2024 FELLOWS

THIRTEENTH EDITION

NATIONAL ACADEMY OF INVENTORS

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ABOUT THE NAI FELLOWS PROGRAM

The NAI Fellow program has 2,068 Fellows worldwide representing more than 300 prestigious universities and governmental and non-profit research institutes. Collectively, the Fellows hold more than 68,000 issued U.S. patents, which have generated over 20,000 licensed technologies, 4,000 companies and created more than 1.2 million jobs. In addition, over $3.2 trillion in revenue has been generated based on NAI Fellow discoveries.

NAI FELLOWSHIP REQUIREMENTS

- Nominees should have made outstanding contributions to innovation in areas such as patents and licensing, innovative discovery and technology, significant impact on society and support and enhancement of innovation
- Nominees must be a named inventor on patent(s) issued by the United States Patent and Trademark Office
- Nominees must be affiliated with an academic organization, e.g., university, college, non-profit research institute or government research agency
- Nominees do not have to be current members of nor affiliated with an NAI Member Institution (recommended)
- All U.S. and non-U.S. citizens are eligible for nomination
- Deceased nominees are not eligible

Self-nomination, team submissions and nominations submitted by relatives are not eligible.

Nominations open May – July annually

Find more information at https://academyofinventors.org/about-the-nai-fellows-program/

NAI

NATIONAL ACADEMY OF INVENTORS

United States Patent and Trademark Office

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

April 14, 2025

Dear Colleagues,

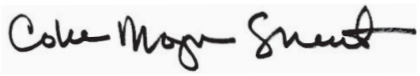
On behalf of the United States Patent and Trademark Office (USPTO), it is my pleasure to congratulate the National Academy of Inventors (NAI) 2024 class of fellows. We are honored to recognize the 170 innovators who are receiving the highest professional distinction awarded to academic inventors.

These academic inventors have demonstrated a prolific spirit of innovation, and their inventions have made a tangible impact on the quality of life, economic development, and welfare of our society.

We also applaud the NAI's efforts to recognize academic inventors with U.S. patents, enhance the visibility of academic technology and innovation, and encourage the disclosure of intellectual property.

Again, congratulations to the 2024 NAI Fellows for their outstanding accomplishments and advancement of innovation for the United States.

Sincerely,



Coke Stewart
Acting Undersecretary of commerce for Intellectual Property and Acting Director of the United States Patent and Trademark Office

P.O. Box 1450, Alexandria, VA 22313-1450 • www.uspto.gov

United States
of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE *119th* CONGRESS, FIRST SESSION

House of Representatives

HON. KATHY CASTOR OF FLORIDA

Extension of Remarks

Honoring the 170 Inventors Inducted as the 2024 Fellows of the National Academy of Inventors

Tuesday, June 3, 2025

Mr. Speaker, I rise today to honor the 170 inventors who will be inducted as the 2024 Fellows of the National Academy of Inventors (NAI). An induction ceremony will take place June 23-26, 2025, in Atlanta, Georgia to celebrate these inventors and their incredible accomplishments. The ceremony will be presided over by the Acting Director of the United States Patent and Trademark Office, Coke Morgan Stewart, and President of the National Academy of Inventors, Dr. Paul R. Sanberg. To be named as a Fellow, these individuals were nominated by their peers and underwent a review process by the NAI Selection Committee, which ultimately deemed their innovations as making a significant impact on the quality of life, economic development and the welfare of their communities, the residents of Florida and the United States.

The NAI Fellow program has 2,068 Fellows worldwide representing more than 300 prestigious universities and governmental and non-profit research institutes. Collectively, the Fellows hold more than 68,000 issued U.S. patents, which have generated over 20,000 licensed technologies, 4,000 companies and created more than 1.2 million jobs. In addition, over $3.2 trillion in revenue has been generated based on NAI Fellow discoveries.

Among NAI fellows, there are more than 170 senior leaders of research universities and nonprofit research institutes, over 755 members of the National Academies of Sciences, Engineering and Medicine, 63 inductees of the National Inventors Hall of Fame, 70 recipients of the U.S. National Medal of Technology and Innovation and U.S. National Medal of Science, 57 Nobel Laureates, over 533 AAAS Fellows, over 395 IEEE Fellows and more than 232 Fellows of the American Academy of Arts & Sciences, among other awards and distinctions.

Founded by Dr. Paul R. Sanberg at the University of South Florida in 2010, the NAI's mission is to recognize and encourage inventors with patents issued from the U.S. Patent and Trademark Office, enhance the visibility of academic technology and innovation, encourage the disclosure of intellectual property, educate, and mentor innovative students and translate the inventions of its members to benefit Florida and communities all throughout the United States. Mr. Speaker, on behalf of my neighbors in Tampa Bay and the citizens of Florida, I am proud to honor the 2024 Fellows of the National Academy of Inventors for this outstanding achievement. We owe a debt of gratitude to these inventors for their invaluable contributions to society, which continually propel us forward. May their example inspire future generations to pursue their own paths of discovery and innovation, ensuring a bright and innovative future for us all. I include in the Record the 2024 National

The 2024 NAI Fellows include:

Ishwar Aggarwall, The University of North Carolina at Charlotte; Pierre Agostini, The Ohio State University; Mark Akeson, University of California, Santa Cruz; Yousef Al-Abed, The Feinstein Institutes for Medical Research; Herb Aldwinckle, Cornell University; Dan Ammon Jr., University at Buffalo, The State University of New York; Alain Aspect, Institut d'Optique Graduate School; Corinne E. Augelli-Szafran, Southern Research Institute; Clinton Ballinger, Rensselaer Polytechnic Institute; Robeit S. Balog, Texas A&M University; Prith Banerjee, University of Illinois at Chicago; Ronald Barrett-Gonzalez, University of Kansas, Robert Bartlett, University of Michigan; Peter J. Basser, National Institutes of Health; Moungi Bawendi, Massachusetts Institute of Technology; Dibakar Bhattacharyya, University of Kentucky; Pratim Biswas, University of Miami; Silvia Blemker, University of Virginia; William Branch, University of Georgia; Malcolm Brenner, Baylor College of Medicine; Richard K. Brow, Missouri University of Science and Technology; Edgar B. Cahoon, University of Nebraska-Lincoln; Jianfeng Ca, University of South Florida; Hui Cao, Yale University; Arnold Caplan, Case Western Reserve University; John M. Cioffi, Stanford University; Corie L. Cobb, University of Washington. Eric W. Cochran, Iowa State University; Daniel Codd, University of San Diego; Todd J. Cohen, New York Institute of Technology; Bruce N. Cronstein, New York University Grossman School of Medicine; Maria Croyle, The University of Texas at Austin; Anthony Czarnik, University of Nevada, Reno; Arvin Dar, Memorial Sloan Kettering Institute Cancer Center; Matthew Darr, Iowa State University; Hiranmoy Das, Texas Tech University Health Sciences Center; Kenneth Dawson-Scully, Nova Southeastern University; Edward J. Delp, Purdue University; Horacio Dante Espinosa, Northwestern University; Ying Fang, University of Illinois Urbana-Champaign; Aaron Franklin, Duke University; Eby Friedman, University of Rochester; Klaus Fruh, Oregon Health & Science University; Lilit Garibyan, Massachusetts General Hospital/Harvard University; Robert Garry, Tulane University; Manas Ranjan Gartia, Louisiana State University; Arun K. Ghosh, Purdue University; Simon Francis Giszter, Drexel University; Steven Goldman, University of Rochester; Andrea Goldsmith, Princeton University; David Gracias, Johns Hopkins University; Joel S. Greenberger, University of Pittsburgh; Jaime Grunlan, Texas A&M University; Ephraim Gutmark, University of Cincinnati. Keith Hearon,

Boston University; Larry Heck, Georgia Institute of Technology; Wolfgang Heidrich, King Abdullah University of Science and Technology; Joseph P. Heremans, The Ohio State University; Mark Hoffman, University of Missouri-Kansas City; Kaibin Huang, The University of Hong Kong; Bertram Jacobs, Arizona State University; Hamid Jafarkhani, University of California, Irvine; Shibin Jiang, The University of Arizona; Christopher S. Johnson, Argonne National Laboratory; Sergei V. Kalinin, University of Tennessee, Knoxville/Pacific Northwest National Laboratory; Homayoon Kazerooni, University of California, Berkeley; Brian G. Kiernan, New Jersey Institute of Technology; Steven Koester, University of Minnesota; Johann Walter Kolar, ETH Zurich--Swiss Federal Institute of Technology Zurich; Farinaz Koushanfar, University of California, San Diego; Ferenc Krausz, Max Planck Institute of Quantum Optics, Garching, Germany; Ashok Kumar, University of South Florida; Eren Kurshan, Princeton University; Ioannis Kymissis, Columbia University; Klaus Lackner, Arizona State University; Gregory Lanza, Washington University in St. Louis; Matthew Laskoski, U.S. Naval Research Laboratory; Chih-Kung Lee, National Taiwan University. Hui (Helen) Li, Florida State University; Hai Li, Duke University; Wenbin Lin, University of Chicago; Walter Ian Lipkin, Columbia University; Xuedong Liu, University of Colorado Boulder; Devinder Mahajan, Stony Brook University; Abhijit Mahalanobis, The University of Arizona; Stanton F. McHardy, The University of Texas at San Antonio; Michael McLaughlin, The University of Adelaide; Shawn A. Mehlenbacher, Oregon State University; Charles L. Melcher, The University of Tennessee, Knoxville; Tommaso Melodia, Northeastern University; Rajesh Menon, The University of Utah; Theodore Moise, The University of Texas at Dallas; David Morse, H. Lee Moffitt Cancer Center & Research Institute; Javad Mostaghimi, University of Toronto; Naima Moustaid-Moussa, Texas Tech University; Christopher Murray, University of Pennsylvania; Tina M. Nenoff, Sandia National Laboratories; Gabriele Neumann, University of Wisconsin-Madison; Kytai T. Nguyen, The University of Texas at Arlington; Michael Niederweis, The University of Alabama at Birmingham; Thomas Nosker, Rutgers, The State University of New Jersey; Rafail Ostrovsky, University of California, Los Angeles. Cynthia Owsley, The University of Alabama at Birmingham; Cengiz Ozkan, University of California, Riverside; Makarand Paranjape, Georgetown University; Dan Peer, Tel Aviv University; Yuri Karl Peterson, Medical University of South Carolina; Konstantin Petrukhin, Columbia University; Wellington Pham, Vanderbilt University; Edwin Piner, Texas State University; Darrin Pochan, University of Delaware; Francisco Quintana, Harvard University; Muhammad Rabnawaz, Michigan State University; P. Srirama Rao, Virginia Commonwealth University; Ramesh Raskar, Massachusetts Institute of Technology; Edward Ratner, University of Houston; Jeff Reed, Virginia Tech; Fan Ren, University of Florida; Catherine L. Riddle, Idaho National Laboratory; Guillermo Risatti, University of Connecticut; Carol Robinson, University of Oxford; Cliona Mary Rooney, Baylor College of Medicine; Alberto Salleo, Stanford University; Richard Samulski, The University of North Carolina at Chapel Hill; Gaurav N. Sant, University of California, Los Angeles; Edward Sargent, Northwestern University; Charles Shoemaker, Tufts University; Daniel Siegwart, UT Southwestern Medical Center; Neal Sikka, The George Washington University; Blake Simmons, Lawrence Berkeley National Laboratory. Rajesh Singh, Morehouse School of Medicine; Anand Sivasubramaniam, The Pennsylvania State University; Yiqiao Song, Harvard University; Vivek Sujan, Oak Ridge National Laboratory; Zhaoli Sun, Johns Hopkins University; Nian Sun, Northeastern University; Yang Tao, University of Maryland, College Park; Ravi Thadhani, Emory University; Voon-Yew (Aaron) Thean, National University of Singapore; Ashley Parkinson Thrall, University of Notre Dame; Martin Thuo, North Carolina State University; Theo T. Tsotsis, University of Southern California; Francisco Valero-Cuevas, University of Southern California; Omid Veiseh, Rice University; Victor Veliadis, North Carolina State University; Uzi Vishkin, University of Maryland, College Park; Edmund Waller, Emory University; Angela Wandinger-Ness, The University of New Mexico; Guoan Wang, University of South Carolina; Grace J. Wang, Worcester Polytechnic Institute; Dean C. Webster, North Dakota State University; Di Wei, University of Cambridge; Marc Steven Weinberg, Draper Laboratory (CDSL), Ulrich Wiesner, Cornell University; Hugh E. Williams, RMIT University. Peter Wipf, University of Pittsburgh; Gary E. Wnek, Case Western Reserve University; Jang-Yen Wu, Florida Atlantic University; Wei Wu, University of Southern California; Younan Xia, Georgia Institute of Technology; Longya Xu, The Ohio State University; Zhen Xu, University of Michigan; Mengsu (Michael) Yang, City University of Hong Kong; Yang Yang, University of California, Los Angeles; Jianhua Yu, University of California, Irvine; Carlos A. Zarate Jr., National Institutes of Health; Junshan Zhang, University of California, Davis; Zhongfei (Mark) Zhang, Binghamton University, State University of New York; Ji-Guang (Jason) Zhang, Pacific Northwest National Laboratory; Min Zou, University of Arkansas.

Sincerely,

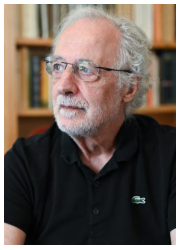
Kathy Castor
United States Representative
Florida - District 14

CLASS OF 2024 FELLOWS

Ishwar Aggarwall | *The University of North Carolina at Charlotte*

For his work in Fiber Optics and Lasers

https://physics.charlotte.edu/people/ishwar-aggarwal/



Pierre Agostini | *The Ohio State University*

For work in Physics

https://physics.osu.edu/people/agostini.4

Mark Akeson | *University of California, Santa Cruz*

For pioneering nanopore DNA and RNA sequencing which is a portable technology used in basic science and healthcare applications

https://nanopore.soe.ucsc.edu/people

Yousef Al-Abed | *The Feinstein Institutes for Medical Research*

For work in Chemistry

https://feinstein.northwell.edu/institutes-researchers/our-researchers/yousef-al-abed-md

Herb Aldwinckle | *Cornell University*

For work in Agriculture & Life Sciences

https://cals.cornell.edu/herbert-sanders-aldwinckle

Dan Ammon Jr. | *University at Buffalo, The State University of New York*

For serving millions of patients by innovating and developing several first to market medical devices

https://engineering.buffalo.edu/chemical-biological/people/faculty-directory/adjunct.html

Alain Aspect | *Institut d' Optique Graduate School*

For work in Physics

https://www.universite-paris-saclay.fr/en/alain-aspect

Corinne E. Augelli-Szafran | *Southern Research Institute*

For the discovery of novel compounds and advancing them into clinical trials for the treatment of cancer, diabetes and antivirals

https://southernresearch.org/corinne-augelli-szafran/

Clinton Ballinger | *Rensselaer Polytechnic Institute*

For translating technology into meaningful products and the reward of converting others into innovators!

https://faculty.rpi.edu/clint-ballinger

Robert S. Balog | *Texas A&M University*

For transitioning technology. I help develop in the academic laboratory into a commercialized product to better society

https://engineering.tamu.edu/electrical/profiles/index.html#Faculty

Prith Banerjee | *University of Illinois at Chicago*

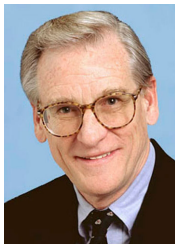
For leadership and advancement in applications of artificial intelligence and high-performance computing to computer-aided engineering simulation

https://6g.ucsd.edu/speaker/prith-banerjee

Ronald Barrett-Gonzalez | *University of Kansas*

For numerous STEM educational devices and brought personal carbon sequestration capability to individuals around the globe

https://ae.ku.edu/people/ron-barrett-gonzalez



Robert Barlett | *University of Michigan*

For work in Medicine

https://medschool.umich.edu/profile/3800/bob-bartlett

Peter J. Basser | *National Institutes of Health*

For the invention and development of diffusion tensor magnetic resonance imaging (DTI) and MRI Tractography

https://irp.nih.gov/pi/peter-basser

Moungi Bawendi | *Massachusetts Institute of Technology*

For work in Chemistry

https://chemistry.mit.edu/people/bawendi-moungi

Dibakar Bhattacharyya | *University of Kentucky*

For water decontamination and detoxification by functionalized and responsive membranes including 258 refereed journal and book chapter publications

https://engr.uky.edu/people/dibakar-bhattacharyya

Pratim Biswas | *University of Miami*

For being a Global leader in Aerosol Science and Technology; Innovator in Nanotechnology and Education

https://people.miami.edu/profile/4115fc73d4ecea6e88347a04b3e78b8a

Silvia Salinas Blemker | *University of Virginia*

For pioneering multi-scale muscle modeling and imaging-driven insights to transform treatments for musculoskeletal diseases, sports injuries, and human performance

https://med.virginia.edu/faculty/faculty-listing/ssb6n/

William Branch | *University of Georgia*

For the development of a new and improved peanut cultivar that benefits the whole peanut industry. (Grown on greater than 80% of the peanut acreage in Georgia, which grows approximately 50% of all the peanuts in the US)

https://cropsoil.uga.edu/people/faculty/william-branch.html

Malcolm Brenner | *Baylor College of Medicine*

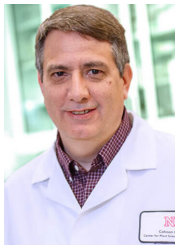
For developing a way to rapidly and safely control the survival of therapeutic cells in patients being treated for cancer

https://www.bcm.edu/people-search/malcolm-brenner-18659

Richard K. Brow | *Missouri University of Science and Technology*

For work in Materials Science

https://mst.elsevierpure.com/en/persons/richard-k-brow



Edgar B. Cahoon | *University of Nebraska-Lincoln*

For research has helped advance the nutritional and industrial value of crops

https://biochem.unl.edu/edgar-cahoon/

Jianfeng Cai | *University of South Florida*

For the development non-natural peptidomimetics-AApeptides for biomedical applications

https://www.usf.edu/arts-sciences/departments/chemistry/faculty/jianfeng-cai.aspx

Hui Cao | *Yale University*

For inventing ground-breaking light sources and demonstrated a wide range of applications
https://appliedphysics.yale.edu/hui-cao

Arnold Caplan | *Case Western Reserve University*

For work in Biology
https://thedaily.case.edu/faculty-member-arnold-caplan-passes-away/

John M. Cioffi | *Stanford University*

For the co-invention of the first artificially intelligent broadband link methods, internationally standardized for all xDSL, cable, cellular, and Wi-Fi systems
https://cioffi-group.stanford.edu

Corie L. Cobb | *University of Washington*

For the development of manufacturing platforms and material processing methods which have been licensed or commercialized for semiconductors, solar cells, and batteries.
https://www.me.washington.edu/facultyfinder/corie-l-cobb

Eric W. Cochran | *Iowa State University*

For inventions unleashed the low-cost manufacturing of polymer asphalt modifiers, adhesives, and coatings from glycerol and soybean oil
https://www.cbe.iastate.edu/the-department/facultystaff/profile/ecochran/

Daniel Codd | *University of San Diego*

For innovations in sensor design and insertion methods for low-cost, simplified continuous glucose monitoring benefiting diabetic patients worldwide
https://www.sandiego.edu/directory/biography.php?profile_id=1725

Todd J. Cohen | *New York Institute of Technology*

For Transforming Cardiopulmonary Resuscitation and Heart Failure Management with Breakthrough Cardiac Devices used World-wide
https://site.nyit.edu/bio/tcohen03

Bruce N. Cronstein | *New York University, Grossman School of Medicine*

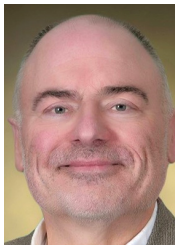
For working on purine metabolism and receptors and my greatest accomplishment is development of a purine-based therapy for osteoarthritis

https://med.nyu.edu/faculty/bruce-n-cronstein

Maria Croyle | *The University of Texas at Austin*

For developing a novel technology that reduces costs and allows for rapid and equitable distribution of drugs and vaccines globally

https://pharmacy.utexas.edu/directory/maria-croyle



Anthony Czarnik | *University of Nevada, Reno*

For inventing compounds that became fluorescent after binding glucose, then brought to market as a continuous glucose monitor

https://www.unr.edu/chemistry/people/anthony-czarnik

Arvin Dar | *Memorial Sloan Kettering Institute Cancer Center*

For work in Oncology

https://profiles.icahn.mssm.edu/arvin-dar

Matthew Darr | *Iowa State University*

For creating 88 unique patents and tech transfer licenses in the area of digital and precision agriculture.

https://www.abe.iastate.edu/abe-department/directory/profile/darr/

Hiranmoy Das | *Texas Tech University Health Sciences Center*

For identifying a transcription factor, KLF2 that inhibits master regulator of inflammation NFkB

https://www.ttuhsc.edu/pharmacy/research/das-lab.aspx

Kenneth Dawson-Scully | *Nova Southeastern University*

For developing of a potent antiepileptic drug class inspired by genetic and molecular insights into invertebrate neuroprotection against environmental stress

https://psychology.nova.edu/faculty/profile/dawson-scully.html

Edward J. Delp | *Purdue University*

For seminal work in the area mutilmedia forenics and the imapct this work has on society

https://engineering.purdue.edu/~ace/

Horacio Dante Espinosa | *Northwestern University*

For pioneering innovations and the development of novel engineered devices advancing materials research and technologies for cell manipulation and analysis

https: //www.mccormick.northwestern.edu/research-faculty/directory/profiles/espinosa-horacio.html

Ying Fang | *University of Illinois Urbana-Champaign*

For making outstanding contributions to develop, patent, licensing, and commercialization of important viral vaccines and diagnostic test kits

https://vetmed.illinois.edu/directory/profile/?id=yingf

Aaron Franklin | *Duke University*

For inventing new electronic device structures that enable everything from future transistors to sensors for monitoring tire health

https://ece.duke.edu/people/aaron-franklin/

Eby Friedman | *University of Rochester*

For supporting the US government in defending our country while enhancing our nation's technological and commercial success

https://hajim.rochester.edu/ece/sites/friedman/

Klaus Früh | *Oregon Health & Science University*

For work in Infectious Disease

https://www.ohsu.edu/vaccine-gene-therapy-institute/klaus-fruh-phd

Lilit Garibyan | *Massachusetts General Hospital, Harvard University*

For inventing and trailblazing a new field of injectable cooling to help patients

https://researchers.mgh.harvard.edu/profile/3297256/Lilit-Garibyan

Robert Garry | *Tulane University*

For inventing monoclonal antibody therapy for Lassa fever

https://medicine.tulane.edu/departments/microbiology-immunology-tulane-cancer-center-tips-advisory-committee-tips-mentor

Manas Ranjan Gartia | *Louisiana State University*

For nanotechnology based sensors for healthcare, energy, and environmental applications

https://www.lsu.edu/eng/mie/people/faculty/gartia.php

Arun K. Ghosh | *Purdue University*

For designing and developing FDA approved drug, Darunavir, for the treatment of HIV/AIDS patients and those with drug-resistant HIV variants

https://www.chem.purdue.edu/people/76

Simon Francis Giszter | *Drexel University*

For discoveries and patented technologies have been used commercially and have had clinical impact

https://drexel.edu/medicine/faculty/profiles/simon-giszter/

Steven Goldman | *University of Rochester*

For developing new methods for producing, genetically manipulating, and mobilizing neural and glial progenitor cells of the human brain.

https://www.urmc.rochester.edu/people/112361674-steven-a-goldman

Andrea Goldsmith | *Princeton University*

For innovations in wireless communications have been adopted in WiFi and cellular systems worldwide to allow fast, reliable service

https://ece.princeton.edu/people/andrea-goldsmith

David Gracias | *Johns Hopkins University*

For inventing a 3D integrated, micro and nanostructured materials and devices of broad relevance to electronics, optics, diagonstics and medicine

https://engineering.jhu.edu/chembe/faculty/david-gracias/

Joel S. Greenberger | *University of Pittsburgh*

For identifying multiple molecular biologic pathways for ionizing irradiation induced cell death and discovered mitigator drugs for each pathway

https://radiationoncology.pitt.edu/people/joel-s-greenberger-md-facro-facr-fastro

Jaime Grunlan | *Texas A&M University*

For developing environmentally-benign flame retardant treatment for almost every polymeric material

https://radiationoncology.pitt.edu/people/joel-s-greenberger-md-facro-facr-fastro

Ephraim Gutmark | *University of Cincinnati*

For work in Mechanical Engineering

https://researchdirectory.uc.edu/p/gutmarej

Keith Hearon | *Boston University*

For work in Biomedical Engineering

https://coe.gatech.edu/about/advisory-board

Larry Heck | *Georgia Institute of Technology*

For founding Cortana as Chief Scientist of Speech Products at Microsoft, first large-scale deployment of deep neural networks (HSN, 2000)

https://ece.gatech.edu/directory/larry-p-heck

Wolfgang Heidrich | *King Abdullah University of Science and Technology*

For the development of HDR Display and Computational Camera Technology

https://vccimaging.org/People/heidriw/

Joseph P. Heremans | *The Ohio State University*

For doping lead telluride with resonant dopants increases its thermoelectric efficiency to ZT=1.7

https://mae.osu.edu/people/heremans.1

Mark Hoffman | *University of Missouri-Kansas City*

For developing strategies to integrate genomic information with electronic health records

https://profiles.childrensmercy.org/mark-hoffman

Kaibin Huang | *The University of Hong Kong*

For the development of 4G and 5G technologies for multi-antenna communications and mobile edge computing

https://www.eee.hku.hk/~huangkb/

Bertram Jacobs | *Arizona State University*

For work in Biochemistry

https://search.asu.edu/profile/116491

Hamid Jarfarkhani | *University of California, Irvine*

For inventing innovative multi-input multi-output (MIMO) technologies for wireless communications

https://www.ece.uci.edu/~hamidj/

Shibin Jiang | *The University of Arizona*

For successfully founding four high-tech companies and patents as well as commercializing more than 15 innovative products

https://www.optics.arizona.edu/our-college/full-directory/all-faculty

Christopher S. Johnson | *Argonne National Laboratory*

For discovering and patenting the chemical material that goes into the Li-ion battery that powers electric vehicles

https://www.anl.gov/profile/christopher-stiles-johnson

Sergei V. Kalinin | *University of Tennessee, Knoxville/Pacific Northwest National Laboratory*

For Pioneering AI-driven automated electron and scanning probe microscopy for physics discovery, materials optimization, and advancing atom-by-atom fabrication with electron beams

https://me.berkeley.edu/people/homayoon-kazerooni/

Homayoon Kazerooni | *University of California, Berkeley*

For founding Ekso Bionics (2005, public 2014) and suitX (acquired by Ottobock 2021), pioneering medical/industrial exoskeletons

https://me.berkeley.edu/people/homayoon-kazerooni/

Brian G. Kierman | *New Jersey Institute of Technology*

For the direction of the development and initial production of the world's first commercial digital mobile phone

https://research.njit.edu/nai/sites/research.nai/files/Brian%20G%20Kiernan%20bio.pdf

Steven Koester | *University of Minnesota*

For work in Electrical Engineering

https://cse.umn.edu/ece/steven-koester

Johann Walter Kolar | *ETH Zurich - Swiss Federal Institute of Technology Zurich*

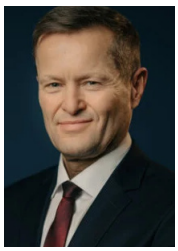
For inventions that have allowed electronic links the power distribution empires created by Thomas A. Edison and George Westinghouse

https://pes.ee.ethz.ch/education.html

Farinaz Koushanfar | *University of California, San Diego*

For his work pioneering secure and efficient AI-based computing, co-designing AI, hardware, and cryptography for robustness, IP protection, and privacy-preservation

https://jacobsschool.ucsd.edu/people/profile/farinaz-koushanfar



Ferenc Krausz | *Max Planck Institute of Quantum Optics, Garching, Germany*

For work in Physics

https://www.nobelprize.org/prizes/physics/2023/summary/

Ashok Kumar | *University of South Florida*

For work in Materials Science

https://www.eng.usf.edu/~kumar/

Eren Kurshan | *Princeton University*

For building innovative computing solutions for mission-critical applications in cybersecurity, fraud prevention, and financial crime detection for societal good

https://patents.princeton.edu/people/eren-kurshan

Ioannis Kymissis | *Columbia University*

For working on new displays and organic semiconductor devices

https://www.ee.columbia.edu/ioannis-john-kymissis

Klaus Lackner | *Arizona State University*

For work in Civil Engineering

https://search.asu.edu/profile/2483273

Gregory Lanza | *Washington University in St. Louis*

For work in Medicine

https://physicians.wustl.edu/people/gregory-m-lanza-md-phd/

Matthew Laskoski | *U.S. Naval Research Laboratory*

For encouraging the next generation of young scientists to protect their ideas using the patenting process and to work hard to develop these government technologies to distribute to the broader community

https://www.linkedin.com/in/matthew-laskoski-1a415585/

Chih-Kung Lee | *National Taiwan University*

For holding 166 patents & 144 papers from National Taiwan University

https://www.iam.ntu.edu.tw/en/facilities-en/169-en/%E6%9C%AC%E6%89%80%E6%88%90%E5%93%A1-en/professor-info-2/1294-chih-kung-lee-3

Hui (Helen) Li | *Florida State University*

For work in Electrical Engineering

https://web1.eng.famu.fsu.edu/~li/

Hai Li | *Duke University*

Contributions in neuromorphic computing and machine learning acceleration that advance the AI systems

https://ece.duke.edu/people/hai-helen-li/

Wenbin Lin | *University of Chicago*

For work in Chemistry

https://chemistry.uchicago.edu/faculty/wenbin-lin

Walter Ian Lipkin | *Columbia University*

For development of tools for infectious disease diagnosis, surveillance and discovery in clinical medicine and public health

https://www.publichealth.columbia.edu/profile/w-i-lipkin-md

Xuedong Liu | *University of Colorado Boulder*

For advancing cancer therapeutics, notably in precision oncology, and pioneering innovative drug delivery system

https://www.colorado.edu/biochemistry/xuedong-liu

Devinder Mahajan | *Stony Brook University*

For monetizing small gas fields by highly efficient conversion to liquid fuels in skid-mounted units

https://www.stonybrook.edu/commcms/matscieng/people/_core/devinder_mahajan

Abhijit Mahalanobis | *The University of Arizona*

For invention of methods for target detection and recognition for security and surveillance applications

https://www.crcv.ucf.edu/person/abhijit-mahalanobis/

Stanton F. McHardy | *The University of Texas at San Antonio*

For discovering small molecule drugs that went into advanced clinical trials to help patients

https://lsom.uthscsa.edu/mimg/team-member/stanton-f-mchardy-ph-d/

Michael Mclaughlin | *The University of Adelaide*

For developing improved fertilizers to enhance crop and animal nutrition to feed and improve the health of a growing world population

https://www.adelaide.edu.au/directory/michael.mclaughlin

Shawn A. Mehlenbacher | *Oregon State University*

For creating new hazelnut cultivars led to a tripling of the acreage in Oregon, and plantings in Chile and Europe

https://horticulture.oregonstate.edu/users/shawn-mehlenbacher

Charles L. Melcher | *The University of Tennessee, Knoxville*

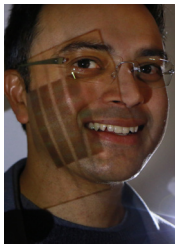
For his medical imaging invention (LSO scintillator) is now helping patients world-wide

https://ne.utk.edu/people/charles-l-melcher/

Tommaso Melodia | *Northeastern University*

For work in Computer Engineering

https://ece.northeastern.edu/wineslab/tmelodia.php



Rajesh Menon | *The University of Utah*

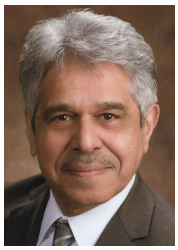
For revolutionizing imaging with computational multimodal optics, leveraging full photon properties for breakthroughs in science, industry, and technology
https://profiles.faculty.utah.edu/u0676529

Theodore Moise | *The University of Texas at Dallas*

For developing along with his team, a low-power memory technology that enables 100x faster data storage than conventional approaches
https://ntxsi.utdallas.edu/contact-us/

David Morse | *H. Lee Moffitt Cancer Center & Research Institute*

For the development of a targeted alpha-particle therapy for effective treatment of metastatic uveal melanoma
https://www.moffitt.org/research-science/researchers/david-morse/



Javad Mostaghimi | *University of Toronto*

For the development of a conical ICP torch for trace element analysis saving over 2 M liters of argon/ year; Air-cooled interface for ICP-Mass Spectrometer
https://www.mie.utoronto.ca/faculty_staff/mostaghimi/

Naima Moustaid-Moussa | *Texas Tech University*

For significant work in health and economic impacts of metabolic diseases , as millions suffer or die each year from these illnesses
https://www.depts.ttu.edu/hs/ns/moustaid-moussa.php

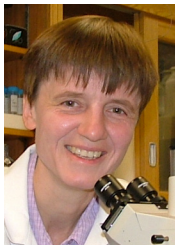
Christopher Murray | *University of Pennsylvania*

For work in Chemistry
https://www.chem.upenn.edu/profile/christopher-b-murray

Tina M. Nenoff | *Sandia National Laboratories*

For the translation of basic research to commercialization of crystalline silicotitanates to clean radioactive Cesium from the nuclear accident at Fukushima Daiichi

https://www.sandia.gov/research/area/materials-and-advanced-manufacturing-clone-3/people/tina-m-nenoff/



Gabriele Neumann | *University of Wisconsin-Madison*

For work in Veterinary Medicine

https://www.vetmed.wisc.edu/people/gabrielle-neumann/

Kytai T. Nguyen | *The University of Texas at Arlington*

For development of novel nanoparticles and drug delivery systems to treat cancers, cardiovascular diseases, and lung disorders

https://www.uta.edu/academics/faculty/profile?user=knguyen

Michael Niederweis | *The University of Alabama at Birmingham*

For discovering the channel protein MspA which was used to demonstrate that sequencing of DNA with nanopores is feasible

https://apps.medicine.uab.edu/FacultyDirectory/FacultyData.asp?FID=17935

Thomas Nosker | *Rutgers, The State University of New Jersey*

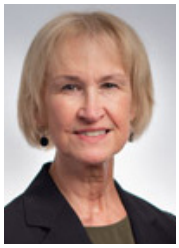
For work in Materials Science

https://mse.rutgers.edu/thomas-nosker

Rafail Ostrovsky | *University of California, Los Angeles*

For inventing numerous fundamental cryptographic algorithms including Oblivious RAM, single-server Private Infomration Retrieval, Garbled RAM

https://web.cs.ucla.edu/~rafail/



Cynthia Owsley | *The University of Alabama at Birmingham*

For work in Medicine

https://www.uab.edu/medicine/ophthalmology/faculty/owsley

Cengiz Ozkan | *University of California, Riverside*

For groundbreaking innovations in materials design for batteries, supercapacitors, and semiconductor devices, revolutionizing energy storage, electronics, and advancing technology commercialization

https://profiles.ucr.edu/app/home/profile/cozkan

Makarand Paranjape | *Georgetown University*

For developing patient-friendly dermal patch technologies for non-invasively sensing blood-borne biomolecules, without drawing blood, and passively delivering drugs transdermally

https://physics.georgetown.edu/makarand-paranjape/

Dan Peer | *Tel Aviv University*

For pioneering work in the field of systemic, cell specific delivery of RNA payloads using targeted lipid nanoparticles

https://english.tau.ac.il/vp_research_and_development

Yuri Karl Peterson | *Medical University of South Carolina*

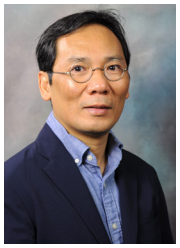
For leading drug discovery efforts that accelerate and reduce the cost of finding therapies by integrating chemistry, biology, and computing

https://education.musc.edu/MUSCApps/FacultyDirectory/Peterson-Yuri

Konstantin Petrukhin | *Columbia University*

For work in Opthamology

https://www.vagelos.columbia.edu/profile/konstantin-petrukhin-phd/



Wellington Pham | *Vanderbilt University*

For the integration of medicinal chemistry with biomarker imaging for personalized and precision medicine

https://engineering.vanderbilt.edu/bio/?pid=wellington-pham

Edwin Piner | *Texas State University*

For Innovating the fundamental materials that enabled commercialization of the multi-billion dollar III-nitride on silicon power electronics industry

https://faculty.txst.edu/profile/1922595

Darrin Pochan | *University of Delaware*

For work in Engineering

https://www.dbi.udel.edu/biographies/darrin-j-pochan

Francisco Quintana | *Harvard University*

For identifying mechanisms that regulate the immune system, developing new tools for its investigation and therapies for human diseases

https://www.brighamandwomens.org/research/labs-and-projects/quintana/overview

Muhammad Rabnawaz | *Michigan State University*

For enabling zero-waste packaging through innovations in plastic and paper packaging materials

https://www.canr.msu.edu/people/rabnawaz-muhammad

P. Srirama Rao | *Virginia Commonwealth University*

For his work amongst my various patents to co-patent technologies that advanced to clinical trials and received CE mark approval

https://research.vcu.edu/about/vp-for-research-and-innovation/

Ramesh Raskar | *Massachusetts Institute of Technology*

For work in Electrical Engineering
https://web.media.mit.edu/~raskar/

Edward Ratner | *University of Houston*

For developing technology that underlies video streaming today by changing video quality in real-time based on the connection speed
https://dot.egr.uh.edu/programs/undergraduate/computer-information-systems/faculty/?l=ratner&f=ed

Jeff Reed | *Virginia Tech*

For developing new systems for managing the electromagnetic spectrum that allows for spectrum sharing
https://reed.wireless.vt.edu

Fan Ren | *University of Florida*

For work in Chemical Engineering
https://che.ufl.edu/people/faculty/name/fan-ren/

Catherine L. Riddle | *Idaho National Laboratory*

For technology will save lives during a radiological disaster: Codeac (Colorimetric Detection of Actinides)
https://www.nsta.org/science-teacher/science-teacher-novemberdecember-2021/radiochemist-catherine-riddle

Guillermo Risatti | *University of Connecticut*

For work in Veterinary Medicine
https://cuba.uconn.edu/person/guillermo-risatti/

Carol Robinson | *University of Oxford*

For designing a mass spectrometer that enabled a new phase for structural biology

https://www.chem.ox.ac.uk/people/dame-carol-robinson

Cliona Mary Rooney | *Baylor College of Medicine*

For pioneering the clinical use of virus-specific T-cells for the treatment of cancer

https://www.bcm.edu/people-search/cliona-rooney-29800

Alberto Salleo | *Stanford University*

For contributing to the development of the fundamental understanding and technological advances in polymers for optoelectronics and electrochemistry

https://mse.stanford.edu/people/alberto-salleo

Richard Samulski | *The University of North Carolina at Chapel Hill*

For work in Pharmacology

https://www.med.unc.edu/pharm/directory/r-jude-samulski-phd/

Gaurav N. Sant | *University of California, Los Angeles*

For translating carbon management technologies from the bench- to commercial scales

https://samueli.ucla.edu/people/gaurav-sant/

Edward Sargent | *Northwestern University*

For developing and commercializing new materials for light sensing and for solar energy conversion

https://chemistry.northwestern.edu/people/core-faculty/profiles/ted-sargent.html

Charles Shoemaker | *Tufts University*

For the advanced discovery and application of camelid single-domain antibodies as components of immunotherapeutics

https://facultyprofiles.tufts.edu/charles-shoemaker

Daniel Siegwart | *The University of Texas Southwestern Medical Center*

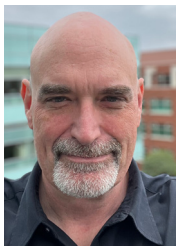
For pioneering the discovery and development of lipid nanoparticles for delivery of genetic medicines

https://profiles.utsouthwestern.edu/profile/133851/daniel-siegwart.html

Neal Sikka | *The George Washington University*

For inventing medical devices that improve the patient experience

https://gwdocs.com/profile/neal-sikka



Blake Simmons | *Lawrence Berkeley National Laboratory*

For discovery and demonstration of novel biomass deconstruction and conversion technologies

https://biosciences.lbl.gov/profiles/blake-simmons/

Rajesh Singh| *Morehouse School of Medicine*

For research exploring cancer, nanotechnology, and chemokines to improve therapeutic outcomes and overall survival for cancer patients

https://www.msm.edu/about_us/FacultyDirectory/MicrobiologyBiochemistryImmunology/RajeshSingh/index.php

Anand Sivasubramaniam | *The Pennsylvania State University*

For work in Power Management of Datacenters and High-end Computer Systems

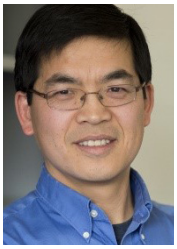
https://www.cse.psu.edu/~axs53/

Yiqiao Song | *Harvard University*

For working on novel nuclear magnetic resonance instruments, methodology, and diverse applications
https://www.nmr.mgh.harvard.edu/user/6975

Vivek Sujan | *Oak Ridge National Laboratory*

For pioneering disruptive automotive technologies in telematics and zero emissions, driving industry innovation toward smarter, cleaner, and more efficient mobility
https://www.ornl.gov/sites/default/files/2021-08/resume_sujan_cummins_2021_wPublications.pdf



Nian Xiang Sun | *Northeastern University*

For innovations in integrated magnetic and magnetoelectric materials and microsystems
https://coe.northeastern.edu/people/sun-nian-xiang/

Zhaoli Sun | *Johns Hopkins University*

For pioneering MRG-001, a novel immunoregulatory and regenerative therapy in Phase II clinical trials for diseases lacking effective treatments
https://profiles.hopkinsmedicine.org/provider/zhaoli-sun/2776996

Yang Tao | *University of Maryland, College Park*

For developing machine vision-guided automation and smart manufacturing technologies to enhance quality, safety, and efficiency across bioengineering, food and agricultural automation
https://bioe.umd.edu/clark/faculty/222/Yang-Tao

Ravi Thadhani | *Emory University*

For developing the first diagnostic test for preeclampsia, a major cause of maternal and fetal mortality, approved by the FDA
https://whsc.emory.edu/about/leadership/bios/thadhani-ravi.html

Voon-Yew (Aaron) Thean | *National University of Singapore*

For semiconductor innovation that enabled the world's first SiGe logic transistors introduced into high-volume consumer electronics in 2009

https://cde.nus.edu.sg/ece/staff/aaron-voon-yew-thean/

Ashley Parkinson Thrall | *University of Notre Dame*

For building the Kinetic Structures Laboratory where she investigates the behavior of modular, rapidly constructible, and deployable structures

https://athrall.nd.edu

Martin Thuo | *North Carolina State University*

For frugal innovations like Heat-free/low temperature solders and seed lubricants

https://mse.ncsu.edu/people/mthuo/

Theo T. Tsotsis | *University of Southern California*

For the development of high temperature membrane reactors and the advancement of novel carbon capture and utilization technologies

https://viterbi.usc.edu/directory/faculty/Tsotsis/Theodore

Francisco Valero-Cuevas | *University of Southern California*

For creating practical solutions to improve health and wellbeing

https://pt.usc.edu/faculty/francisco-valero-cuevas-phd/

Omid Veiseh | *Rice University*

For developing and commercializing encapsulated cell-based therapeutics for the treatment of metabolic diseases, cancer, Type-1 diabetes, and other autoimmune disorders

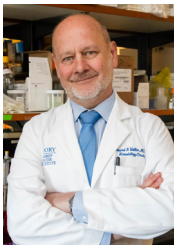
https://profiles.rice.edu/faculty/omid-veiseh

Victor Veliadis | *North Carolina State University*

For Commercialization of energy efficient SiC and GaN power devices and electronics, which bring substantial economic growth and harmful emissions reductions
https://ece.ncsu.edu/people/jvveliad/

Uzi Vishkin | *University of Maryland, College Park*

For integrated general-purpose architecture accelerator inventions support the parallel algorithms theory he previously co-founded, impacting Billions of desktops and laptops
https://ece.umd.edu/clark/faculty/491/Uzi-Vishkin



Edmund Waller | *Emory University*

For inventing a novel immunotherapy drug that blocks an immune checkpoint pathway and activates T cells to eradicate cancer
https://winshipcancer.emory.edu/profiles/waller-edmund.php

Angela Wandinger-Ness | *The University of New Mexico*

For demonstration of GTPase enzymes as drug targets for cancer and infectious diseases
https://hsc.unm.edu/directory/wandinger-ness-angela.html

Grace J. Wang | *Worcester Polytechnic Institute*

For playing an integral role in the R&D of computer hard disk drives, achieving significant increase of data storage capacity
https://www.wpi.edu/news/grace-jinliu-wang-phd-named-worcester-polytechnic-institute-s-17th-president

Guoan Wang | *University of South Carolina*

For contributions in the advancement of semiconductor and RF technologies addressing challenges related to spectrum, power, and size efficiency
https://sc.edu/study/colleges_schools/engineering_and_computing/faculty-staff/wangguoan.php

Dean C. Webster | *North Dakota State University*

For coatings systems with reduced environmental and health impact

https://www.ndsu.edu/faculty/dewebste/

Di Wei | *University of Cambridge*

For pioneering nanoengineering contributions, created innovative nano-hierarchical designs advancing iontronics in energy and information technologies

https://www.cpds.eng.cam.ac.uk/staff/professor-di-wei-0

Marc Steven Weinberg | *Draper Laboratory (CDSL)*

For first silicon micromachined gyroscope started commercial sensor revolution applied to smartphones, automobiles, drones, aerospace, virtual reality, cameras, machinery, medical, oil-exploration

https://ieeexplore.ieee.org/author/37322787100

Ulrich Wiesner | *Cornell University*

For work in Chemical Engineering

https://www.mse.cornell.edu/faculty-directory/uli-b-wiesner

Hugh E. Williams | *RMIT University*

For co-inventing Infinite Scroll while at Microsoft in the early 2000s

https://hughewilliams.com/shortbio/

Peter Wipf | *University of Pittsburgh*

For natural products total synthesis, developing new chemical methods and potential therapeutics, including a PI-3 kinase inhibitor that reached clinical trials

https://www.chem.pitt.edu/person/peter-wipf

Gary E. Wnek | *Case Western Reserve University*

For his accomplishments are directly traced to students and colleagues over many years. He is grateful for their creativity, engagement and friendship
https://case.edu/engineering/about/faculty-and-staff-directory/gary-wnek

Jang-Yen Wu | *Florida Atlantic University*

For the development of mechanism-based therapeutic intervention for neurological diseases including stroke, Parkinson's disease and Alzheimer's disease
https://www.fau.edu/medicine/directory/jang-yen-wu/

Wei Wu | *University of Southern California*

For being a prolific inventor with 121 issued U.S. Patents with 10 of the patents being licensed to three different startup companies
https://viterbi.usc.edu/directory/faculty/Wu/Wei

Younan Xia | *Georgia Institute of Technology*

For inventing myriad nanomaterials for applications in catalysis, energy conversion, environmental protection, electronics, photonics, display, nanomedicine, and regenerative medicine
https://chemistry.gatech.edu/people/younan-xia

Longya Xu | *The Ohio State University*

For the invention of clean, efficient, and smart energy-power technologies to make our society better and sustainable
https://ece.osu.edu/news/2023/02/ece-professor-longya-xu-elected-2023-national-academy-engineering-cohort

Zhen Xu | *University of Michigan*

For inventing the first non-invasive, mechanical technology (histotripsy) that uses ultrasound to perform incisionless surgery for cancer treatment
https://bme.umich.edu/people/xu-zhen/

Mengsu (Michael) Yang | *City University of Hong Kong*

For innovative research and pioneering development of advanced microfluidics and biosensor technologies that significantly enhance early disease detection and personalized medicine
https://scholars.cityu.edu.hk/en/persons/m-yang%28740ae7ac-ccc4-4569-857f-31d9dfc2ef89%29.html

Yang Yang | *University of California, Los Angeles*

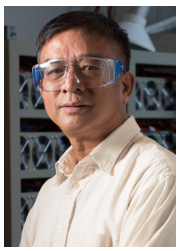
For accelerating innovation in organic and perovskite photovoltaics, bridging the gap from laboratory breakthroughs to market deployment
https://samueli.ucla.edu/people/yang-yang/

Jianhua Yu | *University of California, Irvine*

For seminal contributions to advancing innate immune cell-based cancer immunotherapy and oncolytic virotherapy
https://www.faculty.uci.edu/profile/?facultyId=7295

Carlos A. Zarate Jr. | *National Institutes of Health*

For his work with ketamine, which led to the approval of esketamine by the FDA
https://www.nimh.nih.gov/research/research-conducted-at-nimh/principal-investigators/carlos-zarate



Ji-Guang (Jason) Zhang | *Pacific Northwest National Laboratory*

For Developing a new concept of electrolyte design (Localized High Concentration Electrolytes) that enables high efficiency operation of rechargeable batteries
https://www.pnnl.gov/people/jason-zhang

Junshan Zhang | *University of California, Davis*

For leadership in edge AI and wireless networks, who has developed data-driven technology innovations for various IoT applications
https://faculty.engineering.ucdavis.edu/jzhang/

Zhongfei (Mark) Zhang | *Binghamton University, State University of New York*

For work in Computer Science

https://www.binghamton.edu/computer-science/people/profile.html?id=zzhang

Min Zou | *University of Arkansas*

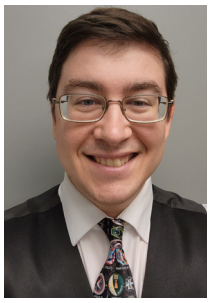
For developing patented technologies that improved renewable energy, reduced industrial friction, and supported cycling, driving economic growth and creating high-tech jobs

https://engineering.uark.edu/mechanical-engineering/

2024 FELLOWS SELECTION COMMITTEE*

Karen J.L. Burg, Ph.D. | *Vice President for Research, University of Georgia, Harbor Lights Endowed Chair, College of Veterinary Medicine, University of Georgia, AAAS-Lemelson Invention Ambassador, NAI Fellow, NAI Board Member*

Karen J.L. Burg, Ph.D. was named Vice President for Research in 2021. She holds the Harbor Lights Chair in Small Animal Studies in the College of Veterinary Medicine at the University of Georgia (UGA). Prior to joining UGA, she served as vice president for research and professor of chemical engineering at Kansas State University. Honors to Karen include the Presidential Early Career Award for Scientists and Engineers, the inaugural Swiss AO Research Prize, recognition as an American Association for the Advancement of Science-Lemelson Invention Ambassador, an American Association for the Advancement of Science Fellow, an American Council on Education Fellow, an American Institute for Medical and Biological Engineering Fellow, a Biomedical Engineering Society Fellow, an International Union of Societies for Biomaterials Science and Engineering Fellow, a Massachusetts Institute of Technology TR Young Innovator, a National Academy of Inventors Fellow, and a US Department of Defense Era of Hope Scholar. Karen is the inventor of record of eight issued patents, with licenses serving as the foundation for a thriving diagnostics company. Karen served as a member of the United States delegation for the 2017 Global Entrepreneurship Summit (GES) in Hyderabad, India and as alumna ambassador for the 2019 GES in The Hague, The Netherlands.



Kevin C. Cooke, Ph.D. | *Director of Research Policy, Association of Public and Land-Grant Universities (APLU)*

Cooke works with the senior research officers of the APLU Council on Research to develop understanding and strategy in response to federal government policies and regulations affecting research and innovation programs and to share information and best practices for the administration of university research operations. Previously, Dr. Cooke was selected as an American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellow and worked at the National Science Foundation. He provided program analyses for the strategic visioning of the Established Program to Stimulate Competitive Research (EPSCoR), an NSF program designed to address the nation's geographic diversity of R&D spending. Dr. Cooke's academic experience includes researching the growth of massive, star-forming galaxies over cosmic time using images and spectra from ground- and space-based telescope facilities, such as the Hubble Space Telescope. He also has a passion for science communication, having worked in the U.S. Space and Rocket Center educating the public on the value of the space race and public investment in R&D. Dr. Cooke earned his Ph.D. in Astrophysical Sciences and Technology from the Rochester Institute of Technology.

2024 FELLOWS SELECTION COMMITTEE*

Elizabeth Lea Dougherty, J.D. | *Eastern Regional Outreach Director, U.S. Patent and Trademark Office, HonNAI, NAI Board Member*

As the Eastern Regional Outreach Director for the U.S. Patent and Trademark Office (USPTO), Elizabeth Dougherty carries out the strategic direction of the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, and is responsible for leading the USPTO's East Coast stakeholder engagement. Focusing on the region and actively engaging with the community, Ms. Dougherty ensures the USPTO's initiatives and programs are tailored to the region's unique ecosystem of industries and stakeholders. Ms. Dougherty has more than 25 years of experience working at the USPTO. She served as the Senior Advisor to the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. In this role, she worked closely across the Agency's leadership to implement the policies and priorities for the USPTO. She began her career at the USPTO as a patent examiner after graduating from The Catholic University of America with a bachelor's degree in physics. While a patent examiner, Ms. Dougherty went on to obtain her J.D. from The Columbus School of Law at The Catholic University of America and served as a Senior Legal Advisor in the Office of Patent Legal Administration for a significant part of her career. Over the years, she has also served in the USPTO's Office of Petitions, the Office of Innovation Development, and the Office of Government Affairs.

Ms. Dougherty has dedicated much of her career to the USPTO's outreach and education programs focusing on small businesses, startups and entrepreneurs. In this effort she has developed, implemented, and supervised programs that support the independent inventor community, small businesses, entrepreneurs, and the intellectual property interests of colleges and universities. Similarly Ms. Dougherty has spearheaded a number of special projects with federal, state and local governments, and private organizations to promote and support invention and innovation in the United States.

Ms. Dougherty is a member of the Virginia Bar, the Giles S. Rich American Inn of Court, the Pauline Newman American Inn of Court, the American Bar Association, the Federal Circuit Bar Association, the American Intellectual Property Law Association, the Patent and Trademark Office Society, the Supervisory Patent Examiners and Classifiers Organization, Women in Science and Engineering, Federally Employed Women, and the Network of Executive Women.

2024 FELLOWS SELECTION COMMITTEE*

Louis J. Foreman | *Founder and Chief Executive, Enventys*

Louis Foreman is founder and Chief Executive of Enventys (www.enventys.com), an integrated product design and engineering firm. Louis graduated from The University of Illinois with a degree in Economics. Over the past 35 years Louis has created 10 successful start-ups and has been directly responsible for the creation of over 20 others. A prolific inventor, he is the inventor of 10 registered US Patents, and his firm is responsible for the development and filing of hundreds more. The recipient of numerous awards for entrepreneurial achievement, his passion for small business extends beyond his own companies. Louis is an Assistant Professor of the Practice in the Entrepreneurship Program at Wake Forest University. Louis is an adjunct professor and the Entrepreneur in Residence at The McColl School of Business and was the 2013 Distinguished Visiting Professor at Johnson & Wales University, where he continues to teach. He also teaches IP for Entrepreneurs at Central Michigan. He was recognized by the National Museum of Education for his Distinguished Contributions to Education. He is a frequent lecturer and radio / TV guest on the topics of small business creation and innovation.

In addition to being an inventor, Louis is also committed to inspiring others to be innovative. Louis was the creator of the Emmy® Award winning PBS TV show, Everyday Edisons, and served as the Executive Producer and lead judge. The show won 2 Emmys in 4 seasons and appeared nationally on PBS. In 2007, Louis became the publisher of Inventors Digest, a 35- year-old publication devoted to the topic of American Innovation. In 2009, his first book, The Independent Inventor's Handbook, was published by Workman Publishing. In 2015, Louis was awarded the IP Champion Award by the US Chamber of Commerce. In June of 2022, Louis was inducted into the International IP Hall of Fame. He is a board member of the Intellectual Property Owners Association (IPO), The Federal Reserve Bank Industry Roundtable, Beyond Campus Innovations, Cryptyde, the Intellectual Property Owners Educational Foundation (IPOEF), and the advisory board of Park National Bank. In 2008, Louis was appointed by United States Secretary of Commerce Carlos M. Gutierrez to serve for a three-year term on the nine-person Patent Public Advisory Committee (PPAC) of the United States Patent and Trademark Office and was appointed to serve an additional three-year term. The Committee was created by Congress in 1999 to advise the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office on matters relating to the policies, goals, performance, budget, and user fees of the patent operation. In 2013 he was asked to serve as Chairman of PPAC until the end of his term in December 2014. In 2011 Louis was called upon, multiple times, to brief the House and Senate Judiciary Committees on legislation related to the US Patent System and its impact on independent inventors. On September 16, 2011, Louis joined the President on-stage for the signing of the America Invents Act into law. This bi-partisan effort represented the most comprehensive overhaul to the US Patent System in over 60 years.

Kate Hudson | *Deputy Vice President and Counsel for Government Relations and Public Policy, Association of American Universities, HonNAI*

Kate Hudson serves as the Deputy Vice President and Counsel for Policy and Federal Relations, her portfolio includes intellectual property, technology transfer, open and public access, data privacy, and copyright issues. In addition, she supports AAU's policy and federal relations work in areas that require legal expertise, such as tax issues related to research, labor and employment, research security policy, higher education Title IX issues, and other regulatory matters important to America's leading research universities. Kate also leads AAU's General Counsels (GC) constituent group and Intellectual Property & Tech Transfer Task Force. She is a former federal agency attorney, serving at the Government Accountability Office, the U.S. Office of Personnel Management, and the U.S. General Services Administration as senior counsel.

2024 FELLOWS SELECTION COMMITTEE*

Robert S. Langer, Sc.D. | *National Medal of Technology and Innovation Recipient, National Medal of Science Recipient, National Inventors Hall of Fame Inductee, NAI Fellow, David H. Koch Institute, Professor, Massachusetts Institute of Technology*

Robert S. Langer is the David H. Koch Institute Professor at MIT (there are 13 Institute Professors at MIT; being an Institute Professor is the highest honor that can be awarded to a faculty member). He has written more than 1,400 articles. He also has over 1,300 issued and pending patents worldwide. His many awards include the United States National Medal of Science, the United States National Medal of Technology and Innovation, the Charles Stark Draper Prize (considered the engineering Nobel Prize), Albany Medical Center Prize (largest US medical prize), the Wolf Prize for Chemistry and the Lemelson-MIT prize, for being "one of history's most prolific inventors in medicine." Langer is one of the very few individuals ever elected to the National Academy of Medicine, the National Academy of Engineering, the National Academy of Inventors and the National Academy of Sciences.Society, the Supervisory Patent Examiners and Classifiers Organization, Women in Science and Engineering, Federally Employed Women, and the Network of Executive Women.

Cato T. Laurencin, M.D., Ph.D. | *University Professor & Albert and Wilda Van Dusen, Distinguished Professor of Orthopaedic Surgery, University of Connecticut, NAI Fellow, NAI Board Member*

Cato T. Laurencin, M.D., Ph.D. is the University Professor and Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery at the University of Connecticut. A surgeon-engineer-scientist, he is Professor of Chemical, Materials, and Biomedical Engineering at UConn. He serves as Chief Executive Officer of the Connecticut Convergence Institute for Translation in Regenerative Engineering, at UConn Health. He earned his B.S.E. in Chemical Engineering from Princeton University, his M.D., Magna Cum Laude, from the Harvard Medical School, and his Ph.D. in Biochemical Engineering/Biotechnology from the Massachusetts Institute of Technology. Dr. Laurencin has produced seminal research and technologies on nanotechnology and tissue regeneration, polymer/ceramic systems for bone regeneration, and biomaterials for soft tissue regeneration. Dr. Laurencin is a pioneer of the field of Regenerative Engineering. He received the NIH Director's Pioneer Award, and the National Science Foundation's Emerging Frontiers in Research and Innovation Grant Award for this field. For his work he has received singular honors including the American Association for the Advancement of Science Philip Hauge Abelson Prize given 'for signal contributions to the advancement of science in the United States', the Simon Ramo Founder's Award from the National Academy of Engineering and the Walsh McDermott Prize from the National Academy of Medicine. He is the first in history to win all three of these awards. Dr. Laurencin is a world leader in invention and innovation, and he is the recipient of the National Medal of Technology and Innovation, America's highest award for technological achievement, award by President Barack Obama in ceremonies at the White House.

2024 FELLOWS SELECTION COMMITTEE*

Andrew J. Maas, AUTM | *AUTM / Immediate Past Chair (2024)*

Andy is the Assistant Vice President – Technology Transfer Discovery to Impact Team at The University of Texas at Austin. He has more than 20 years of experience in technology licensing and commercialization.

Andy's activities have taken him from an engineering startup where he built a company from two to 14 employees to academic roles in both university and research foundation settings.

Currently, Andy manages a team within the University of Texas Discovery to Impact supporting Intellectual Property Management, Licensing, Business Development, Collaborative Research, and Legal Strategies.

Prior to his role at UT Austin, Andy was the Associate Vice President for Research over the office Innovation and Ecosystem Development where he was responsible for all technology commercialization, small business support, incubation, acceleration, and SBIR/STTR activities of the LSU Flagship campus in Baton Rouge, Louisiana. At LSU, Andy was the Principal Investigator for a $160M NSF Engine award, Future Use of Energy in Louisiana (FUEL), brought together 65+ partners across the state and over 165 individuals during the ideation, planning, development and submission process. In addition to the $160M from the NSF, Louisiana Economic Development committed $67.5M to support the program.

Andy has been involved in the AUTM Valuation Committee as a Member since 2015 and the Chair from 2016 to 2020.

Arthur Molella, Director Emeritus | *Director Emeritus, Smithsonian Lemelson Center for the Study of Invention & Innovation*

Arthur P. Molella, Ph.D., was the founding director, now emeritus, of the Smithsonian Institution's Lemelson Center for the Study of Invention and Innovation at the National Museum of American History. He received his Ph.D. in the history of science from Cornell University and a Doctor of Science, honoris causa, from Westminster University, U.K (2005). At the National Museum of American History, he served variously as curator of electricity, chairman of the Department of History of Science and Technology, and assistant director for History. At Johns Hopkins University, he has served as Senior Lecturer, Dept. History of Science, and currently Lecturer M.A. in Museum Studies, On-Line, Advanced Academic Programs. He was head curator of the Smithsonian's Science in American Life exhibition, co-curator of the international exhibition, Nobel Voices. He has published and lectured widely on the history of science, invention, technology, and modern technological culture. His most recent books include Places of Invention (Smithsonian, 2015), World's Fairs on the Eve of War (Pittsburgh, 2015), World's Fairs in the Cold War (Pittsburgh, 2019). In addition to serving on the Executive Advisory Board of the National Academy of Inventors, he is on the board of the Florida Inventors Hall of Fame. He received the 2020 Leonardo da Vinci Medal of the Society for the History of Technology, the international society's highest award.

2024 FELLOWS SELECTION COMMITTEE*

Rini Paiva | *Executive Vice President for Selection and Recognition, National Inventors Hall of Fame*

Rini Paiva is the Executive Vice President for Selection and Recognition, National Inventors Hall of Fame (NIHF). In this role, she oversees the annual Inductee Selection process for the NIHF, working with a wide-ranging group of experts in science, technology, engineering, intellectual property, and history to ultimately recognize the world's foremost patented inventors for their life-changing and innovative work. In addition, Paiva facilitates the Collegiate Inventors Competition (CIC), which brings recognition to the country's outstanding college students who create the technologies that shape the future. Both the NIHF and the CIC are dedicated to recognizing and fostering invention, creativity, and entrepreneurship. Paiva also provides oversight for the NIHF Museum in Alexandria, Virginia, which features the life-changing Inductees of the NIHF and demonstrates the power of intellectual property and innovation. Also integral to her work is encouraging NIHF Inductees to be involved in the organization's education programs, Camp Invention and Invention Project, so that they may serve as inspiration, encouragement, and examples to younger generations. With the National Inventors Hall of Fame since 1995, Paiva is an authority on the topic of U.S. invention.

Laura Savatki, MBA, CLP, RTTP | *Executive Director Innovation, University of Louisville, Past Chair, AUTM*

Laura directs innovation development efforts for the University of Louisville. In this role, her team is responsible for technology identification & protection, commercialization, and partnership development. Laura has a diverse background as a research scientist, entrepreneur, and start-up advisor, and broad experience bringing inventions to market. Laura's early career in medical research focused on vaccine trials, stem cell biology, transplant/oncology, and cellular assays. Her past roles include Vice President and Chief Operating Officer for Prodesse, a company she co-founded, which makes molecular infectious disease diagnostic products (now as part of Hologic). Laura has served on the board for the Alliance of Technology Transfer Professionals (ATTP) which confers the Registered Technology Transfer Professional credential for the profession. She is completing her service as the immediate past Chair of AUTM, the leading association for technology transfer.

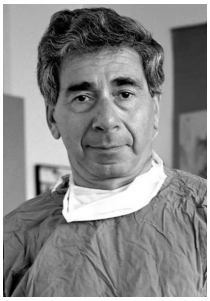
Denise Zannino, Ph.D. | *Science Policy and Communications Analyst, National Science Foundation*

Denise Zannino, Ph.D. is a Science Policy and Communications Analyst at the National Science Foundation in the Office of Legislative and Public Affairs. In this capacity she is responsible for internal communications and strategic visioning, project management for special events such as press conferences and symposiums, and general science outreach and communications projects. Prior to this role Denise was a AAAS Science & Technology Policy Fellow in the same office.
Denise earned her Ph.D. in neuroscience from Vanderbilt University, and a BS in biology and psychology from James Madison University. She is passionate about utilizing her scientific background and experience in biomedical research to communicate science to a varied range of audiences including the public, media, and other scientists, and to promote scientific programs, outreach, and awareness.

IN MEMORIAM

Honoring the lives of the prolific NAI Fellows we lost during the past year

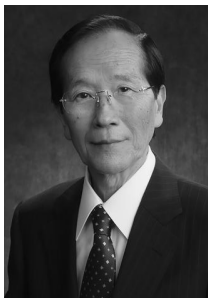
Donald L. Bitzer
1934-2024
North Carolina State University
NAI Fellow Class of 2017



Roy Calne
1931-2024
University of Cambridge
NAI Fellow Class of 2012

Arnold I. Caplan
1942-2024
Case Western Reserve University
NAI Fellow Class of 2024

Joanne Chory
1955-2024
Salk Institute for Biological Studies
NAI Fellow Class of 2017



Akira Endo
1933-2024
Tokyo University of Agriculture and Technology
NAI Fellow Class of 2012

Robert "Bob" Anthony Holton
1944-2025
Florida State University
NAI Fellow Class of 2018

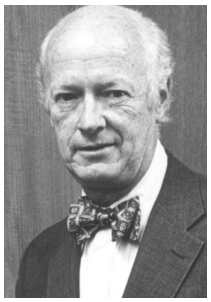
Joseph S. Kalinowski
1958-2024
East Carolina University
NAI Fellow Class of 2015

Joseph P. Kennedy
1928-2024
The University of Akron
NAI Fellow Class of 2012

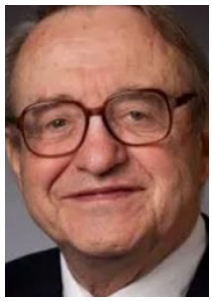
Michael R. Lovell
1967-2024
Marquette University
NAI Fellow Class of 2013

IN MEMORIAM

Honoring the lives of the prolific NAI Fellows we lost during the past year



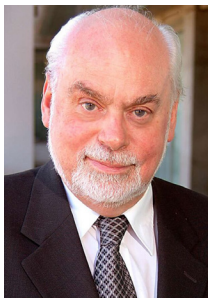
William P. Murphy
1924-2024
Florida International University
NAI Fellow Class of 2018



Darwin J. Prockop
1929-2024
Texas A&M University
NAI Fellow Class of 2014

Andrew V. Schally
1926-2024
University of Miami
NAI Fellow Class of 2015

Gregory Scott Schultz
1949-2024
University of Florida
NAI Fellow Class of 2020



J. Fraser Stoddart
1942-2024
The University of Hong Kong
NAI Fellow Class of 2019

Andrew M. Weiner
1958-2024
Purdue University
NAI Fellow Class of 2016

S.D. Worley
1942-2024
AuburnUniversity
NAI Fellow Class of 2014

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