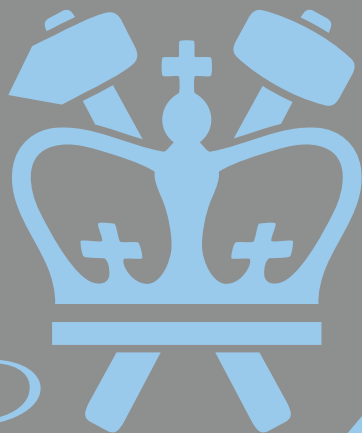


COLUMBIA UNIVERSITY
THE FU FOUNDATION SCHOOL OF
ENGINEERING AND APPLIED SCIENCE

TWO THOUSAND FIFTEEN

Celebrating Faculty Excellence

ACCLAIMING THE AWARDS, HONORS,
AND RECOGNITIONS THAT OUR FACULTY
RECEIVED DURING THE PAST YEAR



Excellence

“We are in a Renaissance period for Engineering—a period of great research, great creativity and invention, great innovation, and incredible translation of these innovations to solutions that impact every aspect of society.”

—MARY C. BOYCE

Excellence

Introduction

*T*oday we celebrate and recognize the significant accomplishments of our faculty during the past academic year. Our collective research continues to advance disciplinary frontiers as we seek to solve the global engineering challenges of our age. It is important to pause and acknowledge that the excellence and impact of these efforts are recognized by institutions and organizations that represent both national and international academic communities and professional organizations.



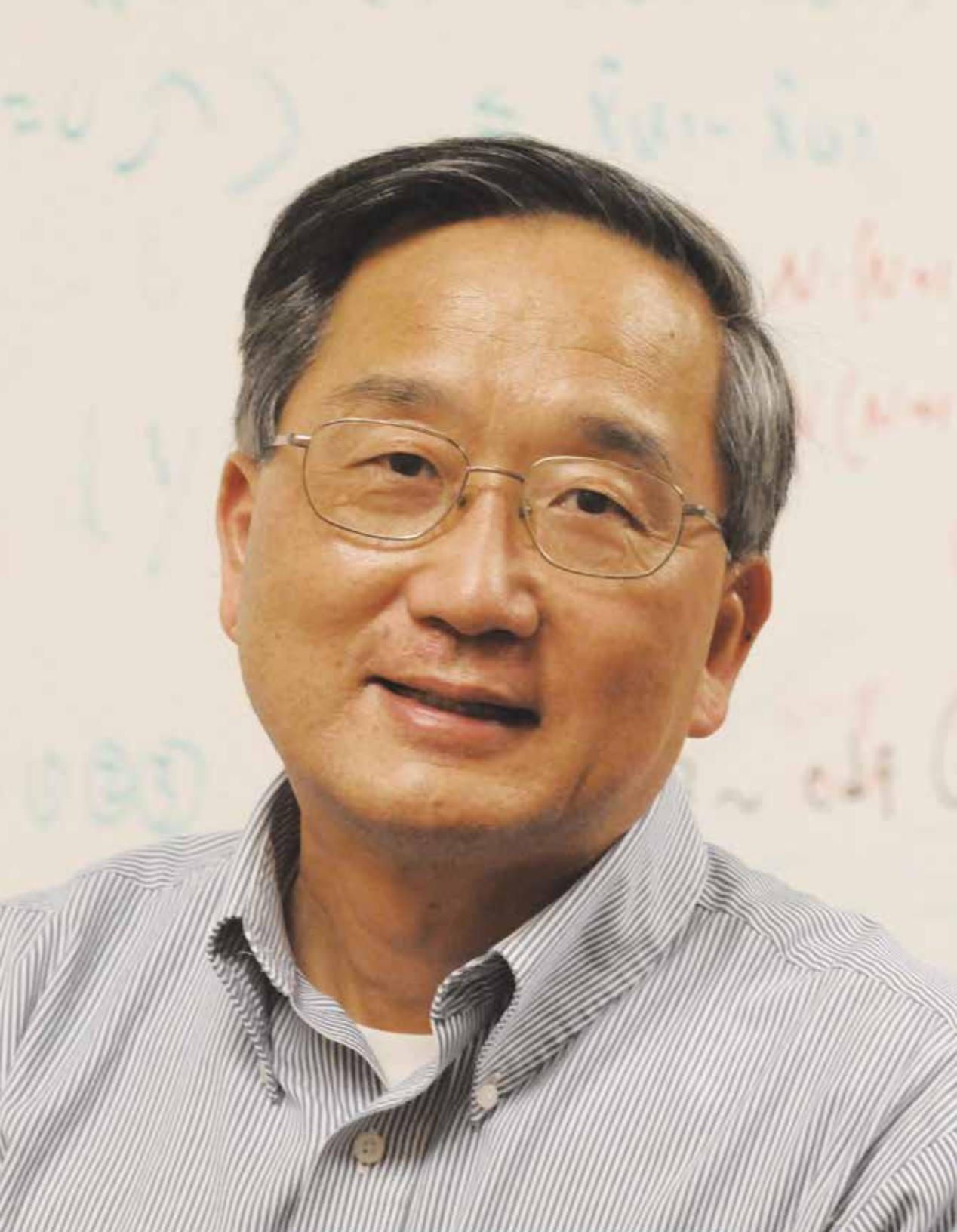
As we've examined our strengths as a faculty, it has become clear that we are defining and pushing disciplinary frontiers that will impact our lives in ways we can only begin to imagine. Our investigations—in the fields of data science; advanced materials and devices; sensing, imaging, and visualization; and computer-based engineering science—have shown how our work is transcending disciplines. At the same time, our work in health and wellness, sustainability and resilience, communications and information, and risk and security has the power to transform lives.

Last year's celebration of the 150th anniversary of our founding gave us reason to reflect on the past accomplishments of our faculty, students, and alumni. As we move forward, our faculty continues this great tradition, actively translating their research into practical innovations, capitalizing on our expanding avenues for entrepreneurship and engagement with industry. Through our teaching, mentoring, and example, we are preparing our students to use their intellect, their diverse talents, their creativity, and their passion to impact our world and to make the lives of future generations better. Faculty who are cited in these pages represent the continuation of our School's impressive tradition of outstanding research and scholarship into succeeding generations.

This year we are pleased to celebrate the exceptional scholarship of David Yao, elected to the National Academy of Engineering; Kartik Chandran, a new MacArthur Fellow; three professors who have received named chairs—Alexander L. Gaeta, Michal Lipson, and Peter Schlosser; and all our faculty who have received recognitions this past year. Congratulations!

Mary C. Boyce

Mary C. Boyce
Dean of Engineering
Morris A. and Alma Schapiro Professor



DAVID YAO

Piyasombatkul Family Professor of Industrial Engineering and Operations Research

NATIONAL ACADEMY OF ENGINEERING

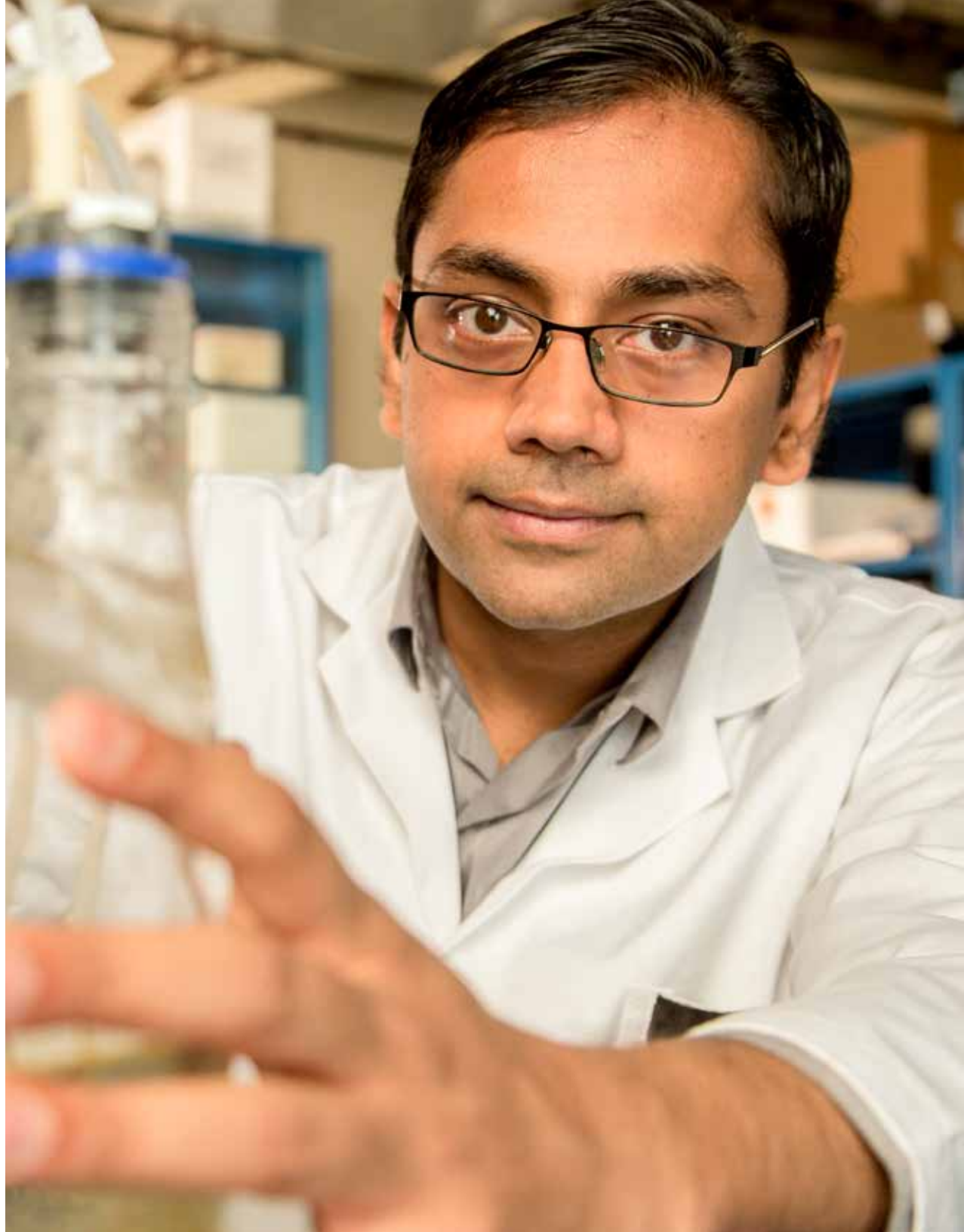
elected a member of the National Academy of Engineering for his leading scholarship and research into stochastic systems and their applications in engineering and service operations

KARTIK CHANDRAN

Associate Professor of Earth and Environmental Engineering

MACARTHUR FOUNDATION FELLOWSHIP

given to individuals with exceptional creativity, promise for important future advances based on a track record of significant accomplishments, and potential for the fellowship to facilitate subsequent creative work; for his work in transforming wastewater from a pollutant requiring disposal to a resource for useful products, such as commodity chemicals, energy sources, and fertilizers



Named Professors



ALEXANDER L. GAETA

David M. Rickey Professor of Applied Physics and of Materials Science

APPLIED PHYSICS AND APPLIED MATHEMATICS



MICHAL LIPSON

Eugene Higgins Professor of Electrical Engineering

ELECTRICAL ENGINEERING



PETER SCHLOSSER

Maurice Ewing and J. Lamar Worzel Professor of Geophysics and Professor of Earth and Environmental Sciences

EARTH AND ENVIRONMENTAL ENGINEERING

Singular Honors



ALFRED AHO

Lawrence Gussman Professor of Computer Science

HONORARY DOCTORATE, DOCTOR OF SCIENCE, *HONORIS CAUSA*,
UNIVERSITY OF TORONTO



MARY C. BOYCE

Dean, The Fu Foundation School of Engineering and Applied Science; Morris A. and Alma Schapiro Professor, Mechanical Engineering

2015 ENGINEERING SCIENCE MEDAL, SOCIETY OF ENGINEERING SCIENCE

awarded by the Society of Engineering Science for seminal contributions to the understanding of the mechanical behavior of nonlinear viscoelastic/viscoplastic solids and for opening up the field for quantitative modeling of finite deformation analysis of the inelastic response of polymers



MICHAEL J. MASSIMINO

Professor of Professional Practice, Mechanical Engineering

NASA HUBBLE 25TH ANNIVERSARY COMMENDATION
presented to members of the Hubble Space Telescope Astronaut Team by NASA Administrator Charles Bolden

CRADLE OF AVIATION MUSEUM SPIRIT OF DISCOVERY AWARD
given to leaders in aerospace who inspire future generations, in particular, in recognition for his courage, sacrifice, and service to the country as a Space Shuttle astronaut

Singular Honors



SHREE NAYAR

T. C. Chang Professor of Computer Science

NATIONAL ACADEMY OF INVENTORS

for demonstrating “a highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society”; he has been awarded more than 40 patents for his inventions related to digital imaging, computer vision, human-computer interfaces, and robotics



ISMAIL C. NOYAN

Professor of Materials Science and Engineering and of Earth and Environmental Engineering; Chair, Department of Applied Physics and Applied Mathematics

JENKINS LIFETIME ACHIEVEMENT AWARD, INTERNATIONAL CENTRE FOR DIFFRACTION DATA

for contributions to the development of residual stress measurements and their applications in materials science and for his teaching and research in neutron and x-ray diffraction methods for analyses of micro- and nanoscale structures



RICHARD M. OSGOOD JR.

Eugene Higgins Professor Emeritus of Electrical Engineering and Professor Emeritus of Applied Physics and Applied Mathematics

2015 IEEE PHOTONICS SOCIETY QUANTUM ELECTRONICS AWARD for seminal contributions to novel laser systems, laser-surface photochemistry, and integrated linear and nonlinear Si waveguides

Singular Honors



CHRISTOPHER SCHOLZ

Professor of Earth and Environmental Sciences and of Applied Physics and Applied Mathematics

HARRY FIELDING REID MEDAL, SEISMOLOGICAL SOCIETY OF AMERICA awarded for outstanding contributions in seismology and earthquake engineering



GORDANA VUNJAK-NOVAKOVIC

Mikati Foundation Professor of Biomedical Engineering and Professor of Medical Sciences

NATIONAL ACADEMY OF INVENTORS

for demonstrating “a highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society”; she has over 70 licensed, issued, or pending patents and has founded two biotech companies



Y. LAWRENCE YAO

Professor of Mechanical Engineering

MILTON C. SHAW MANUFACTURING RESEARCH MEDAL, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

for “significant fundamental contributions to the science and technology of manufacturing processes”

Faculty Early Career Development Awards



MATEI CIOCARLIE

Assistant Professor of Mechanical Engineering

OFFICE OF NAVAL RESEARCH (ONR) YOUNG INVESTIGATOR PROGRAM AWARD

for work on human-in-the-loop systems in which humans and robotic manipulators work together, side by side, on the same task



PIERRE GENTINE

Assistant Professor of Earth and Environmental Engineering

U.S. DEPARTMENT OF ENERGY (DOE) EARLY CAREER RESEARCH PROGRAM AWARD

to support research on land-atmosphere interactions and the role they play in weather and climate prediction



CHRISTINE HENDON

Assistant Professor of Electrical Engineering

NSF FACULTY EARLY CAREER DEVELOPMENT (CAREER) AWARD

to support her project, “Structure-Functional Imaging of the Atrial Myocardium,” and for her work using optical imaging and spectroscopy as a means to monitor radiofrequency ablation treatment of cardiac arrhythmias

Faculty Early Career Development Awards



NIMA MESGARANI

Assistant Professor of Electrical Engineering

2015 PEW SCHOLAR

to support interdisciplinary research spanning electrical engineering, neurophysiology, linguistics, and computational modeling to explore the complex neural networks involved in language perception and advance biologically inspired speech recognition programs



KRISTIN MYERS

Associate Professor of Mechanical Engineering

NSF FACULTY EARLY CAREER DEVELOPMENT (CAREER) AWARD to support her project, “Growth and Remodeling of the Uterine Cervix during Pregnancy”



MINGOO SEOK

Assistant Professor of Electrical Engineering

NSF FACULTY EARLY CAREER DEVELOPMENT (CAREER) AWARD

to support his project focused on computing chip design, “Addressing Deepening Variability Challenges for Next-Generation Margin-Free VLSI Computing Platform Design”

Faculty Early Career Development Awards



STEVE WAICHING SUN

Assistant Professor of Civil Engineering and Engineering Mechanics

U.S. ARMY YOUNG INVESTIGATOR PROGRAM AWARD

to support further research on modeling how microscopic water and air seepages inside each pore of granular materials, such as sand, silt, and sediment, affect the bearing capacity and stability of the ground

ELECTED MEMBER OF COMPUTATIONAL MECHANICS COMMITTEE AND GRANULAR MECHANICS COMMITTEE OF ASCE ENGINEERING MECHANICS INSTITUTE



QI WANG

Assistant Professor of Biomedical Engineering

2014 NARSAD YOUNG INVESTIGATOR AWARD OF THE BRAIN & BEHAVIOR RESEARCH FOUNDATION

to use advanced functional magnetic resonance imaging (fMRI) brain scans to measure the dynamics of neural circuits integrating visual and tactile information in patients with schizophrenia and autism spectrum disorder (ASD)

2015 SACKLER CONVERGENCE AWARD, THE SACKLER CENTER recognizing significant advances in convergence research—the integration of two or more of the following disciplines: mathematics, physics, chemistry, biomedicine, biology, astronomy, earth sciences, engineering, and computational science—for achievements possible only through such integration

Faculty Early Career Development Awards



JOHN WRIGHT

Assistant Professor of Electrical Engineering

2015 PAMI YOUNG RESEARCHER AWARD

given by the IEEE Computer Society to one early career researcher per year for outstanding research in the area of computer vision



NANFANG YU

Assistant Professor of Applied Physics and Applied Mathematics

DARPA YOUNG FACULTY AWARD

to support his research on “flat optics,” using strong interactions between light and 2D-structured materials to control light at will, and, in particular, metasurface-based flat optical modulators



CHANGXI ZHENG

Assistant Professor of Computer Science

NSF FACULTY EARLY CAREER DEVELOPMENT (CAREER) AWARD for his proposal, “Simulating Nonlinear Audiovisual Dynamics for Virtual Worlds and Interactive Applications,” to create realistic computer-generated sounds

Election to Professional Societies



MARK CANE

G. Unger Vetlesen Professor of Earth and Climate Sciences and Professor of Applied Physics and Applied Mathematics

FELLOW, THE OCEANOGRAPHY SOCIETY

for contributions to the understanding and prediction of the El Niño-Southern Oscillation (ENSO) and the tropical oceans and their effects on climate and society



MICHAEL J. MASSIMINO

Professor of Professional Practice, Mechanical Engineering

MEMBER, ASSOCIATION OF SPACE EXPLORERS

for individuals who have completed at least one orbit of the earth in a spacecraft



FENIOSKY PEÑA-MORA

Edwin Howard Armstrong Professor of Civil Engineering and Engineering Mechanics and Professor of Computer Science and of Earth and Environmental Engineering

FELLOW, CHARTERED INSTITUTE OF BUILDING (UNITED KINGDOM)
the world's largest professional body for construction management and leadership



LORENZO POLVANI

Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences

FELLOW, AMERICAN METEOROLOGICAL SOCIETY

for outstanding contributions to the atmospheric or related oceanic or hydrologic sciences

Election to Professional Societies



HENNING SCHULZRINNE

Julian Clarence Levi Professor of Mathematical Methods and Computer Science and Professor of Electrical Engineering

FELLOW, ASSOCIATION FOR COMPUTING MACHINERY

for contributions to the design of protocols, applications, and algorithms for Internet multimedia



LATHA VENKATARAMAN

Associate Professor of Applied Physics

FELLOW, AMERICAN PHYSICAL SOCIETY

for pioneering contributions to measurement and understanding of electron transport through single organic molecules



GORDANA VUNJAK-NOVAKOVIC

Mikati Foundation Professor of Biomedical Engineering and Professor of Medical Sciences

FELLOW, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS)
for distinguishing contributions to the field of tissue engineering, particularly by developing functional human tissues for regenerative medicine, stem cell research, and modeling of disease

BOARD OF DIRECTORS, AMERICAN INSTITUTE FOR MEDICAL AND BIOLOGICAL ENGINEERING (AIMBE)

CHAIR-ELECT, COLLEGE OF FELLOWS, AIMBE



CHRIS H. WIGGINS

Associate Professor of Applied Mathematics

FELLOW, AMERICAN PHYSICAL SOCIETY

for pioneering work in computational biology, including the applications of machine learning, statistical inference, and information theory for the investigation of biological networks

Recognitions and Achievements



AUGUSTIN CHAINTREAU

Assistant Professor of Computer Science

ROXANA GEAMBASU

Assistant Professor of Computer Science



XRAY (THE FIRST FINE-GRAINED, ROBUST, AND SCALABLE PERSONAL DATA TRACKING SYSTEM FOR THE WEB) featured in the *New York Times* Bits blog, 2014; *Guardian* Technology blog; *Fast Company* Co.Exist blog; *ReadWrite*; *NetworkWorld.com*; and nine other sources



JINGGUANG G. CHEN

Thayer Lindsley Professor of Chemical Engineering

2015 MCS GIUSEPPE PARRAVANO MEMORIAL AWARD FOR EXCELLENCE IN CATALYSIS RESEARCH



XI CHEN

Associate Professor of Computer Science

2015 PRESBURGER AWARD, EUROPEAN ASSOCIATION FOR THEORETICAL COMPUTER SCIENCE (EATCS) to a young scientist for outstanding contributions in theoretical computer science, documented by a published paper or a series of published papers

Recognitions and Achievements



ROXANA GEAMBASU

Assistant Professor of Computer Science

2014 MICROSOFT FACULTY FELLOWSHIP given to early-career scholars who are engaged in state-of-the-art computing research and have the potential to make significant advances in the field



DANIEL HSU

Assistant Professor of Computer Science

2014 YAHOO ACADEMIC CAREER ENHANCEMENT (ACE) AWARD for pioneering innovations that improve the Internet in both evolutionary and revolutionary ways



SHIHO KAWASHIMA

Assistant Professor of Civil Engineering and Engineering Mechanics

FORBES 30 UNDER 30 LIST: SCIENCE recognized for her work in experimental cement and concrete research



IOANNIS KYMISSIS

Associate Professor of Electrical Engineering

2014 *POPULAR SCIENCE MAGAZINE'S* INVENTION AWARD for Radiator Labs, developer of a radiator retrofit that increases the energy efficiency of steam heating systems

VERIZON POWERFUL ANSWERS AWARD for entrepreneurs, companies, and innovators worldwide to provide innovative solutions in transportation, emergency response, and Internet of Things

Recognitions and Achievements



FENIOSKY PEÑA-MORA

Edwin Howard Armstrong Professor of Civil Engineering and Engineering Mechanics and Professor of Computer Science and of Earth and Environmental Engineering

ASCE CONSTRUCTION MANAGEMENT AWARD

for exceptional leadership and outstanding contributions to the field of construction engineering and management through his education and research innovations

THOUSAND TALENTS PROGRAM EXPERT (CHINA)

VISITING CHAIR PROFESSORSHIP, TSINGHUA UNIVERSITY

VISITING FELLOW, ROYAL ACADEMY OF ENGINEERING (UNITED KINGDOM)



HENNING SCHULZRINNE

Julian Clarence Levi Professor of Mathematical Methods and Computer Science and Professor of Electrical Engineering

IEEE INTERNET AWARD

for exceptional contributions to the advancement of Internet technology



ADAM SOBEL

Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences

2014 ASCENT AWARD, AMERICAN GEOPHYSICAL UNION (ATMOSPHERIC SCIENCES SECTION)

for outstanding contributions to the modeling of aerosol properties and their impact on climate in the troposphere and lower stratosphere

LOUIS J. BATTAN AUTHOR'S AWARD FROM THE AMERICAN METEOROLOGICAL SOCIETY

for his book, *Storm Surge: Hurricane Sandy, Our Changing Climate, and Extreme Weather of the Past and Future*, which "makes accessible the sophisticated science behind Hurricane Sandy, highlighting the critical connection of severe weather prediction to our lives and a warming world"

Recognitions and Achievements



PONISSERIL SOMASUNDARAN

LaVon Duddleson Krumb Professor of Mineral Engineering, Earth and Environmental Engineering

2015 ALEXANDER SCHWARZKOPF PRIZE FOR TECHNOLOGICAL INNOVATION FROM THE INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTER (I/UCRC) ASSOCIATION COMMITTEE on behalf of the Center for Particulate and Surfactant Systems (CPaSS), recognized for its "exemplary research contribution to technology innovation and its positive impact on the technology, industry, and to society as a whole"



YANNIS TSIVIDIS

Edwin Howard Armstrong Professor of Electrical Engineering

FALL 2014 ISSUE OF *IEEE SOLID-STATE CIRCUITS MAGAZINE* WAS DEVOTED TO THE IMPACT OF HIS RESEARCH ON THE FIELD OF SOLID-STATE CIRCUITS



FRANCESCO VOLPE

Associate Professor of Applied Physics

FUSION POWER ASSOCIATES 2015 EXCELLENCE IN FUSION ENGINEERING AWARD

given annually since 1987 to recognize persons in the relatively early part of their careers who have shown both technical accomplishment and potential to become exceptionally influential leaders in the fusion field

Recognitions and Achievements



GORDANA VUNJAK-NOVAKOVIC

Mikati Foundation Professor of Biomedical Engineering and Professor of Medical Sciences

NAMED ONE OF THE 100 LEADING GLOBAL THINKERS FOR 2014 BY *FOREIGN POLICY MAGAZINE* FOR SUCCESSFULLY USING A 3D PRINTER TO CREATE REPLACEMENT CARTILAGE TISSUE

BLUE RIBBON ADVISORY PANEL FOR BIOENGINEERING/
COMPUTATIONAL BIOLOGY STUDY SECTIONS, NIH-CENTER FOR SCIENTIFIC REVIEW



MICHAEL WEINSTEIN

Professor of Applied Mathematics and of Mathematics

SIMONS MATH+X INVESTIGATOR
on a program established by the Simons Foundation to encourage novel collaborations between mathematics and other fields in science or engineering; to lead collaborations between the Applied Mathematics program of the Department of Applied Physics and Applied Mathematics and the Department of Mathematics in the mathematics of waves in novel media, such as those arising in optics, photonics, and condensed matter physics

Scholarly Leadership



SUNIL AGRAWAL

Professor of Mechanical Engineering and of Rehabilitation and Regenerative Medicine

CHAIR, ASME DESIGN DIVISION



GERARD ATESHIAN

Andrew Walz Professor of Mechanical Engineering and Professor of Biomedical Engineering

VICE CHAIR, U.S. NATIONAL COMMITTEE ON BIOMECHANICS



KATAYUN BARMAK

Philips Electronics Professor of Applied Physics and Applied Mathematics

PROGRAM CO-CHAIR, 16TH JOINT INTERNATIONAL MAGNETISM AND MAGNETIC MATERIALS AND INTERMAG CONFERENCE



SIMON J. L. BILLINGE

Professor of Materials Science and of Applied Physics and Applied Mathematics

SYMPOSIUM CO-ORGANIZER, ACA ANNUAL MEETING ON "POWDER PAIR DISTRIBUTION FUNCTION AND PHARMACEUTICALS"

2015 CHAIR, MATERIALS SPECIAL INTEREST GROUP OF THE AMERICAN CRYSTALLOGRAPHIC ASSOCIATION

2015 SNS TRIANNUAL REVIEW OF PHOTON SCIENCES DIVISION

2015 SPECIAL EDITION, NANOSCALE, PEROVSKITES AT THE NANOSCALE: FROM FUNDAMENTALS TO APPLICATIONS

Scholarly Leadership



PATRICIA CULLIGAN

*Professor of Civil Engineering and Engineering Mechanics;
Associate Director, Data Science Institute*

ELECTED CHAIR, STANDING COMMITTEE ON GEOLOGICAL AND
GEOTECHNICAL ENGINEERING, DIVISION OF EARTH AND LIFE
SCIENCES, NATIONAL ACADEMIES

ELECTED MEMBER, BOARD OF GOVERNORS, ASCE GEO-INSTITUTE



GEORGE DEODATIS

*Santiago and Robertina Calatrava Family Professor of Civil
Engineering; Chair, Department of Civil Engineering and
Engineering Mechanics*

MEMBER, BOARD OF GOVERNORS, ENGINEERING MECHANICS
INSTITUTE OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS



X. EDWARD GUO

*Professor of Biomedical Engineering; Vice Chair, Department of
Biomedical Engineering*

VICE CHAIR, CELLULAR AND TISSUE ENGINEERING COMMITTEE,
BIOENGINEERING DIVISION, ASME

CHAIR, NSF-COLUMBIA MECHANOMEDICINE SYMPOSIUM, COLUMBIA
UNIVERSITY

Scholarly Leadership



ANDREAS HIELSCHER

*Professor of Biomedical Engineering, of Radiology (Physics),
and of Electrical Engineering*

THEME CHAIR, BIOMEDICAL IMAGING & IMAGE PROCESSING,
IEEE ENGINEERING IN MEDICINE AND BIOLOGY CONFERENCE,
“BIOMEDICAL ENGINEERING: A BRIDGE TO IMPROVE THE QUALITY OF
HEALTH CARE AND THE QUALITY OF LIFE”

CHAIR, EUROPEAN CONFERENCE ON BIOMEDICAL OPTICS (ECBO)

THEME CHAIR AND EDITOR, BIOMEDICAL IMAGING & IMAGE
PROCESSING THEME, 36TH ANNUAL INTERNATIONAL CONFERENCE,
IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY
(EMBC'14)

CHAIR, EXTERNAL ADVISORY BOARD MEETING, NIH
BIOENGINEERING RESEARCH PROJECT, “A NOVEL OPTICAL SPECTRAL
IMAGING SYSTEM FOR RAPID IMAGING OF BREAST TUMOR MARGINS”



ELIZABETH HILLMAN

*Associate Professor of Biomedical Engineering and of Radiology
(Physics)*

INAUGURAL GENERAL CHAIR, THE OPTICAL SOCIETY (OSA) OPTICS
AND THE BRAIN MEETING

ELECTED GENERAL CHAIR, OSA BIOMEDICAL OPTICS (BIOMED)
MEETING, 2018 (VICE CHAIR IN 2016)

2014 CO-CHAIR, SPIE/OSA ECBO MEETING, “NEUROPHOTONICS”
CONFERENCE

2015 CO-CHAIR, “NEUROPHOTONICS” ECI CONFERENCE,
“ADVANCES IN OPTICS FOR BIOTECHNOLOGY, MEDICINE, AND
SURGERY XII”

2014 PROGRAM CHAIR, OSA BIOMED, “BIOPHYSICS, BIOLOGY &
BIOPHOTONICS: THE CROSSROADS”

Scholarly Leadership



GARUD IYENGAR

Professor of Industrial Engineering and Operations Research; Chair, Department of Industrial Engineering and Operations Research

SIMONS FOUNDATION DISTINGUISHED VISITOR, SIMONS CENTER FOR STUDY OF LIVING MACHINES AT THE NATIONAL CENTER FOR BIOLOGICAL SCIENCE, BANGALORE



PETER KINGET

Professor of Electrical Engineering

DISTINGUISHED LECTURER, 2015 IEEE SOLID-STATE CIRCUITS SOCIETY



ELISA KONOFAGOU

Professor of Biomedical Engineering and of Radiology (Physics)

2014 CO-CHAIR, INTERNATIONAL TISSUE ELASTICITY IMAGING CONFERENCE

2014 CO-CHAIR, IEEE INTERNATIONAL ULTRASONICS SYMPOSIUM



IOANNIS KOUGIOUMTZOGLOU

Assistant Professor of Civil Engineering and Engineering Mechanics

CERTIFICATE OF APPRECIATION, AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

for extraordinary efforts organizing the Second International Conference on Risk and Uncertainty (ICVRAM-ISUMA) at University of Liverpool, United Kingdom

Scholarly Leadership



SANAT KUMAR

Professor of Chemical Engineering; Chair, Department of Chemical Engineering

EDITOR, *NPJ COMPUTATIONAL MATERIALS*, PART OF THE NEW ONLINE SERIES OF NATURE PARTNER JOURNALS

ELECTED VICE CHAIR, DIVISION OF POLYMER PHYSICS, AMERICAN PHYSICAL SOCIETY



V. FAYE MCNEILL

Associate Professor of Chemical Engineering

VICE CHAIR, AIChE ENVIRONMENTAL DIVISION 2015 (SECOND VICE CHAIR IN 2014, CHAIR IN 2016)

SYMPOSIUM CHAIR, "THE ROLE OF WATER IN AEROSOL CHEMISTRY," AAAR ANNUAL MEETING, MINNEAPOLIS, MN, OCTOBER 2015



BARCLAY MORRISON III

Associate Professor of Biomedical Engineering; Vice Dean of Undergraduate Programs

ELECTED VICE PRESIDENT, INTERNATIONAL RESEARCH COUNCIL ON BIOMECHANICS OF INJURY



GERALD NAVRATIL

Thomas Alva Edison Professor, Applied Physics and Applied Mathematics

MEMBER, BOARD OF DIRECTORS, FUSION POWER ASSOCIATES

Scholarly Leadership



ISMAIL C. NOYAN

Professor of Materials Science and Engineering and of Earth and Environmental Engineering; Chair, Department of Applied Physics and Applied Mathematics

CHAIR, HARD X-RAY NANOPROBE BEAMLINE ADVISORY TEAM (HXN-BAT), NATIONAL SYNCHROTRON LIGHT SOURCE II (NSLS-II) BROOKHAVEN NATIONAL LABORATORY

CHAIR, BEAMTIME ALLOCATION COMMITTEE, NSLS-II



ARON PINCZUK

Professor of Applied Physics and of Physics

EDITOR-IN-CHIEF, *SOLID STATE COMMUNICATIONS JOURNAL*



LORENZO POLVANI

Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences

CONVENER, AGU CHAPMAN CONFERENCE ON “THE WIDTH OF THE TROPICS”

LEAD AUTHOR, UNEP/WMO 2014 SCIENTIFIC ASSESSMENT OF OZONE DEPLETION

CO-CHAIR, WHOLE ATMOSPHERE CHEMISTRY CLIMATE MODEL (WACCM)

Scholarly Leadership



ANDREW SMYTH

Professor of Civil Engineering and Engineering Mechanics

VICE PRESIDENT, ASCE EMI BOARD OF GOVERNORS



MICHAEL WEINSTEIN

Professor of Applied Mathematics and of Mathematics

SENIOR EDITOR, *JOURNAL OF NONLINEAR SCIENCE* (SPRINGER-VERLAG)

EDITORIAL BOARD, *STUDIES IN APPLIED MATHEMATICS* (MIT)

EDITORIAL BOARD, AMS MATHEMATICAL SURVEYS AND MONOGRAPHS

CHAIR, THEMATIC YEAR ON MATHEMATICS AND OPTICS, NSF-INSTITUTE FOR MATHEMATICS AND ITS APPLICATIONS (IMA)

MISSION STATEMENT

The mission of The Fu Foundation School of Engineering and Applied Science is to expand knowledge and advance technology through research, while educating students to become leaders informed by an engineering foundation. Enriched with the intellectual resources of a global university in the City of New York, we push disciplinary frontiers, confront complex issues, and engineer innovative solutions to address the grand challenges of our time. We create a collaborative environment that embraces interdisciplinary thought, integrated entrepreneurship, cultural awareness, and social responsibility, and advances the translation of ideas into practical innovations.

Excellence



COLUMBIA | ENGINEERING
The Fu Foundation School of Engineering and Applied Science

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