WELCOME AND INTRODUCTION

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

Andreas H. Hielscher
Professor of Biomedical Engineering

Shree Nayar
T. C. Chang Professor of Computer Science
Data Science: The 1890 Census (Herman Hollerith)

Chris H. Wiggins
Associate Professor, Applied Physics and Applied Mathematics
Data Science: Transforming the 21st Century

Raimondo Betti
Professor of Civil Engineering and Engineering Mechanics
Building Connections (William Barclay Parsons)

Andrew Smyth
Professor of Civil Engineering and Engineering Mechanics
Smart, Secure, Sustainable Cities

Venkat Venkatasubramanian
Ruben-Viele Professor of Chemical Engineering
Global Health: Mass Production of Antibiotics (Elmer Gaden)

Jingyue Ju
Ruben-Viele Professor of Chemical Engineering
Precision Medicine: Pioneering Genome Technology

Alan C. West
Ruben-Viele Professor of Electrochemistry
Pioneering Electrochemistry (Colin Fink)

Chris Marianetti
Associate Professor of Applied Physics and Applied Mathematics
Computation and Materials Discovery

Jeffrey Kysar
Professor of Mechanical Engineering
Frontiers of Engineering Science (Raymond Mindlin)

Latha Venkataraman
Associate Professor of Applied Physics and Applied Mathematics
Frontiers of Molecular Engineering

Upmanu Lall
Silberman Professor of Earth and Environmental Engineering
Environmental Sustainability: Sustainable Mining (Herbert Kellogg)

Ah-Hyung (Alissa) Park
Lenfest Associate Professor in Applied Climate Science, Earth and Environmental Engineering
Sustainable Energy: Carbon Sequestration

Helen H. Lu
Professor of Biomedical Engineering
Pioneers of Biomedical Engineering

Gordana Vunjak-Novakovic
The Mikati Foundation Professor of Biomedical Engineering
Precision Medicine: Regenerative Engineering

Sunil Agrawal
Professor of Mechanical Engineering
Kinematics of Motion (Ferdinand Freudenstein)

Eitan Grinspun
Associate Professor of Computer Science
Computational Animation and Entertainment
Patricia Culligan  
Professor of Civil Engineering and Engineering Mechanics  
Translational Innovation for Livable Cities  
(Charles F. Chandler)

Sam Sia  
Associate Professor of Biomedical Engineering  
Translational Innovation for a Livable World

Ward Whitt  
Wai T. Chung Professor of Industrial Engineering and Operations Research  
Risk Management  
(Cyrus Derman)

Garud Iyengar  
Professor of Industrial Engineering and Operations Research  
Network Risk Management

Kenneth L. Shepard  
Lau Family Professor of Electrical Engineering  
Pioneering Molecular Films  
(Irving Langmuir)

James C. Hone  
Wang Fong-Jen Professor of Mechanical Engineering  
Frontiers of Nanoscale Engineering

Michael Mauel  
Professor of Applied Physics and Applied Mathematics  
Pioneering Computational Fluid Dynamics  
(C. K. [John] Chu)

Adam Sobel  
Professor of Applied Physics and Applied Mathematics and of Environmental Sciences  
Computational Earth and Atmospheric Science

George Deodatis  
Santiago and Robertina Calatrava Family Professor of Civil Engineering and Engineering Mechanics  
Infrastructure Safety: Structural Reliability  
(Alfred M. Freudenthal)

Roxana Geambasu  
Assistant Professor of Computer Science  
Infrastructure Security: Privacy in a Data-Driven World

Shih-Fu Chang  
Richard Dicker Professor of Telecommunications, Electrical Engineering; Senior Vice Dean  
Communication Channels: FM Radio  
(Edwin H. Armstrong)

Keren Bergman  
Charles Batchelor Professor of Electrical Engineering  
Communication Channels: Optical Networks

Andreas Hielscher  
Professor of Biomedical Engineering  
Electrical Engineering Pioneer: X-ray Imaging (Michael I. Pupin)

Elizabeth Hillman  
Associate Professor of Biomedical Engineering  
Precision Medicine: Frontiers in Imaging

CLOSING REMARKS

Dean Boyce  
Reception immediately following the program