<td>1999-2003</td>
</tr>
<tr>
<td>Anikar Chhabra</td>
<td>Resident</td>
<td>1999-2004</td>
</tr>
<tr>
<td>Adam Crowl</td>
<td>Resident</td>
<td>1999-2004</td>
</tr>
<tr>
<td>Michael Handy</td>
<td>Resident</td>
<td>1999-2004</td>
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<tr>
<td>Cay Mierisch</td>
<td>Resident</td>
<td>1999-2004</td>
</tr>
<tr>
<td>Hans Olsen</td>
<td>Resident</td>
<td>1999-2004</td>
</tr>
<tr>
<td>Todd Battaglia</td>
<td>Resident</td>
<td>2000-2005</td>
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<tr>
<td>Steve Cohen</td>
<td>Resident</td>
<td>2000-2005</td>
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<tr>
<td>Quanjun Cui</td>
<td>Resident</td>
<td>2000-2005</td>
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<td>Kornelis Poelstra</td>
<td>Resident</td>
<td>2000-2005</td>
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<tr>
<td>John Thaller</td>
<td>Resident</td>
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<tr>
<td>Geoffrey Baer</td>
<td>Resident</td>
<td>2001-2006</td>
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<td>John Goff</td>
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<td>2001-2006</td>
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<td>Eric Franke</td>
<td>Resident</td>
<td>2001-2006</td>
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<tr>
<td>Ole Raustol</td>
<td>Resident</td>
<td>2001-2006</td>
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<tr>
<td>Richard Thomas</td>
<td>Resident</td>
<td>2001-2006</td>
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<tr>
<td>Matthew Craig</td>
<td>Resident</td>
<td>2002-2007</td>
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<tr>
<td>Eric Dorf</td>
<td>Resident</td>
<td>2002-2007</td>
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<tr>
<td>Barton Harris</td>
<td>Resident</td>
<td>2002-2007</td>
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<tr>
<td>Brian Leo</td>
<td>Resident</td>
<td>2002-2007</td>
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<tr>
<td>Scott Wein</td>
<td>Resident</td>
<td>2002-2007</td>
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<tr>
<td>Name</td>
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<tr>
<td>Lance Brunton</td>
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<td>2003-2008</td>
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<tr>
<td>Jason Oliviero</td>
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<td>Doug Orndorff</td>
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<td>Rob Schoderbek</td>
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<td>Chris Sherrell</td>
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<td>Saadiq El-Amin</td>
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<td>Aaron Freilich</td>
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<td>Ray Golish</td>
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<td>Mike Kwon</td>
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<td>Jasmin McGinty</td>
<td>Matched</td>
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<td>Luke Choi</td>
<td>Matched</td>
<td>2005-2010</td>
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<td>Scott Eisenhuth</td>
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<td>Richard Rainey</td>
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<td>Trevor Starnes</td>
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<td>Yaw Boachie-Adjei</td>
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<td>Sean Jones-Quaidoo</td>
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<td>Richard Ma</td>
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<td>Chealon Miller</td>
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<td>Melissa Willenborg</td>
<td>Matched</td>
<td>2006-2011</td>
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<td>Laura Gill</td>
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<td>MaCalus Hogan</td>
<td>Matched</td>
<td>2007-2012</td>
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<tr>
<td>Winston Gwathmey</td>
<td>Matched</td>
<td>2007-2012</td>
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<tr>
<td>Erica Taylor</td>
<td>Matched</td>
<td>2007-2012</td>
</tr>
</tbody>
</table>

**Publications:**


34. Laurencin, C.T., Lane, J. (1994). Poly(lactic acid) and poly(glycolic


debridement of late, acute total hip arthroplasty infections average 6 year follow-up. *J. Arthroplasty* 14, 903-910.


139. Lu, H.H., Cooper, J.A., Manuel, S., Freeman, J.W., Attawia, M., Ko, F.K.,


266. Jiang, T., Nukavarapu, S.P., Deng, M., Jabbarzadeh, E., Kofron, M.D.,


76


335. Lo K.W.H., Kan, H. M., **Laurencin, C.T.** (2013). Short Term Administration of Small Molecule Phenamil Induced a Protracted


344. Roshan James, Meng Deng, Sangamesh G. Kumbar, Cato T. Laurencin.
(2014). Bioinspired materials for bone regenerative engineering. *Handbook of Biomimetics and Bioinspiration*


353. Roshan James, Meng Deng, Sangamesh G. Kumbar, **Cato T. Laurencin.** (2014). Bioinspired materials for bone regenerative engineering. *Handbook of Biomimetics and Bioinspiration*


82


384. Ogueri, K.S., Escobar Ivirico, J. L., Nair, L. S., Allcock, H. R., Laurencin,


Francis Group, 125-140.


**Journals:**


Publications (non-scientific):

Books:


**Presented Papers:**


studies of osteoblasts and 3-dimensional degradable polymer composites. 
*Proc. Soc. for Biomat.*


applications. *Ortho Trans.*


101. Laurencin CT; Borden MD; Attawia MA; Khan MY. (2001). Osteoinduction Via a Biofunctional Biomimetic Construct for Bone Tissue Engineering. *Institute for Electrical and Electronic Engineers*


106. Botchwey E; Pollack S; El-Amin S; Levine E; Tuan R; Laurencin C. Integrin Expression by Human Osteoblast-Like Cells Cultured on 3-Dimensional Polymeric Scaffolds in a Rotating Bioreactor. ASME Summer Bioengineering Conference, Snowbird, UT, June 2001.


109. Laurencin CT; Borden MD; Attawia MA; El-Amin SF; Khan Y. In-Vitro Analysis of a Tissue Engineered Scaffold for Bone Repair. American Institute for Chemical Engineers, Reno, NV, November 2001.

110. Khan Y; Ambrosio A; Lee D; Laurencin C. A Novel Polymer/Ceramic Scaffold for Bone Tissue Engineering: Biocompatibility and Optimization Studies. Society for Biomaterials, Tampa, FL, April 2002.

112. Laurencin CT; Borden MD; Attawia MA; El-Amin SF; Khan Y. (2001). In-Vitro Analysis of a Tissue Engineered Scaffold for Bone Repair. American Institute for Chemical Engineers Proc.


For Biomat.


180. Lv Q, Laurencin, CT. (2007). Human mesenchymal stem cell proliferation, differentiation, and mineralization on 3-dimensional nano hydroxyapatite-polymeric composite scaffolds for tissue regeneration. *Proceedings of the Society for Biomaterials*


192. Qing Lv, Lakshmi Nair, Cato Laurencin. Human Mesenchymal StemCell Proliferation, Differentiation, and Mineralization on 3-dimensional Nano Hydroxyapatite-Polymeric Composite Scaffolds for Tissue Regeneration. 32nd Annual Meeting of the Society For Biomaterials, Chicago, Illinois,
2007.


198. Qing Lv, Lakshmi Nair, Cato Laurencin. The Response of Human and Rabbit Bone Marrow Derived Mesenchymal Stem Cells to Dynamic Culture Environment in Bioreactors. 8th World Biomaterial Conference, Amsterdam, Neatherland, 2008.


2008.


218. Wallace, J., Mikael, P., Laurencin, C.T., Nukavarapu, S.P. Biodegradable Polymer-Magnesium Composite scaffolds for Bone Tissue Engineering: Effect of Magnesium on Osteoblast Proliferation, Maturation and


253. Laurencin CT, Walsh WR, Bertollo N, Poggie R, Reilly J, Aronson M.
Nair LS. An engineering solution to anterior cruciate ligament regeneration using a biodegradable and biomimetic matrix. 65th Annual Meeting of the Association of Bone and Joint Surgeons, Istanbul, Turkey, April 2013.


255. James, Roshan; Hogan, MaCalus; Keller, Thomas C; Balian, Gary; Laurencin, Cato T; Chhabra, A (Bobby). Combined treatment of a tendon gap with a biomimetic electrospun scaffold, stromal cells and GDF5. Society for Biomaterials, 2013.


261. Cato T. Laurencin, M.D., Ph.D., Roshan James, Ph.D. Composites and


268. Roshan James, Ph.D., Cato T. Laurencin, M.D, Ph.D. Regenerative Engineering and Nanotechnology. ICONSAT, 2014.


272. Xiaohua Yu, Paulos Y. Mengsteab, Lakshmi S. Nair, Cato T. Laurencin. Surface Modification of Poly (L-lactide) to Enhance Mesenchymal Stem Cell Performance on a Biomimetic Ligament Matrix for ACL regeneration,


290. Ifegwu OC, Awale G, Kan HM, Rajpura K, Lo KWH, Laurencin CT.


**Other Presentations (Keynote, Invited, Plenary):**


16. Laurencin, C. “Degradable Polymers for Controlled Release.” Seminar Lecture, University of Kentucky, Department of Pharmaceutics and Department of Chemical Engineering. Lexington, Kentucky (1993)


27. Laurencin, C. “Studies on the development of three dimensional systems for tissue engineering.” Medical College of Pennsylvania/Hahnemann University, Department of Surgery, Grand Rounds (1995)


35. Laurencin, C. “Shoulder Instability and Rotator Cuff Injuries.” Primary Care in Orthopaedic Surgery/Allegheny University of the Health Sciences (1996)


40. Laurencin, C. “Shoulder Instability: Treatment and Outcomes.” Lecture to
Department of Orthopaedic Surgery, The Medical University of South Africa. Pretoria, South Africa (1996)


51. Laurencin C. “Arthroscopic Management of Instability.” Invited Panel Discussant, The Orthopaedic Learning Center, American Academy of
Orthopaedic Surgeons. Rosemont, IL (1996)


62. Laurencin, C. “Polymer based systems for tissue engineering.” Lecture to
the Department of Chemical Engineering, The City College of New York. New York, NY (1997)


73. Laurencin, C. “A Pre-clinical Evaluation of the Norian SRS Material for
Use as a Bone Cement.” Presentation to FDA Orthopaedic Device Panel (Oct. 1998)


82. Laurencin, C. “Infection after Anterior Cruciate Ligament Surgery.” Lecture to Saint Gardiner Hospital, Perth, Australia (May 1999)


84. Laurencin, C. “Tissue Engineering of Bone: In Vitro Development.” Lecture to Western Hospital, Melbourne, Australia (May 1999)
85. Laurencin, C. “Anterior Shoulder Instability: A Systematic Approach.” Lecture to Christchurch School of Medicine, Christchurch, New Zealand (May 1999)


96. Laurencin, C. “Challenges and Opportunities in Musculoskeletal Tissue Engineering.” Public Forum on Tissue Engineering: Hong Kong Polytechnic University (April 2000)


100. Laurencin, C. “Shoulder Instability: A paradigm for Diagnosis and Treatment.” Lecture to Chestnut Hill Hospital: Family Practice Clinical Group (March 2000)


Materials Engineering. Cairo, Egypt (September 2000)


107. Laurencin, C. “Polymer Based Delivery Systems for the Treatment of Ewing’s Sarcoma: Systems based on Taxol Release.” Lecture to the National Cancer Institute of Egypt. Cairo, Egypt (September 2000)


109. Laurencin, C. “Tissue Engineering of Bone: Matrix Principles.” Lecture to the University of Iowa, Department of Chemical Engineering (January 2001)

110. Laurencin, C. “Tissue Engineering of Bone: Cell-Polymer Composite Development.” Lecture to the University of Pittsburgh, Department of Chemical Engineering (January 2001)

111. Laurencin, C. “Tissue Engineering of Musculoskeletal Tissues: New Directions.” Lecture to the Musculoskeletal Signature Program Group, University of Connecticut Medical Center (Feb 2001)


115. Laurencin, C. “Tissue Engineering of Bone: Matrix Methods.” Grand Rounds Lecture, Department of Orthopaedic Surgery, University of
Adelaide. Adelaide, Australia (April 2001)


129. Laurencin, C. “Horizons in Tissue Engineering of Bone.” Lecture to University of Texas, Department of Biomedical Engineering (October 2002)

130. Laurencin, C. “Tissue Engineering Curricular Advancement.” Invited speech, American Institute of Chemical Engineers (November 2002)


137. Laurencin, C. “Musculoskeletal Tissue Engineering, New Paradigms for
Regeneration.” Lecture to Marquette University (Visiting Professor) (February 2006)


140. Laurencin, C. “Biomedical Engineering Education: Next Generation Approaches” Lecture (Plenary Speech), Whitaker Foundation Summit, 2005


164. Laurencin, C. “Engineering New Tissues: Regenerative Engineering.” Invited Lecture, University of Virginia School of Medicine Dean’s Lecture (December 2007)


167. Laurencin, C. Keynote Speaker, Earnest Just Memorial Symposium. Medical University of South Carolina (2008)

168. Laurencin, C. Visiting Professor, Grand Rounds Speaker, Vanderbilt University, Department of Orthopaedic Surgery (2008)


170. Laurencin, C. Keynote Speaker, Holland Scholars Program, University of Virginia (2008)

171. Laurencin, C. Invited Speaker, Columbus Orthopaedic Society, Columbus,
Ohio (2008)

172. Laurencin, C. Mallory-Coleman Visiting Professor, Ohio State University Department of Orthopaedic Surgery (2008)

173. Laurencin, C. Invited Speaker, 2nd International Medical School Dean’s Meeting. Beijing, China (2009)


176. Laurencin, C. Invited Speaker, Karolinska Institute, Nanotechnology and Nanomedicine Symposium (2009)


179. Laurencin, C. Invited Speaker, Florida Hospital Distinguished Lectureship Series. Tampa, FL (2010)

180. Laurencin, C. Invited Speaker, Society for Biomaterials, Grand Challenges for Biomaterials Research and Education (2010)


189. Laurencin, C. “Meeting the Grand Challenges: Bold Ideas; Bold, Smart People; Organizations that Believe.” Invited Keynote Speaker, 25th anniversary celebration of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) (2011)

190. Laurencin, C. “Regenerative Engineering Paradigms for Musculoskeletal Tissues.” The Alan S. Michaels Distinguished Lectureship in Medical and Biological Engineering. Massachusetts Institute of Technology (2011)


195. Laurencin, C. “Journey to the Center of the Academic World: A Surgeon’s


206. Laurencin, C. “Next Generation Devices and Technologies through Regenerative Engineering.” CAETS Convocation: Pathways to sustainability: Energy, Mobility and Health care Engineering. New Delhi,
India (Oct 2015)


211. Laurencin, C. Keynote Speaker, 4th Annual Healthcare and Science Stars of Tomorrow Career Symposium. Rivera Beach, FL (March 2016)

212. Laurencin, C. Global Research Collaborative for Infectious Disease Preparedness (GloPID-R). Washington, DC (March 2016)


217. Laurencin, C. “Tunable Elastomeric Matrices for Musculoskeletal Regenerative Engineering.” Invited Speaker, Annual Northeast Alliance for Graduate Education and the Professoriate (NEAGEP) and Five Colleges
218. Laurencin, C. “Robust Regenerative Engineering of the Shoulder.” Invited Speaker, CIMTEC International Conferences on Modern Materials & Technologies. Perugia, Italy (June 2016)


226. Laurencin, C. “Regenerative Engineering: Bringing convergence to musculoskeletal tissue regeneration.” International symposium on clinical translational medicine ISCTM. Shanghai, China (Sept 2016)
Laurencin, C. “Regenerative Engineering: Convergence: To Address Grand Challenges.” Invited Speaker, Two Genes Lecture. Northwestern University School of Engineering, Evanston, IL (February 2017)

Laurencin, C. Distinguished Engineering Educator Award. Awardee Speaker, The National Engineer Week Honors & Awards Banquet (February 2017)

Laurencin, C. Invited Speaker, Sex & Gender Research Forum, Drexel University. Philadelphia, PA (March 2017)


Laurencin, C. “Regenerative Engineering: Theory and Practice.” Keynote Speaker, the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Regional Meeting. Louisiana State University, Baton Rouge, LA (April 2017)

Laurencin, C. “Regenerative Engineering – the Convergence of Advanced Materials Science, Stem Cell Science, Physics, Developmental Biology, and Clinical Transition.” Keynote Speaker, Distinguished Professor Lecture Series at Widener University School of Engineering. Chester, PA (April 2017)


Laurencin, C. Plenary Speaker, National Medical Association Region I Annual Meeting. St. Thomas, Virgin Islands (May 2017)


239. Laurencin, C. “Blacks in Science, Engineering and Medicine: Struggles that Continue, Struggles that are Growing, and Possible Solutions.” Keynote Speaker, American Institute of Chemical Engineers (AIChE) Annual Meeting. Minneapolis, MN (October 2017)

240. Laurencin, C. “Convergence in Regenerative Engineering.” Plenary Speaker, National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Conference. Minneapolis, MN (October 2017)


243. Laurencin, C. “The Uconn Sastra collaboration.” Invited Speaker, SASTRA University. Trichy, India (December 2017)

244. Laurencin, C. Keynote Speaker, Biomedical Engineering Society Cellular and Molecular Bioengineering Conference. Key Largo, FL (January 2018)


246. Laurencin, C. “Regenerative Engineering: convergence to address Musculoskeletal Grand Challenges.” Invited Speaker, Rockwell Lecture Series at UH Cullen College of Engineering. Houston, TX (February 2018)

247. Laurencin, C. “Regenerative Engineering and Grand Challenges.” Invited
Laurencin, C. “Beyond transplantation – Progress, prospects, and
challenged in regenerative engineering” Invited Speaker, 2019 Gustave J. Dammin, M.D. Memorial Lecture. Department of Pathology, Brigham and Women’s Hospital (January 2019)


Laurencin, C. “Regenerative Engineering: Convergence in Action.” Keynote Speaker, 34th Annual National MD/PhD Student Conference. Copper, CO (July 2019)


Laurencin, C. “Success is What You Leave Behind.” Keynote Speaker, Lecture Series: Thought Leaders on Diversity and Inclusion. Women and Minority Faculty Inclusion. The University of Texas MD Anderson Cancer Center. Houston, TX (November 2019)


Laurencin, C. “Regenerative Engineering of Complex Tissues.” Invited Speaker, All India Institute of Medical Sciences (AIIMS). New Delhi, India (December 2019)

**Invited Speeches (Other):**


14. Laurencin, C. “The First Year of Medical School.” Address to first year class. Medical College of Pennsylvania and Hahnemann University School of Medicine (1995)


23. Laurencin, C. “Giving Credit Where Credit is Due.” Address to Joint Session of the Biomedical Careers Program and the Graduate Sciences Career Program of the University of Medicine and Dentistry. Robert Wood Johnson School of Medicine (1996)


32. Laurencin, C. “Mentoring minority students.” Interview with Black Entertainment Television (April 1997)


PA (1998)


43. Laurencin, C. “Success in the face of Adversity.” Invited Address to Central High School Football Team (2000)


47. Laurencin, C. “National Medical Fellowships Special Recognition Award” NBC 10 Profile and Interview (2001)

48. Laurencin, C. “Dr. C. Laurencin and legacy of Dr. Helen M. Laurencin” NBC 10 Profile and Interview with Ms. Edie Huggins (2002)


**Sessions Moderated/Chaired, Workshops Led:**

1. Bristol-Myers/ Squibb Scientific Program for Minority Medical Students in Science (Day 2) (1994)


9. Workshop Moderator and Judge, Lincoln University Science and Engineering Program (1996)

10. Lincoln University High School Enrichment Program: Biomedical Sciences Workshop (1996)


16. Allegheny University of the Health Sciences, Clinical Research Center Conference, Medical and Surgical Devices Session (1997)


18. Gordon Research Conference (Il Ciocco, Italy) Biodegradable Polymers (May 8th Discussion Leader) (1997)


24. Materials Research Society Orthopaedic and Dental Applications (Fall 1998)


29. Session Chair, Orthopaedic Research Society: Tumors (2001)


42. The Nanotechnology Conclave Session II: Nanotechnology and Drug Delivery (2006)


46. Anesiva Corporation Shoulder Advisory Board Session (2007)

47. Panel Discussion/Lecture Diversity in Medicine, Helen I. Moorehead-Laurencin M.D Research Day, Drexel University (2008)
48. Distinguished Leadership Panel, The American Institute for Medical and Biological Engineering Conference (April 2016)

49. Advisory Committee, Burroughs Wellcome Fund Career Awards at THE Scientific Interface (April 2016)

50. Panelist, The Intel International Science and Engineering Fair (Intel ISEF) (May 2016)

51. Conference Chair, Rock Stars of Regenerative Engineering Conference, (December 2016)

52. External Advisory Board, Southern University of Science and Technology (SUSTech) Broad Meeting (December 2016)

53. External Advisory Broad, NAM Council Meeting and Strategic Planning Sessions (February 2017)

54. Award Presenter, American Institute for Medical and Biological Engineering (AIMBE) Annual Meeting (March 2017)


56. External Advisory Board, Harvard-MIT Division of Health Sciences and Technology (HST) Advisory Board Meeting (October 2017)

57. Panel Co-Organizer, Engineering Solutions to Address Health Care Disparities at Biomedical Engineering Society Annual Meeting (October 2017)

58. External Advisory Board, The Massachusetts Institute of Technology Institute for Medical Engineering and Science Visiting Committee Meeting (November 2017)

59. Advisory Board, Southern University of Science and Technology (SUSTech) Board Meeting, Shenzhen, China (January 2018)

60. Moderator, Biomaterials Definitions Meeting: Regenerative Medicine
Session: Chengdu, China (June 2018)

61. Moderator, Biomaterials Definitions Meeting: Opportunities and Priorities: Emerging Technologies Session: Chengdu, China (June 2018)


63. Panel Participant, Collaborating to Increase the Number of Black Males in Medicine. National Medical Association (NMA) Annual Convention and Scientific Assembly, Honolulu, Hawaii (July 2019)


**Patents:**


Polyphosphazene–Calcium Deficient Hydroxyapatite Composites as Bone Cements. U.S. Patent Pending


porous polymer structures as osteochondral plugs. U.S. Provisional 2012


54. Laurencin, CT, Nair LS.: Immobilized metallic nanoparticles as unique materials for therapeutic and biosensor applications. U.S. Patent No. US. 8,927,018


58. Laurencin, CT, McLaughlin, SW, Veronick, J, Kahn, Y, Nair, LS, Goldhamer, DJ.: Bi-phasic 3-Dimensional Nanofiber Scaffolds, Two Parallel Beam Collector Device and Methods of Use. U.S. Patent No. 10,179,039


Javier Reyes
Dear Alberto and Sal,

After careful consideration and research, I am respectfully submitting this letter of application for the position of President at the University of Central Florida.

I currently serve in dual roles in senior administration at West Virginia University. I am a member of the executive leadership team as Vice President for Start-Up West Virginia and report directly to President E. Gordon Gee to guide the growth and aggregation of innovation resources at WVU. I also serve in academic administration as the Milan Puskar Dean for the John Chambers College of Business and Economics. I accepted the dean position at WVU in February 2016 (four years ago) and officially started my appointment on July 1 of the same year. My expanded role as vice president began in the fall of 2018. I also hold the rank of full professor.

Prior to my leadership roles at WVU, I held a dual appointment at the University of Arkansas (UofA). I served as Vice Provost for Distance Education, reporting directly to the Provost, and as the Associate Dean for Undergraduate Programs and Executive Education in the Sam M. Walton College of Business. I joined Arkansas in 2003 as an Assistant Professor in Economics and left as a full professor 13 years later in June 2016.

The University of Central Florida is a comprehensive, research intensive (R1), public university. It is one of few universities with these classifications that is also a Hispanic-Serving Institution. This renowned university is seeking a president who has a strong academic background with the experience and understanding of the student success-centered mission, the innovative research and economic impact mission, and the outreach mission. The successful candidate should be an anticipatory thinker who can inspire others, promote creativity and innovation, aggregate and align resources to fuel the strategic plan for the institution, and who is willing to – and demonstrates a record of – taking calculated risks. The next president of the University of Central Florida should be a leader who can make informed decisions and demonstrates the nimbleness to respond and adjust quickly as initiatives succeed or fail. The successful candidate should inspire others through strong principles and integrity, with a guiding belief in accountability and an open, inclusive mindset with a commitment to promoting an environment that celebrates diversity, equity, and inclusion. The next president should embrace a mindset that respects the roles, contributions, and responsibilities of faculty and staff, focusing on driving access and success for all students.

Most importantly, the University of Central Florida needs a leader that understands the broad spectrum of the collegiate experience. This experience is enhanced by the presence of an energized multi-site campus, a vibrant Athletics program, a growing Medical Center, celebrated arts facilities, and a world-class research park.
I believe that my experiences and leadership profile offer a strong match with the attributes sought in the next leader of the University of Central Florida. I have extensive experience as a faculty member and administrator in large public research universities. I have a passion for education, student success, research and innovation. I have demonstrated success for assembling teams that collectively match the leadership statement and characteristics that the University of Central Florida would like to see as the core principles for its next leadership team. I have worked in two R1 universities that have between $150M and $180M in R&D expenditures.

I am submitting this application for consideration for the next president of the University of Central Florida because this is an institution that has grown exponentially in relevance, reputation and scope. It has demonstrated the tenacity to navigate difficult days, while embracing the optimism that its best days lie ahead. That tenacity has risen from the strengths of its faculty and their impactful research, a student body who embraces learning today so that they can lead the way tomorrow, and embracing its deep connections to its community – locally, regionally and globally.

The University of Central Florida is an institution that has a strategic plan that aligns with the visionary plan that the state of Florida has launched under the Florida Chamber of Commerce (Florida 2030 vision). The connections between these two inspirational visions present a promising roadmap for the University of Central Florida to grow its scale and impact. The University of Central Florida has the faculty, teaching and research assets to connect, shape and influence the innovation and economic development movement in the region and across the state of Florida. The institution is committed to attaining the “Preeminent Research University” status in the state of Florida as it continues to strive for student success and academic excellence. This commitment makes the institution a prime source for the talent and resources that are needed to fuel the vision for Florida 2030.

I believe that the University of Central Florida can thrive under my leadership and vision. It is my dream to guide a University of this stature that can impact the world today and solve the global problems of tomorrow.

**Inclusive leadership committed to students’ success in close partnership with faculty**

The leadership style that has guided my work and vision over the past 17 years at the University of Arkansas and West Virginia University finds its base on an inclusive approach that champions diversity, open communication, transparency, and accountability. I have focused my leadership on academic dimensions as well as outcomes-based metrics for the success of students, increasing research quality, empowering innovative teaching, impactful outreach, purposeful development, and meaningful corporate partnerships.

I hold a true appreciation for the shared governance structures that define successful academic settings. I always look for opportunities to hold open communication forums to foster faculty and staff engagement for the planning and implementation of the strategic vision for the organization. Long-lasting and impactful initiatives in higher education come from faculty and staff champions who fully engage and understand the capabilities of the campus, colleges, programs, and corporate partnerships. These champions look for support to elevate initiatives that not only fit the current realities, but that also push the frontier of their discipline, industry, or units and have positive impact on the success of students, the community, the state, and in many cases, the world.
Access to education and the success of students are the top priorities and the leading principles in higher education. To promote the success of their students, comprehensive universities need to invest in three pillars: their research enterprise, their student life and collegiate experience support services, and venues to engage with organizations that want to connect with students and faculty. These pillars serve as the foundation on which research universities can build a nurturing and deep learning environment, balancing learning in the classroom, learning through research engagements and scholarship, and learning through practice and application in partnerships with outside entities that seek to connect with the pipeline of talent provided by the institution.

The connecting force across these three pillars is faculty. The faculty connect knowledge creation (research) with practice and application in ways that are meaningful for students and lead to innovative discoveries and practices by organizations. This virtuous cycle (research, learning, and application) is the main driver for innovation in science, technology, and organizational practices that lead to changes in the global landscape. Investment in faculty and the resources they need to be successful fuels this cycle.

**Championing Access to Higher Education, Diversity, Equity and Inclusion**

I am a champion for diversity, equity, and inclusion on campus as well as at the national level. If we have any hope of finding solutions to the many challenges that we face in our diverse society and turn those challenges into opportunities for prosperity, it is through embracing diversity of thought as the foundational anchor for everything that we do. As a Hispanic-Serving Institution and a university that has been recognized by the Association of Public Land-grant Universities (APLU) for its efforts to help underrepresented students complete their degrees, the University of Central Florida is an institution that aligns with a strong diversity, equity and inclusion mindset for all students.

On campus, I work to support a mindset grounded on diversity of thought, fostering all dimensions of diversity for the student body, faculty and staff. While at the University of Arkansas, I was part of the founding board of directors for the Northwest Arkansas chapter of the Association for Latino Professionals for America (ALPFA), which was sponsored by the Walmart executive leadership team. I worked with the University of Arkansas team who established “La Oficina Latina” as a college access initiative and personally connected with teachers in the high schools in the area to engage students with pathways for educational opportunities with the Northwest Arkansas Community College and the University of Arkansas.

I am an active collaborator and supporter of the WVU FirstGen team and the WVU Center for Veteran, Military and Family Programs. I work with faculty and staff to connect with first generation students and student veterans by providing mentorship and guidance to engage them with their education and support their academic success. I am an active member of the Latin American Interest Group at West Virginia University, where we work to connect initiatives across campus to empower understanding and inclusiveness of the Latin community and its culture in the university activities around teaching, service, research and community engagement.

At the national and corporate level, I am a founding member of the Hispanic Advisory Council for TIAA and now a member of the Diversity Council for TIAA. Through these councils, I work with the executive leadership team of TIAA to create a forum for the company to explore ways of providing financial education to those who need it most and exploring creative solutions in recruiting, developing and retaining
diverse talent. Initiatives that we have launched have been active in Texas, Florida, Montana and West Virginia, demonstrating the reach of scope and scale that is offered by TIAA.

**Experience gathering resources to deploy successful visionary strategies**

My experiences over the past 17 years as faculty, associate dean, vice provost, vice president, and dean have given me a unique perspective that allows me to identify ways to capitalize upon - and think creatively about - the changes that are redefining the landscape of higher education. For the past two decades, higher education has been disrupted by the rise of online education, reduction of state and federal support, increased scrutiny about tuition/costs and academic outcomes, higher expectations for the research enterprise, and increased competition in higher education as the U.S. population and global dynamics change.

Even under these onerous external circumstances, the new strategic plan for the Chambers College has been effective in spurring growth in enrollment and resources, producing a 15 percent increase in enrollment from August 2016 to the start of the 2019 academic year. During this time, the research quality and output of the faculty increased substantially, elevating the quality and status of the College and the University.

The initiatives implemented under my administration in the Walton College and Global Campus at the University of Arkansas led to substantial increases in student success, enrollment and revenue. Online enrollments propelled by the creation of new academic programs across the University nearly doubled in scope from 1,200 to over 2,300 and the enrollment in the Walton College grew from 3,394 to 4,812.

In both instances at the UofA and at WVU, growth in enrollment and resources fueled and elevated the quality of research and academic programs while maintaining a strong commitment to the success of the students by offering a holistic learning experience that emphasizes retention, graduation and placement.

I have a successful record of accomplishments as Dean for the Chambers College of Business. The development and fundraising activities since the start of my deanship at WVU (July 2016) have totaled over $49 million in gifts and donations, including gifts and contributions from corporations. These efforts have been anchored by a visionary strategy that in just two years led to the naming of the college in November of 2018 in honor of John Chambers (former CEO of Cisco Systems and current CEO of JC2Ventures), the launch of various innovative and multidisciplinary on campus and online graduate and undergraduate academic programs in partnership with other colleges, and approval from the Board of Governors for the construction of a new home for the college. The new building - named after Bob Reynolds, CEO of Putnam Investments - will be a $100 million capital investment that is already at 70 percent of the fundraising goal. It will be operational by April 2022.

**Demonstrated understanding of the functional areas of a comprehensive research university and successful engagement with a variety of constituencies**

Throughout my career, I have been fortunate to have opportunities to focus on the missions of two major research universities. I have worked with three different chancellors/presidents, four provosts, three deans in the Walton College, and have always strived to maintain an active and collaborative participation in the administrative leadership teams. While serving as dean and a member of the Provost’s office, I worked effectively on a broad range of key initiatives and functional areas of comprehensive universities, including
strategic academic and interdisciplinary programming, recruitment and retention initiatives, as well as university-wide research, outreach, communications and development programs. I have focused on collaborative, cross-disciplinary efforts with the Colleges of Engineering, Arts and Sciences, Agricultural Resources, Education, Health Sciences (including the School of Medicine), Business, Law, and Continuing Education and Extension Services.

The innovative and inclusive vision that led to the naming of the Chambers College marked the beginning of a movement across the academic landscape of WVU. This movement seeks to establish collaborative efforts among applied and disruptive innovation centers in the Health Sciences and the colleges of Business and Engineering, and later expand to include other colleges across WVU. President Gee appointed me to lead this vision as the Vice President for Startup West Virginia. In this role, I am a member of the President’s Executive Leadership Team that not only focuses on the academic side of the university, but that also works on the planning and strategic visioning of the entire institution. The leadership group includes senior leaders for Athletics, WVU Medicine, Student Affairs, University Relations and Enrollment Management, Government Relations, Global Affairs, Legal Counsel, Talent and Culture, Diversity, Equity and Inclusion, Finance and Administration, Facilities and Auxiliary Services, Research Office, WVU Foundation, and the WVU Alumni Association. Being actively involved at this level of the administration has provided me experiences and knowledge of areas of the institution that are not within the standard scope of a dean, particularly in the areas related to strategic communications and marketing, government affairs, student affairs, economic development, community outreach, WVU Medicine, and the research enterprise of the university across STEM-related fields.

In my role as vice president, I work to align and coordinate resources across campus that cover the spectrum of research and development, entrepreneurship and innovation centers, technology transfer operations, and the translation into application and commercialization of intellectual property from within the campus or attracted to WVU through corporate partnerships. Outside of the campus, I work directly with the Governor’s Cabinet officials, the leadership of the State Legislature, and the Congressional Delegation to promote the initiatives of WVU, engage in statewide economic development and explore changes in the regulatory environment to support economic development, innovation and entrepreneurship opportunities for the state of West Virginia.

As a dean, vice president and vice provost, I have been deeply engaged in building collaborative relationships with corporations, not-for-profit entities, foundations, state and federal agencies, and national and international research laboratories. I have worked to identify different vehicles to establish connections between the research and teaching enterprise of the institution with opportunities to receive funding or support, as well as to provide avenues that propel economic development and enhance the reputation of the University of Arkansas and West Virginia University.

**Appreciation and understanding of the synergies of collegiate activities and the community**

Large public research universities in the United States provide a comprehensive setting for the education of their students and the engagement of their faculty. They also promote and support collegiate activities around arts, athletics, economic development, healthcare and innovation. These activities provide different ways to engage with the community around the campus and the state. The medical, athletics, arts and outreach programs serve as an excellent vehicle to bring together the academic community with the people that live, learn, and play in neighboring counties and cities. I have been actively engaged with these activities at the UofA and WVU. I have seen Razorbacks and Mountaineers on the field, on the stage, in
the labs and in the operating rooms serve as a source of tremendous pride for Arkansas and West Virginia. The University of Central Florida is uniquely positioned to leverage these activities and make them the threads that stitch together the community of central Florida. These activities provide the University with platforms to showcase how the activities of the faculty, researchers, doctors, and student-athletes transform lives, inspire thousands of people, and impact their community, the state, and the world positively.

Attached with this letter you will find my CV and the “Responsibilities and Accomplishments in Administration” narrative document. These provide you with a variety of examples of initiatives and activities that present my experiences in academic operations, administration, budget management, diversity and inclusion, strategic leadership, corporate development and fundraising. You can also see evidence of my high energy and entrepreneurial drive and my focus on interdisciplinary efforts. These are built on the foundations of transparent and effective communication, strong and efficient project management practices and collaborative efforts across disciplines and functional units.

It would be an honor and privilege to discuss these experiences in more detail with the search committee and learn more about the vision that the faculty and the administrative leadership of the institution have for the University of Central Florida.

I believe that conversations with the faculty, staff, and administrators at the University of Arkansas and at West Virginia University would confirm that I am innovative, work with a team spirit, and that I communicate well with others. They would also share that I like to set and work on goals that are transformational and impactful across the campus and that were/are not only focused in online learning, the Walton College and the Chambers College. I pride myself on bringing a great energy and optimism to every role that I take on – and encouraging my teams to lead with optimism and curiosity.

I appreciate your consideration of my application for the position. I look forward to discussing my vision with you further and learning more about the tremendous opportunities at the University of Central Florida.

Kind regards,

Javier A. Reyes
Javier A. Reyes

Responsibilities and Accomplishments in Administration

Vice President for Start-Up West Virginia, West Virginia University
(Fall 2018 – Present)

Continue to lead the John Chambers College of Business and Economics as Milan Puskar Dean while assuming an expanded leadership role as Vice President for Start-up West Virginia at West Virginia University (WVU).

This expanded role carries the responsibility to lead and coordinate campus-wide initiatives that pertain to the analysis, implementation and impact of efforts related to the innovation economy and the economic development of the state of West Virginia.

Working collaboratively to grow and diversify West Virginia’s economy with the leaders of WV Forward (https://wvforward.wvu.edu/), WVU Corporate Relations, the WVU Alumni Association, industry and economic development centers and institutes at WVU (including WVU Medicine and the Health Sciences), the West Virginia Department of Commerce, the National Guard, and the Governor’s Office.

- Identify units across campus and coordinate alignment of priorities and resources with the objectives set by the West Virginia Forward initiative. Connecting and working directly with the Department of Commerce and the Economic Development office of the State of West Virginia.

- Work on coordination efforts and reconfiguration of the resources of the innovation centers and hubs across all the WVU System. Focusing on expanding coordination of the research enterprise and resources across the institution for the translation and commercialization of high-growth disruptive technologies, especially those based on WVU innovations/IP.

- Work with units across campus to engage with the Governor’s Cabinet officials, the leadership of the State Legislature and the Congressional Delegation of West Virginia to build and present the case for resources needed to support initiatives around economic development for the state. Analyzing and proposing changes in the regulatory framework, as well as being an advocate for the role of WVU as an active partner for education, innovation, research, and corporate development for the state of West Virginia.

- Aligning resources and units that work on outreach, economic development and applied research. Working with grant funding agencies, state and federal agencies, and other organizations to accelerate the growth of industries and businesses. Fostering synergies and collaborations across campus that can provide resources to propel activities around economic development and job creation for the state of West Virginia and beyond.

- Working to create a new funded program for Ph.D. and post-doctoral students in Science to come to campus to support and work with the commercialization infrastructure of the innovation centers. These students will be working with the accelerator/incubator
program and will be affiliated with programs and working with inventors/researchers across the campus focusing on the translation of disruptive technologies into new businesses and startups.

- Working to launch the Center for Translation of Artificial Intelligence at West Virginia University. Focusing on the application of emerging AI and Machine Learning discoveries to solving complex problems that affect or constraint health, prosperity, security, and economic and business development.

- Appointed by the Governor’s office to the Board of the West Virginia Job Investment Trust. This organization manages and controls the "Trust" to be used for the development, promotion and expansion of West Virginia's economy and to provide opportunities to businesses and college and university students to develop and implement plans for innovative projects and investment opportunities.

- Member of the Governor’s (Petrochemical) Downstream Jobs Task Force. Working on the activities related to fostering the expansion of the petrochemical industry in West Virginia and the downstream manufacturing industrial clusters. Representing the research and economic development assets that WVU can engage for these efforts.

**Milan Puskar Dean for the John Chambers College of Business and Economics, West Virginia University** (Summer 2016 – Present)

Overseeing a college with an annual budget of nearly $30 million, over 3,100 undergraduate and graduate students, six academic departments, and about 100 faculty members and 70 staff. The John Chambers College of Business and Economics offers 12 undergraduate majors and 13 graduate programs and 7 online graduate certificates. These programs include five Ph.D. programs, one undergraduate online major in General Business and online graduate programs in Business Administration (MBA), Business Cybersecurity, Forensic Accounting and Fraud Examination, and Business Data Analytics. The Chambers College also houses outreach centers for Economic Development, Entrepreneurship, Innovation and Technology in Hospitality, Sales, Executive Education, International Business and Financial Education and Literacy.

- Established a new vision for the college that resulted in a mission-driven business school that seeks impact, innovation and engagement with its different constituencies and stakeholders. The newly-defined mission and vision for the John Chambers College of Business and Economics (http://business.wvu.edu/about/mission-vision-values) focuses on transforming the business landscape and advancing economic growth in the state of West Virginia and beyond. It emphasizes the offering of experiential learning opportunities for students in order to engage them with businesses and organizations in Morgantown, across the state of West Virginia and around the world. Working to ensure that these new business-learning experiences provide differentiators for the students in the global marketplace while positively and dynamically impacting West Virginia.

- The naming of the college in honor of John Chambers, former Cisco CEO and Chairman, took place in November 2018, just two years after being appointed Milan Puskar Dean, and presented a new vision for a college that leads in the business and technology
invention movement that is shaping businesses and organizations globally. The naming of the college came with an undisclosed contribution of financial resources, time, and personal resources from Mr. Chambers.

- Even as higher education faces strong headwinds, the Chambers College has seen consistent growth in enrollment and resources since 2016. Growing enrollment over fifteen percent in the past three years with substantial increases in revenues and resources to the University and the College to support its teaching, research and outreach missions. The enrollment growth has come from growing and launching new innovative programs in Global Supply Chain Management, Cyber Security, Entrepreneurship, and Data Analytics, in addition to increases in retention rates from the freshman class.

- Aligned resources across the college to expand the Academic Engagement and Success Center (AEESC) in order to include mentoring, tutoring, and supplemental instruction efforts to support and increase retention and graduation rates. The center will also include tutoring and additional instruction around Business Communication (verbal and written) as well as a career studio to address a gap in the skillset of business students that has been identified by employers nationally. In just two years, the retention rate for freshman to sophomore increased from 76 percent to 82 percent and the placement rate at graduation increased by 11 percent and stands at 73 percent currently.

- Worked with Chambers College faculty, staff and students to establish the Diversity Committee of the Chambers College. Focusing on having the college be a diversity, equity and inclusion champion for West Virginia University. Collaborating with the Diversity, Equity and Inclusion Office, the LGBTQ Center, the WVU Center for Veteran, Military and Family Programs, and the FirstGen Student Success initiative.

- I am an active member of the Latin American Interest Group at West Virginia University, where we work to connect initiatives across campus to empower understanding and inclusiveness of the Latin community and its culture in the university activities around teaching, service, research and community engagement.

- Became a member of the Diversity Council for TIAA after serving for six years in the Hispanic Advisory Council to continue to be a voice for diversity and inclusion with a national scope. I have worked with the executive leadership team of TIAA to create a forum for the company to explore ways of providing financial education to those who need it most and exploring creative solutions in recruiting, developing and retaining diverse talent. Initiatives that we have launched have been active in Texas, Florida, Montana and West Virginia, demonstrating the reach of scope and scale that is offered by TIAA.

- Fundraising efforts in the first three years surpassed $45 million, plus a commitment of current and future resources from Mr. Chambers. These additional funds and gifts not only allowed the college to surpass its target contribution of $50 million to WVU’s State of Minds Campaign by almost 30 percent, but also built the foundation for a new campaign for the business school. The Building Beyond campaign has a goal of $40 million by the end of 2021. In June of 2018, the Chambers College of announced that it will be building a new Business School Complex, named after Bob Reynolds, CEO of Putnam Investments, along
the waterfront in Morgantown (a $100 million project). Fundraising efforts for Reynolds Hall currently stand at $27.6 million and growing.

- Development efforts to work creatively with the donors of two existing endowed chairs in order to create three new endowed chairs, in Marketing and Supply Chain, and a demand fund to support faculty research and outreach activities in entrepreneurship and innovation.

- Increased financial support for faculty research. Dedicating close to $2 million to expand and elevate the quality of research active faculty across the college. Close to forty faculty members have received summer support in the last three years (beyond assistant professors with startup packages). Previously, this number was limited to two to four faculty per year. Endowed researchers are now more engaged in supporting research endeavors for themselves as well as those of junior faculty and Ph.D. students.

- The shift to have the college and its faculty focus on quality research is already paying dividends. Over the past three years, publications in A+ journals have increased from 10 to 15 a year, in A journals have increased from 24 to 40 a year, in B (strong) journals have increased from 18 to 34 a year. At the same time, support from corporations and organizations for research have also provided over half a million dollars in support for applied research.

- Secured funding to establish the first startup accelerator/incubator program at WVU. Vantage Ventures houses co-working/shared-space and incubation space for startups. The accelerator program has secured over $7M of new funding for operations and seed funding for startups that are part of the accelerator program. Operations began in September 2019, and it is growing exponentially while supporting innovation and commercialization efforts of WVU IP from all colleges across WVU.

- Aligned resources across the college to connect with disciplines and research areas of interest/focus in West Virginia University. Mainly, Health Sciences, Energy, Innovation and Entrepreneurship, Cyber Security and Data Analytics, Hospitality, Law, and Economic Development and Commercialization efforts of disruptive technologies and innovations.

- Successfully expanded the international engagement in the Chambers College. Taking the College from having no study abroad or international engagement opportunities for undergraduate students to now offering programs in China, Dubai, India, Germany and Brazil, in just three years through the Robbins Global Business Center. The expansion will continue to include other countries in the next two years with the focus of having opportunities for faculty to engage with companies, organizations and universities in the countries where we currently have or seek to establish partnerships.

- Finalized and launched 2+2 and 3+1 programs in China with Tianjin University of Finance and Economics and Shanghai Business School, respectively, to offer B.S. degrees in Energy Finance. This opportunity afforded 50 - 60 students from China coming to campus in August 2019, a flow level that could continue for the next 6 years while we also look to establish similar partnerships in other countries.

- Developed or expanded joint programs with the Statler College of Engineering and Mineral Resources in Cyber Security, dual MBA programs for Medical, Dental, Nursing, Pharmacy
and Public Health students within WVU Health Sciences, as well as with the Law School for J.D. students.

- Moved the General Business Major to an online delivery format and grew enrollment to over 65 students in just one year of operations (started in Fall 2018). Successfully launched the Online M.S. in Business Data Analytics (Fall 2016), and the Online M.S. in Business Cybersecurity (Fall 2018). Both graduate programs bring cohorts of 15-20 students a year. Two more majors are planned to move online in 2020 (Hospitality and Tourism Management and Marketing) along with a new area of concentration in Healthcare for the online MBA.

- Successfully launched the Hospitality Innovation and Technology Lab in the John Chambers College of Business and Economics. Supporting the growing Hospitality and Tourism Management Major in the college and the key role that the college is playing in expanding the Tourism and Hospitality industry in West Virginia.

- Working in the strategic planning efforts in the Chambers College and West Virginia University, extending across the state. Working closely with the leadership of West Virginia University, West Virginia Department of Commerce, and Marshall University to develop and implement a statewide initiative of interwoven collaborative partnerships. Bringing together the brightest minds to leverage multidisciplinary action to empower real, lasting change. (https://wvforward.wvu.edu)

- Active participation in committees and leadership groups across West Virginia University including Culture Leadership Group, Steering Committee for Shared Services, West Virginia University Energy Institute Dean Group, and Arts, Humanities and Social Sciences Dean Group.


**Vice Provost for Distance Education, University of Arkansas** (Summer 2012 – Spring 2016)

Oversaw all aspects of the online, distance, and continuing education programs at the University including strategic planning and coordination with deans in all academic colleges, budget management, marketing and recruiting activities, as well as day-to-day support services for faculty and students. Fostered all online and distance graduate, undergraduate, and executive education efforts, as well as training and professional/workforce development programs. Expanding access to students and professionals who need flexible options to overcome barriers, such as location, time, and financial constraints.

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1 Served as Associate Dean from summer 2010 to summer 2012 under Dean Dan Worrell and left the Dean’s office when appointed to the Vice Provost of Distance Education position. Returned to serve as an interim Associate Dean with Dean Eli Jones in the summer of 2014, supporting an unexpected transition of the previous Associate Dean due to health issues. Currently, still maintaining the position of Vice Provost and plan to continue a dual appointment for the foreseeable future. Assumed the responsibilities for Executive Education in the spring of 2015.
- Managed the expansion of the Global Campus to house a marketing and recruiting team, a compliance and quality assurance office, a credit studies and retention office, a professional and workforce development center, and a top of the line instructional design and support services unit for the development of online courses and e-learning materials.

- Responsible for 40-plus support staff members, seven directors, an operating of nearly $6 million and the distribution of revenues totaling close to $20 million dollars. Facilitated more than 450 online and distance education courses each semester.

- Planned and implemented a faculty-training program for the development of online courses. Trained over fifty faculty members a year and identified funding for its indefinite continuation. Followed the standards of the Quality Matters Rubric.

- Increased revenues from online, distance and continuing education programs from around nine million dollars in fiscal year 2012 to close to nineteen million dollars in fiscal year 2014, while only increasing the operating budget of the Global Campus by less than one million dollars during the same period.

- Managed the enrollment growth in fully online or blended courses from close to 13,000 to over 24,000 enrollments in three years. The number of unique fully online students registered increased from about 1,200 to over 2,300 in the same period. Provided funding for academic advisors for online programs in the academic colleges and launched a marketing campaign with a budget of four hundred thousand dollars annually.

- Strategized and completed the development of new online programs in six different academic colleges or schools (Arts and Sciences, Business, Engineering, College of Education and Health Professions, Law School, College of Agricultural, Food and Life Sciences). In under three years, launched four new online graduate programs, three new online undergraduate programs, four new online certificates, and completed the development of a viable set of online courses that satisfied the university core.

- Fostered growth in the areas of executive education, training programs, and professional development. Built 20-plus courses in close partnership with industry and corporations.

- Developed and implemented an incentive-based tuition revenue sharing program for online, distance, and continuing education courses and programs. The magnitude of yearly shared revenues flowing back to the general fund and the academic colleges increased by almost eight million dollars when compared to the revenue distributed in fiscal year 2012.

- Initiatives funded by the office of the Vice Provost for Distance Education from spring of 2013 to the spring of 2016 represented an investment of over three million dollars. Seeding the exploration and adoption of new learning technologies for all modes of instruction, faculty development programs, funding for graduate and undergraduate students working on research, tutoring and supplemental instruction, as well as partnerships with colleges, the library, and the teaching and faculty support center for the creation of collaborative spaces for faculty and students.

- Worked in collaboration with the Vice Provost for Research and Economic Development and the Dean of the J. William Fulbright College of Arts and Sciences to propose the creation of the Tesseract Center. A faculty and student lead center with a yearly budget of
over three hundred thousand dollars dedicated for the development of immersive learning environments (3-D, virtual reality, and holograms) and the gamification of learning experiences. Targeting the creation of intellectual property and its commercialization with industry applications upon the launch of the center (expected to be in 2016). Collaborating with the advancement team to expand funding through matching funds from alumni and foundations. Two gamified courses already developed and launched (Roman Civilization and Greek Mythology) with enrollments of over 300 students last academic year and projected to have over 500 enrollments in the 2015-2016 academic year.

**Associate Dean for Undergraduate Studies and Executive Education, Sam M. Walton College of Business, University of Arkansas (Summer 2010 – Summer 2012 and for Summer 2014 – Summer 2016)**

Responsible for leading the high quality academic and experiential learning programs that the Walton College provides its undergraduate students and all efforts in Executive Education. De facto department chair for the college wide business core courses (staffing and budget). In charge of managing and supervising all activities and budget related to the Undergraduate Programs office, the Undergraduate Business Core Curriculum, Academic Information, Assurance of Learning and Instructional Design, the Quality Writing Center and participating in the coordination of the efforts and initiatives of the Career Development Center, the Global Engagement and Diversity Programs offices, as well as the Technology Center and the Development and Advancement office of the Walton College. Supervising and managing the Walton College Honors Program and the management of all scholarships. Coordinating efforts related to the Honors Program accelerated access to the MBA and the Masters of Accountancy program.

- Worked with the Dean on the faculty annual evaluations, tenure and promotion decisions, endowed chairs appointments and reappointments, department chair selections and reviews, and the planning and assessment of all strategic thrusts of the college.
- Planned and implemented different strategies and initiatives to position the college to maintain its AACSB accreditation. Including assurance of learning and the monitoring of scheduling of classes and alignment of faculty qualifications. Heavy involvement with the last accreditation for the College in the fall of 2011 and the ongoing planning for our AACSB report to be finalize in fall 2016.
- Managed the expansion of undergraduate enrollment from 3,394 students in 2010 to 4,812 in 2014 while increasing the percentage of underrepresented minorities in the student population by over sixty percent and growing the enrollment in the honors program from 387 students in 2010 to over 450 in 2015.
- Mentored underrepresented minorities and first-generation students, as well as actively engaged with the LGBTQ communities on campus. Working directly with the Oficina Latina and the Recruitment and Enrollment services to connect with the Hispanic community.
- Supported the expansion of academic, outreach and support programs to enhance diversity, equity and inclusion. Engaging with the activities of the Office of Diversity
Programs in the Walton College and its activities to enhance the diversity of thought for the college. Focusing on supporting activities that would foster interaction across groups from different diverse backgrounds (in all dimensions) in order to support a diversity mindset across the academic programs, research agendas, outreach efforts and social environments.

- Worked to connect the diversity mindset of the university setting with that of corporations and organizations outside of the campus. Working as a member of the Board of Directors for the Association for Latino Professional for America (ALPFA) and a founding member for the Hispanic Diversity Council for TIAA.

- Worked in the development of relationships with corporations to establish customize programs in executive education. Coordinating and managing the relationship of the college with J.B. Hunt that led to the establishment of the J.B. Hunt Supply Chain University. Over 300 students have enrolled in the programs after only 2 years of full operations. More programs like this one are being explored with companies like FedEx and ABF.

- Worked with the Dean on the ongoing strategy and vision for the funding and supporting of research efforts in the college as well as for graduate student assistantships.

- Worked on the evaluation of the undergraduate business core-curriculum courses and the resulting implementation of the newly developed undergraduate business core-curriculum.

- Stewarded a gift of $250,000 (2014) to establish the Honors Faculty Fellow in the Sam M. Walton College of Business. Worked on the Retail and Innovation proposals, totaling over ten million dollars. Previously involved in stewarding gifts for renovations of the Walton College main atrium dedicated to Sam M. Walton (one million dollars) and for the establishment of study abroad scholarships and internships.

- Active participation in outreach activities with industry and corporations. Involved with company visits and the Dean’s Alumni Advisory boards connecting the college to alumni and companies like Walmart, Tyson Foods, JB Hunt, Arvest Bank, Stephens Inc., TIAA-CREF, AT&T, Murphy Oil, Bank of America, Dillard’s, FedEx, among others.

- Proposed and implemented a renovation effort for classroom spaces in the Walton College. Negotiating agreements and partnerships with Facilities Management and the Vice Chancellor for Financial Affairs.

- Worked with the Dean’s office and faculty leaders to develop and establish the Walton College Business Communications Center to support and foster students’ oral and written communication skills.

- Worked with the Dean’s office to develop and establish the Global Engagement Office in the Walton College and worked with faculty to establish study abroad programs in Ireland, Mozambique, Belize, Panama, and most recently a 3-1 undergraduate program in partnership with a Chinese university that will bring over 80 Chinese students to the UofA a year starting in 2017.

- Managed the development and launch of the fully online undergraduate business degree (General Business), resulting on additional revenue flows of over four hundred thousand dollars to the college in the first year of operation.
- Managed the evaluation of the business core curriculum that resulted in a revamped curriculum and requirements. Engaged faculty, advisors, students, and industry representatives throughout the process that resulted in a major transformation for the degree plans for all the business majors.

- Managed the newly created office of Assurance of Learning and Instructional Design in the Walton College. Led the development, coordination and implementation of all assurance of learning practices and reports for all graduate and undergraduate programs.

**Director of the Sam M. Walton College of Business Honors Program, University of Arkansas (Fall 2009 – Summer 2012)**

Oversaw all aspects of the academic experience for honors students in the Sam M. Walton College of Business Honors Program. Managed the budget and ensured the highest quality of instruction and curriculum for honors students, established connections with employers, ensuring opportunities for the students to connect with their community and enhance their academic experience through study abroad and experiential learning opportunities. Managed the prestigious Boyer and Walton Fellowships and nurtured development and advancement opportunities for the honors program.

- Managed the evaluation of the program that resulted in a revamped curriculum and requirements for the program. One result was the inclusion of Calculus 1 as a requirement.

- Expanded the offerings of business honors colloquia courses and coordinated efforts with the study abroad office and the Honors College to use scholarships in order to increase the number of honors students participating in study abroad and international programs.

- Envisioned and implemented the renovation of the honors lounge.

- Grew the program to be able to sustain (courses and financially) an enrollment of honors students that represented between 10-15 percent of the overall enrollment of the college.
Javier A. Reyes

Education


**B.A. in Economics with a Minor in Finance (Honors),** Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Estado de México, 05/1998.

Professional Experience

Administrative Positions

**Vice President for Start – Up West Virginia**, West Virginia University
(Fall 2018 – present)

This role carries the responsibility to lead and coordinate initiatives around campus that pertain to the analysis, implementation and impact of efforts related to the innovation economy and the economic development of the state of West Virginia. Working collaboratively to grow and diversify West Virginia's economy with the leaders of WV Forward (https://wvforward.wvu.edu/), WVU's Corporate Relations, the WVU Alumni Association, Industry and Economic Development centers and institutes at WVU (including WVU Medicine and the Health Sciences), the WV Department of Commerce, the National Guard, and the Governor's Office.

**Milan Puskar Dean of the John Chambers College of Business and Economics**, West Virginia University (Summer 2016 – present)

Overseeing a college with an annual budget of nearly $30 million, over 3,100 undergraduate and graduate students, six academic departments, and about 100 faculty members and 70 staff. The John Chambers College of Business and Economics offers 12 undergraduate majors and 13 graduate programs and 7 online graduate certificates. These programs include five Ph.D. programs, one undergraduate online major in General Business and online graduate programs in Business Administration (MBA), Business Cybersecurity, Forensic Accounting and Fraud Examination, and Business Data Analytics. The Chambers College also houses outreach centers for Economic Development, Entrepreneurship, Innovation and Technology in Hospitality, Sales, Executive Education, International Business and Financial Education and Literacy.

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1 Continue to serve as Milan Puskar Dean for the John Chambers College of Business and Economics.
Vice Provost for Distance Education, University of Arkansas (Summer 2012 – Spring 2016)

Overseeing all aspects of the online, distance, and continuing education programs at the university including strategic planning and coordination with Deans in all academic colleges, budget management, marketing and recruiting activities, as well as day-to-day support services for faculty and students. Fostering all online and distance graduate, undergraduate, and executive education efforts, as well as training and professional/workforce development programs. Expanding access to students and professionals who need flexible options to overcome barriers, such as location, time, and financial constraints.

Associate Dean for Undergraduate Studies and Executive Education, Sam M. Walton College of Business, University of Arkansas (Spring 2015 – Spring 2016)

In addition to the undergraduate studies responsibilities (explained below), I was responsible for leading the high quality academic and experiential learning programs that the Walton College provides its undergraduate students and all efforts in Executive Education.

Associate Dean for Undergraduate Studies, Sam M. Walton College of Business, University of Arkansas (Summer 2010 – Summer 2012 and for Summer 2014 – Spring 2015)

De facto department chair for the college wide business core courses (staffing and budget). In charge of managing and supervising all activities and budget related to the Undergraduate Programs office, the Undergraduate Business Core Curriculum, Academic Information, Assurance of Learning and Instructional Design, the Quality Writing Center and participating in the coordination of the efforts and initiatives of the Career Development Center, the Global Engagement and Diversity Programs offices, as well as the Technology Center and the Development and Advancement office of the Walton College. Supervising and managing the Walton College Honors Program and the management of all scholarships. Coordinating efforts related to the Honors Program accelerated access to the MBA and the Master of Accountancy program.

Director of the Sam M. Walton College of Business Honors Program, University of Arkansas (Fall 2009 – Summer 2012)

Overseeing all aspects of the academic experience for the honors students in the Sam M. Walton College of Business Honors Program. Managed the budget and ensured the highest quality of instruction and curriculum for the honors students, established

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2 Served as Associate Dean from summer 2010 to summer 2012 under Dean Dan Worrell and left the Dean’s office when appointed to the Vice Provost of Distance Education position. Returned to serve as an interim Associate Dean with Dean Eli Jones in the summer of 2014, supporting an unexpected transition of the previous Associate Dean due to health issues, still maintained the position of Vice Provost (Dual Appointment).
connections with employers, ensuring opportunities for the students to connect with their community and enhance their academic experience through study abroad and experiential learning opportunities. Managed the prestigious Boyer and Walton Fellowships and nurtured development and advancement opportunities for the honors program.

**Academic Positions**

**Professor, Department of Economics**, John Chambers College of Business and Economics, West Virginia University (Summer 2016 – present)

**Professor, Department of Economics**, Sam M. Walton College of Business, University of Arkansas (Fall 2014 – Spring 2016)

**Associate Professor, Department of Economics**, Sam M. Walton College of Business, University of Arkansas (Fall 2009 – Spring 2014)

**Assistant Professor, Department of Economics**, Sam M. Walton College of Business, University of Arkansas (Fall 2003- Summer 2009)

**Invited Lecturer**, ESC Toulouse

**Invited Lecturer**, Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Queretaro, México (Summer 2010)

**Invited Lecturer**, Clinton School of Public Service (Spring 2006)

**Research Positions and Industry Experience**

**National Science Foundation (NSF) FY2015 Proposal Review Panel** - Reviewer.
(September 2014, June 2015)

**Visiting Academic Scholar Program**, International Monetary Fund (IMF).
Washington D.C. (Fall 2010, Spring 2012)


**Investment Banking - Research Department** – Analyst
**Honors, Awards and Recognitions**

2018 West Virginia Executive Magazine – “Talent Transplant” recognition

2012 Honors College Leadership Award, University of Arkansas.

2012 Inducted into the Teaching Academy of the University of Arkansas.


2009 All-Around Faculty Member Award, Sam M. Walton College of Business, University of Arkansas.

2008 Faculty Gold Medal Award, University of Arkansas / Office of Post - Graduate Fellowships.

2006, 2008 - Recognized as Outstanding Mentor at University of Arkansas.

2003 Outstanding Graduate Student Award, Texas A&M, Economics Department.

2002 Outstanding Graduate Student Teaching Excellence Award, Texas A&M, Economics Department.

**Service and Committees**

*Related to Higher Education Administration*

**President’s Executive Leadership Team**, West Virginia University, Vice President Member (Summer 2019 – present)

**Provost Council**, West Virginia University, Dean Member (Fall 2016 – present)

**Ben Statler College of Engineering and Mineral Resources Dean Search Committee**, West Virginia University, Committee Member (July 2019 – present)

**Technology Transfer Advisory Council**, West Virginia University (January 2019 – present)

**Steering Committee for Shared Services Project across West Virginia University**, West Virginia University, Committee Member (October 2017 – December 2019)

**Culture Leadership Team for West Virginia University**, West Virginia University, Committee Member (February 2017 – present)

**West Virginia University Energy Institute - Deans Group**, West Virginia University, Member (Spring 2017 – present)

**West Virginia University Arts, Humanities and Social Sciences – Deans Group**, West Virginia University, Member, (Fall 2016 – present)
A State of Minds: The Campaign for West Virginia University, Lead for the College of Business and Economics (Summer 2016 – December 2017)

Faculty Development Advisory Committee, University of Arkansas, Division of Academic Affairs. Committee Member (Spring 2014 – Spring 2016)

Honors College Dean Search Committee, University of Arkansas, Committee Chair (Spring 2014 – Spring 2015)

University Information Technology Assessment – Steering committee, University of Arkansas, Committee Member (Fall 2013 - Fall 2014)

Academic Affairs Executive Group, University of Arkansas, Committee Member (Fall 2012 – Spring 2016)

Campaign Arkansas (Capital Campaign), University of Arkansas, Committee Member for Academic Affairs and the Sam M. Walton College of Business (Fall 2011 – Spring 2016)

Executive Education Center and Hotel Taskforce, University of Arkansas, Committee Member (Fall 2011 – Spring 2015)

Graduate School and International Education Dean Search Committee, University of Arkansas, Committee Member (Fall 2009 – Spring 2010)

Honors Council, University of Arkansas, Committee Member (Fall 2009 – Summer 2012)

Related to Activities outside of the Universities

West Virginia State Legislature – Opening Session, invited to present an assessment of the business and economic environment for the state of West Virginia jointly with the Director of the WVU John Chambers College of Business and Economics Bureau of Business and Economic Research (yearly presentation 2017, 2018, 2019, 2020)

Governor’s (Petrochemical) Downstream Jobs Task Force, Member (August 2019 – present)

West Virginia University Foundation Board, Spend Committee Member (June 2019 – present)
West Virginia Jobs Investment Trust Board\(^3\), West Virginia, appointed as representative for West Virginia University (April 2019 – present)

Morgantown Area Community & Economic Development Strategy – Steering Committee, Committee Member, West Virginia (December 2016 – Spring 2019)

Transition Policy Committee – Economic Development – for Governor-elect Jim Justice, Committee Member, West Virginia (December 15, 2016)

Northwest Arkansas Council – Education Consortium, University of Arkansas Representative (June 2014 – Spring 2016)

Northwest Arkansas Board for ALPFA – Association for Latino Professionals for America, Regional Board Member (2009 – 2016)

Recent National Activities

TIAA Diversity Council, Council Member (2019 – present)

TIAA-CREF National Hispanic Advisory Council, Council Member (2015 - 2019)

UPCEA – University Professional and Continuing Education Association, Member of the National Board of Directors (2013 – 2017)

ALPFA – Association for Latino Professionals for America, Member of the National Board of Directors (2012 – 2016)

Professional Leadership Development

Mastering Leadership Dynamics – Professional Development Program, BB&T Leadership Institute, Greensboro, N.C., May 13-17, 2019

Building Trust while Motivating your Team – Professional Development Program, West Virginia University, March 2019

United States Air Force – Air War College - National Security Forum Program
Program Fellow (2015)

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\(^3\) The West Virginia Jobs Investment Trust Board is created as a public body corporate and is established to improve and otherwise promote economic development in the State of West Virginia. The Board shall have the duty to manage and control the West Virginia Jobs Investment Trust (“Trust), as created and established pursuant to the "Jobs Investment Trust Act” to be used for the development, promotion and expansion of West Virginia's economy and to provide opportunities to businesses and college and university students to develop and implement plans for innovative projects and investment opportunity.
Association of Public and Land-grant Universities (APLU)
Attendee (Fall 2013, Fall 2014)

Institute for Emerging Leadership in Online Learning (IELOL)

Southeastern Conference (SEC) Academic Leadership Development Program
University of Arkansas Fellow (2011 – 2012) The program seeks to identify, prepare and advance academic leaders for roles within SEC institutions and beyond.

Professional and Public Speaking Engagements


2019 AACSB Associate Deans Conference – Panelist – Moving on Up: Successfully Navigating the Road from Associate Dean to Dean, New Orleans.

2019 University-Industry Engagement outside Major Metropolitan Areas and Megacities: Identifying Issues and Finding Solutions, organized by the University Industry Demonstration Partnership (UIDP), hosted by the University of Arkansas – Panelist – Entrepreneurship and University Start-Ups Session

2018 West Virginia Public Education Collaborative – Panelist – WV’s Innovation Economy: Moving WV Forward, Morgantown, WV

2018 West Virginia Chamber Annual Meeting & Business Summit. Panel Moderator, A Conversation About Education and West Virginia’s Workforce Future

2018 Hospitality University – sponsored by the West Virginia Hospitality and Travel Association and CVB Association – Keynote Speaker (WVU: Where High-Tech meets Hospitality)


2015 Hispanic Women’s Organization of Arkansas, Annual Conference “We the People”, Jones Center, Springdale, AR.

2014 Blackboard World – Presidents and Provosts Forum, Las Vegas, NV.

2014 Learning with Technology Symposium at University of Arkansas School of Medicine, Little Rock, AR.
2014 New Directions in Online Learning, Boston, MA.

2014 ARVEST Annual Latino Banking Meeting, Springdale, AR.

2013 TEDx Fayetteville, AR – Speaker

2011 Louisiana Collegiate Honors Council, Louisiana

2010 Annual Business Forecast – Center for Business and Economic Research at the University of Arkansas

2008 Invited Speaker to Westwood Elementary, Springdale, Arkansas

Publications and Contributions to Scholarship and Research

I. International Economics, Monetary Policy and Macroeconomics.


II. International Economic Integration


III. *Experimental Economics and Risk*


IV. *Books, Invited Publications and Magazine Articles:*

“Economic Crossroads – B&E Plays a key role in helping affect change” (in collaboration with Patrick Gregg), West Virginia University College of Business and Economics Magazine, Spring/Summer, 2018.


**Presentations at Academic Conferences**


Reyes, J., "Complex Networks and International Economic Integration: Research Projects", presented at Cambridge University - Economics Department - Reading Group on Networks and Theory (Sponsored by CReMic), International, Cambridge University, United Kingdom, Department of Economics, Sponsored by Cambridge University UK, Invited. (November 2009).

Reyes, J., Kali, R., "Growth Networks in Economics", presented at University of Arkansas - Mathematics Department Seminar, Local, Arkansas, Fayetteville, Sponsored by MATH Department - University of Arkansas, Invited. (September 2009).


Reyes, J., "Remittances, Inflation and Exchange Rate Regimes in Small Open Economies", presented at Sam Houston State University - Economics Department - Seminar Series, State, Sam Houston State University, Sponsored by Sam Houston State University - Economics Department, Invited. (April 17, 2008).


