

REPORT TO THE UNIVERSITY SENATE

TO: University Senate

FROM: Michael A. Bernstein, Provost and Senior Vice President for Academic Affairs

DATE: December 5, 2016

Five Stony Brook University Faculty Members Appointed to SUNY Distinguished Ranks

The State University of New York Board of Trustees appointed eight faculty — five of them from Stony Brook University — to the distinguished faculty rank, now joining SUNY's 1,070 member Distinguished Academy. Since the program's inception in 1963, SUNY has appointed 1,070 faculty to the distinguished ranks, as follows: 375 Distinguished Professorships; 311 Distinguished Service Professorships; 379 Distinguished Teaching Professorships; and five Distinguished Librarian Professorships.

Manuel London, Dean of the College of Business; Scott Smokla, Department of Computer Science; and Yuanyuan Yang, Department of Electrical and Computer Engineering, were named Distinguished Professors. Latha Chandran, Department of Pediatrics and Vice Dean for Undergraduate Medical Education, was named a Distinguished Teaching Professor, and Perry Goldstein, Chair of the Department of Music, was named a Distinguished Service Professor.

The Distinguished Professorship is conferred upon individuals who have achieved national or international prominence and a distinguished reputation within a chosen field. This distinction is attained through significant contributions to the research literature or through artistic performance or achievement in the arts. The candidate's work must be of such character that the individual's presence will tend to elevate the standards of scholarship of colleagues both within and beyond these persons' academic fields. Receiving this ranking from Stony Brook University are:

Professor Manuel London: has had a remarkable career combining research and practice, in providing a model for how social science is critical for business education. With 30 years as a university faculty member and administrator, and 12 in corporate research and management, Dr. London established himself as a prolific and highly-cited scholar in the areas of leadership development, career dynamics, performance management, and social entrepreneurship. He was one of the first to study multi-source performance evaluations and feedback in work settings, leading to seminal publications and ubiquitous corporate applications. Dr. London's theory of career motivation, and associated research, outlines how individuals' resilience, insight, and identity influence career goals, and he suggests structures for management development. His award-winning books and articles on performance management in changing organizations focus on creating climates to support employee learning.

Professor Scott A. Smolka: from the Department of Computer Science, joined the faculty in 1982, and was promoted to full professor in 1995. He has made fundamental research

contributions in a number of areas, including process algebra, model checking, probabilistic processes, runtime verification, and the modeling and analysis of cardiac cells and neural circuits. He is best known for the algorithm he co-invented with Paris Kanellakis for deciding bisimulation, a fundamental notion of equivalence for concurrent processes. His research has resulted in more than 190 publications, generating 7,630 citations with an h-index of 45. Dr. Smolka has also been principal investigator and co-principal investigator on grants totaling more than \$23 million, was recently recognized as a Fellow of the European Association for Theoretical Computer Science, and is a recipient of the Chancellor's Award for Excellence in Scholarship and Creative Activities.

Professor Yuanyuan Yang: from the Department of Electrical and Computer Engineering, is internationally-recognized as a leading scientist in the field of parallel and cloud computing systems and computer networks. For her seminal contributions to the field, she was elected Fellow of the Institute of Electrical and Electronics Engineers (IEEE), the world's largest professional society involved in all aspects of electronics and computing. Dr. Yang also currently serves as the Vice Chair for the IEEE Fellow Evaluation Committee. Her research has been extensively supported by the National Science Foundation and Department of Defense. Furthermore, Dr. Yang has served on the editorial boards of top journals in computer systems and networks, including her current service as Associate Editor-in-Chief for *IEEE Transactions on Cloud Computing*, the leading journal in the field of cloud computing.

The Distinguished Teaching Professorship recognizes and honors mastery of teaching. For this prestigious tribute to be conferred, candidates must have demonstrated consistently superior mastery of teaching, outstanding service to students, a commitment to students' ongoing intellectual, scholarship, and professional growth, as well as adherence to rigorous academic standards and requirements. Additionally, a faculty member must have attained and held the rank of full professor for five years, have completed at least three years of full-time teaching on the nominating campus, and must have ten years of full-time teaching in the System. Receiving this rank from Stony Brook University is:

Professor Latha Chandran: a member of the Department of Pediatrics, Founding Director of the David and Miriam Donoho Academy of Clinical and Educational Scholars, and Vice Dean for Undergraduate Medical Education, has a profound impact on the education, as well as the personal and professional development, of her students. Her commitment to scholarship, leadership, professionalism, humanism and service in medicine is noteworthy. Dr. Chandran is a recipient of the Aesculapius Award for Excellence in Medical Teaching, the President and Chancellor's Award for Excellence in Teaching, as well as the Best Teacher in Resident Continuity Clinic Award. She is a member of the Arnold P. Gold Foundation's Gold Humanism Honor Society, and has also been recognized as a national leader in pediatrics education and educational scholarship for her role as a co-leader/co-developer of the Academic Pediatric Association's Educational Scholars Program.

The Distinguished Service Professorship honors and recognizes extraordinary service. Candidates must have demonstrated substantial distinguished service not only at the campus and within the State University, but also at the community, regional and State levels. Furthermore, many candidates for appointment have rendered influential service contributions at the national and international levels. Service must exceed the responsibilities generally considered to be a

part of a candidate's basic professional work, and must involve the application of intellectual skills drawing from the candidate's scholarly and research interests to issues of public concern. Receiving this rank from Stony Brook University is:

Professor Perry Goldstein: is currently serving his second three-year term as Chair of the Department of Music. He has achieved an impressive record of service in the academic department, the Stony Brook University community, the music profession in New York State, as well as in national and international organizations. In the Department of Music, he served as Director of Undergraduate Studies and Graduate Program Director. In the University at large, he has been a member of numerous important committees, including Budget and Finance, the Fulbright Committee, the Staller Long Range Planning Committee, the General Education Committee, and many others. In the music profession, he has held important responsibilities as a member of the Music Funding Panel and Program Auditor for the New York State Council on the Arts. At the national and international levels, Dr. Goldstein has served as a member of the Board of Directors for the League of Composers/International Society of Contemporary Music, as well as a U.S. Representative to the UNESCO International Rostrum of Composers in Paris. He is also a recipient of the Chancellor's Award for Excellence in Teaching.

Alan Alda Receives Double Helix Medal from Cold Spring Harbor Laboratory

Renowned actor, writer, and science communication advocate, Alan Alda, was honored with Cold Spring Harbor Laboratory's prestigious Double Helix Medal at the American Museum of Natural History in New York City on December 1, 2016. Alda, whose passion for science communication spurred him to create the Alan Alda Center for Communicating Science at Stony Brook University in 2009, was recognized for his efforts to help scientists improve the way they communicate about their work, in turn, making science more accessible to the public. Each year, the Alda Center provides in-person training to thousands of scientists and medical professionals around the world. Using techniques developed by Alda himself, the Center's trained instructors guide participants through theater improvisation exercises to help them connect with their audience and talk about their work in a clear and engaging manner.

INCITE Award to Advance Modeling Astrophysical Explosions via Supercomputing

A national research team, led by Stony Brook University, has been awarded 45 million hours of time on one of the world's fastest supercomputers, the Titan Cray XK7, at Oak Ridge National Laboratory, to further their research on explosive astrophysical phenomenon. The award, sponsored by the U.S. Department of Energy's Office of Science through its Innovative and Novel Computational Impact on Theory and Experiment (INCITE) Program, aims to accelerate scientific discoveries and technological innovations by granting, on a competitive basis, time on supercomputers to researchers with large-scale, computationally intensive projects that address "grand challenges" in science and engineering.

The project, entitled "Approaching Exascale Models of Astrophysical Explosions," is led by Drs. Michael Zingale and Alan Calder, Stony Brook University Professors in the Department of Physics and Astronomy. Nationally, the project is one of only six in the area of astrophysics to be awarded by the 2017 INCITE Program. The research team will carry out a comprehensive study of stellar explosions and their precursors using a suite of simulation codes. They will

study a host of astrophysics problems, with the Stony Brook team focused on problems powered by fusion reactions. The project also includes co-investigators from Lawrence Berkeley National Laboratory, Oak Ridge National Laboratory, Los Alamos National Laboratory, the University of California, and the University of Tennessee.

Biomedical Engineering Professor Shu Jia Receives DARPA and NSF Funding for Research

As a 2016 Defense Advanced Research Projects Agency (DARPA) Young Faculty awardee, Shu Jia, an assistant professor in the Department of Biomedical Engineering, received DARPA and NSF funding to develop a new super-resolution light microscopy system to enhance the study of cells, tissues and organ systems. The DARPA award will support Jia's project, entitled "Wavefront-Engineered, High-Speed Super-Resolution Microscopy for Nanometer-Scale, Live-Tissue Imaging." His research is based on a technique called point spread function engineering, which can modify how light is propagated within an imaging system to achieve better imaging capability. By exploring and implementing a new type of optical non-diffracting waveforms, the light within a microscope can propagate in a dramatically different way from normal light. One typical feature is that it will not spread out as much as described by the usual diffraction effect of light. This allows people to image deeper into biological samples.

The highly interdisciplinary team that will participate in this DARPA award includes experts from physics, computer science, engineering, and biology, in collaboration with researchers in pharmacology and the School of Medicine at Stony Brook University. The new technologies are expected to provide additional insight and solutions to challenges in biological and, ultimately, clinical research. In addition to the DARPA award, Jia received a grant in July 2016 from NSF's Biophotonics Program, which will fund the understanding of the brain, improve healthcare, and enhance infrastructure. This award will also lay the foundation for collaborative research with the SUNY Buffalo campus.

Della Pietra Family Auditorium Dedication

On Thursday, November 17, 2016, Stony Brook University held a dedication ceremony for the Della Pietra Family Auditorium in the Simons Center. This was a valuable recognition of the strategic importance of philanthropy and partnerships with our benefactors to the future of higher education, and to our great University. With reduced levels of public funding and increased competition, nationally and internationally, universities must work harder than ever to find the resources to fund world-leading research and teaching. Philanthropic support provides flexible income to support the projects and activities that shrinking core funding cannot finance. It enables universities to build upon their strengths, enhance their student experience, extend their research programs, and create the best possible environments within which people can excel. It builds networks of friends and supporters who contribute to the long-term well-being of the university in many ways beyond their financial contribution— acting as ambassadors, providing links with industry, as well as teaching and mentoring students.

The generosity of the Della Pietra family continues to have a profound impact on Stony Brook University. Their contributions to the University have brought about the development of, or enhancements to: the Simons Center for Geometry and Physics; the Global Health Institute; the

Staller Center; the Lourie Center for Pediatric MS; the Della Pietra Family Endowed Chair in Biomedical Imaging; the College of Arts and Sciences' Teaching and Education Fund; the Children's Hospital Task Force; the Della Pietra Lecture Series; a weekend program for gifted high school students in math and science; and student scholarships. The philanthropy and service of the Della Pietra family has reached every corner of this great University, and we were honored to have their legacy linked to ours through this naming.

Annual Marie Colvin Lecture

On Tuesday, December 6, 2016 at 7:30 p.m. in the Student Activities Center, Sidney Gelber Auditorium, the Marie Colvin Center for International Reporting at Stony Brook University's School of Journalism will present the annual Marie Colvin Lecture, as part of the "My Life as Event" Speaker Series. This year's speaker is Lindsey Hilsum, the international editor of Channel 4 News in London, and an award-winning correspondent and author. In her lecture, entitled "Isolationism and Intervention: A Reporter's Account of Modern Day Conflict and America's Future Role," Hilsum will share her experiences reporting from the frontlines of Rwanda to Syria, and Baghdad to Benghazi. This annual lecture honors Marie Colvin, a Long Island native and acclaimed war correspondent, who was tragically killed in Syria on February, 22, 2012, while covering the conflict for The Sunday Times of London. This event is free and open to the public. For more information, visit stonybrook.edu/journalism or call 631-632-7637.

The Marie Colvin Center for International Reporting aims to cultivate the next generation of overseas reporters. The Center raises awareness about the need for robust international coverage through the annual Marie Colvin Lecture, and works to continue Colvin's legacy by rewarding tenacious overseas reporting with a journalist-in-residence fellowship, which Hilsum is the first to receive. Please visit www.mariecolvincenter.org to learn more about the Center.