



# 2022 FELLOWS

ELEVENTH EDITION





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## ABOUT THE NAI FELLOWS PROGRAM

The NAI Fellow program has more than 1,700 Fellows worldwide representing more than 300 prestigious universities and governmental and non-profit research institutes. Collectively, the Fellows hold more than 58,000 issued U.S. patents, which have generated over 13,000 licensed technologies, 3,200 companies and created more than 1 million jobs. In addition, over \$3 trillion in revenue has been generated based on NAI Fellow discoveries.

Nominations open May–July annually

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

### 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 (the median patent count among current NAI Fellows is 20)
- 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/nomination-process/>





## United States Patent and Trademark Office

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

March 1, 2023

Dear Colleagues,

On behalf of the United States Patent and Trademark Office (USPTO), America's Innovation Agency, I congratulate the National Academy of Inventors (NAI) newly elected 2022 class of Fellows. The USPTO is pleased to recognize these 169 transformative innovators who are receiving the highest professional distinction awarded to academic inventors. Their research and discoveries have revolutionized numerous fields and industries. They are an inspiration to future innovators.

I also commend the NAI for continuing to celebrate and honor the incredible role patented technology, produced by American colleges and universities, makes to our society, economy, and quality of life.

Over the past 12 years the USPTO's relationship with the NAI has grown and, and it culminated last year in the signing of a joint project agreement to better serve under-resourced inventors— many women, minorities, veterans, and persons with disabilities. Our work together will continue to benefit all those who strive to advance science and the useful arts.

Again, congratulations to the 2022 NAI Fellows for their outstanding accomplishments and all they have contributed to the world.

Sincerely,

A handwritten signature in blue ink that reads "Kathi Vidal". The signature is written in a cursive, flowing style.

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





# Congressional Record

PROCEEDINGS AND DEBATES OF THE 118<sup>th</sup> CONGRESS, SECOND SESSION

## House of Representatives

HON. KATHY CASTOR

Extension of Remarks

### Honoring the 169 Inventors Inducted as the 2022 Fellows of the National Academy of Inventors Friday, June 16, 2023

Ms. CASTOR of Florida. Mr. Speaker, I rise today to honor the 169 inventors to be inducted as the 2022 Fellows of the National Academy of Inventors (NAI). An induction ceremony will take place this June in Washington D.C. to celebrate these inventors and their incredible accomplishments, presided over by Undersecretary of Commerce and Director of the United State Patent and Trademark Office, Kathi Vidal, and President of NAI, 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 significant impact on quality of life, economic development and the welfare of society.

Collectively, this year's NAI Fellows hold over 5,000 patents. This remarkable group includes individuals from 110 research universities and non-profit research institutes from across the United States and the world. Today, the NAI maintains a strong membership of 1,736 Fellows; it is composed of more than 200 senior leaders of research universities and nonprofit research institutes, over 650 members of the National Academies of Sciences, Engineering, and Medicine, 49 inductees of the National Inventors Hall of Fame, 63 recipients of the U.S. National Medal of Technology and Innovation and U.S. National Medal of Science, 49 Nobel Laureates, 491 AAAS Fellows, 366 IEEE Fellows, and 265 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 society.

Mr. Speaker, on behalf of my neighbors in Tampa Bay and the citizens of Florida, I am proud to honor the 2022 Fellows of the National Academy of Inventors on this outstanding achievement. We are incredibly grateful to innovators for their contributions to society and its constant revolutionization through their inventions. As the following 169 inventors are inducted into the NAI's growing community, may this encourage future generations to strive toward this achievement and to continue the spirit of discovery and innovation.

The 2022 NAI Fellows include:

Eben Alsberg, University of Illinois Chicago; Husam Alshareef, King Abdullah University of Science and Technology; Tara Alvarez, New Jersey Institute of Technology; Robert Anderson, Illinois Institute of Technology; James Antaki, Cornell University; Gonzalo Arce, University of Delaware; Huseyin Arslan, Istanbul Medipol University; Pranesh Aswath, The University of Texas at Arlington; Matthew Becker, Duke University; Barry Bercu, University of South Florida.

Richard Blair, University of Central Florida; Gerardus Boons, University of Georgia; Brett Bouma, Massachusetts General Hospital Research Institute; Alan Bovik, The University of Texas at Austin; Paul Braun, University of Illinois Urbana-Champaign; Raj Bridgellall, North Dakota State University; Marco Carvalho, Florida Institute of Technology; Shih-Fu Chang, Columbia University; Christopher

Chen, Boston University; Wei Chen, The University of Texas at Arlington.

Ray Chen, The University of Texas at Austin; Floyd Chilton, The University of Arizona; Wonbong Choi, University of North Texas; Marc Christensen, Clarkson University; Carlos Cordon-Cardo, Mount Sinai Health System; Sean Cutler, University of California, Riverside; Dipankar Dasgupta, The University of Memphis; Rafael Davalos, Virginia Polytechnic Institute and State University; Mark Dertzbaugh, U.S. Army Medical Research & Development Command (USAMRDC).

Raymond Dingledine, Emory University; Tammy Dugas, Louisiana State University; Linda Dwoskin, University of Kentucky; Ayman El-Refaei, Marquette University; Ali Erdemir, Texas A&M University; Ronald Faller, University of Nebraska-Lincoln; Philip Felgner, University of California, Irvine; Naola Ferguson-Noel, University of Georgia; J.J. Garcia-Luna-Aceves, University of California, Santa Cruz; Ehud Gazit, Tel Aviv University.

Lee Gehrke, Massachusetts Institute of Technology; Guy Genin, Washington University in St. Louis; Maria Gennaro, Rutgers, The State University of New Jersey; Charles Gersbach, Duke University; Roozbeh Gha-ari, Northwestern University; Joseph Glorioso, III, University of Pittsburgh; Yury Gogotsi, Drexel University; Viviana Gradinaru, California Institute of Technology; Warren Grill, Duke University; Cuntai Guan, Nanyang Technological University, Singapore.

Farshid Guilak, Washington University in St. Louis and Shriners Children's St. Louis; Peixuan Guo, The Ohio State University;

Mool Gupta, University of Virginia; Susan C. Hagness, University of Wisconsin-Madison; William Hahn, Harvard University; Robert Hancock, The University of British Columbia; Jo Handelsman, University of Wisconsin-Madison; Joshua Hare, University of Miami; Vincent Harris, Northeastern University; Bin He, Carnegie Mellon University.

Daniel Henderson, New Jersey Institute of Technology; Payam Heydari, University of California, Irvine; Anthony J. Hickey, The University of North Carolina at Chapel Hill and RTI International; Elizabeth Hillman, Columbia University; Michael Hindle, Virginia Commonwealth University; John A. Hossack, University of Virginia; Jinlian Hu, City University of Hong Kong; Ru Chih Huang, Johns Hopkins University; Hao Huang, University of Houston; Patrick Hwu, H. Lee Moffitt Cancer Center & Research Institute.

Petros Ioannou, University of Southern California; Ravinder Jain, The University of New Mexico; Klavs Jensen, Massachusetts Institute of Technology; Jean Jiang, The University of Texas Health Science Center at San Antonio; Jian Jin, Mount Sinai Health System; David Julius, University of California, San Francisco; Katalin Kariko, University of Pennsylvania; Michael Khonsari, Louisiana State University; Anastasia Khvorova, University of Massachusetts Medical School; Joseph A. King, Jr., U.S. Department of Energy—Advanced Research Projects Agency (ARPA-E).

William King, University of Illinois Urbana-Champaign; Michael King, Vanderbilt University; John Kitching, National Institute of Standards and Technology; Shohei Koide, New York University; Ilya Kolmanovsky, University of Michigan; Vijay Kumar, University of Pennsylvania; Debomoy Lahiri, Indiana University; Nancy Lane, University of California, Davis; Changzhi Li, Texas Tech University; Jianrong Li, The Ohio State University.

Kai Liu, Georgetown University; Yu-Hwa Lo, University of California, San Diego; Gabriel Lopez-Berestein, University of Texas MD Anderson Cancer Center; Jiebo Luo, University of Rochester; David MacMillan, Princeton University; Upamanyu Madhoo, University of California, Santa Barbara; Sanford Markowitz, Case Western Reserve University; B.S. Manjunath, University of California, Santa Barbara; Nicholas

McKeown, Stanford University; Ge'ard Medioni, University of Southern California. Anand Mehta, Medical University of South Carolina; Benjamin Miller, University of Rochester; Ronald Montelaro, University of Pittsburgh; Orhun Muratoglu, Massachusetts General Hospital Research Institute; Nosang Myung, University of Notre Dame; Barbara Osborne, University of Massachusetts Amherst; Adegboyega Oyelere, Georgia Institute of Technology; George Painter, Emory University; Shivendra Panwar, New York University; Ardem Patapoutian, The Scripps Research Institute.

Fang Zheng Peng, Florida State University and Florida A&M University; Randall Prather, University of Missouri-Columbia; Robert Prudhomme, Princeton University; Lili Qiu, The University of Texas at Austin; Ramamoorthy Ramesh, University of California, Berkeley; Anshuman Razdan, University of Oregon; Danny Reible, Texas Tech University; Amy R. Reibman, Purdue University; Stephen Riederer, Mayo Clinic; J. Paul Robinson, Purdue University.

Krishan Sabnani, Johns Hopkins University; Juan Santiago, Stanford University; Justin Schwartz, The Pennsylvania State University; Charles Sentman, Dartmouth; Jay Shendure, University of Washington; A. Dean Sherry, The University of Texas at Dallas and The University of Texas Southwestern Medical Center; Molly Shoichet, University of Toronto; Justin Siegel, University of California, Davis; Rajiv Singh, University of Florida; Kazem Sohraby, Utah Valley University.

Florian Solzbacher, The University of Utah; Nicole Steinmetz, University of California, San Diego; Robert Strongin, Portland State University; Saraswati Sukumar, Johns Hopkins University; Charles R. Sullivan, Dartmouth; Madhavan Swaminathan, Georgia Institute of Technology; Dennis Sylvester, University of Michigan; Mark Tehranipoor, University of Florida; Sylvia Thomas, University of South Florida; Kenneth Tobin, Oak Ridge Associated Universities.

Carlo Traverso, Massachusetts Institute of Technology; Guochuan Emil Tsai, University of California, Los Angeles; Erik Tucker, Oregon Health & Science University; Dustin Tyler, Case Western Reserve University; Yonhua Tzeng, Auburn University and National Cheng Kung

University; Eric Wachsman, University of Maryland, College Park; Yadong Wang, Cornell University; Zhong Lin Wang, Georgia Institute of Technology; Kang Wang, University of California, Los Angeles; Joseph Wang, University of California, San Diego.

Daniel Martin Watterson, Northwestern University; Drew Weissman, University of Pennsylvania; Douglas Werner, The Pennsylvania State University; R. Stanley Williams, Texas A&M University; Justin Williams, University of Wisconsin-Madison; Jeannette Wing, Columbia University; Peter Winzer, Technical University Graz, Austria; Joseph Wu, Stanford University; Charles Wyman, University of California, Riverside; Ganapati Yadav, Institute of Chemical Technology, Mumbai.

Hao Yan, Arizona State University; Yuanyuan Yang, Stony Brook University; Jianhua Joshua Yang, University of Southern California; Raymond Wai Ho Yeung, The Chinese University of Hong Kong; Roe-Hoan Yoon, Virginia Polytechnic Institute and State University; Mone Zaidi, Icahn School of Medicine at Mount Sinai; Chang-Guo Zahn, University of Kentucky; Ji-Cheng Zhao, University of Maryland, College Park; Yuntian Zhu, North Carolina State University and City University of Hong Kong; Xiaowei Zhuang, Harvard University and Howard Hughes Medical Institute.

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You can access the online version of the Congressional Record [here](#).



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## CLASS OF 2022 FELLOWS

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**Eben Alsberg** | *University of Illinois Chicago*

Biomedical Engineering

🌐 <https://bme.uic.edu/profiles/alsberg-eben/>



**Husam Niman Alshareef** | *King Abdullah University of Science and Technology*

Materials Science

🌐 <https://www.kaust.edu.sa/en/study/faculty/husam-n-alshareef>



**Tara Alvarez** | *New Jersey Institute of Technology*

Biomedical Engineering

🌐 <https://expertfile.com/experts/tara.alvarez/tara-alvarez>



**Robert Anderson** | *Illinois Institute of Technology*

Chemical Engineering

🌐 <https://www.iit.edu/directory/people/robert-anderson>



**James Antaki** | *Cornell University*

Biomedical Engineering

🌐 <https://www.engineering.cornell.edu/faculty-directory/james-francis-antaki>



**Gonzalo R. Arce** | *University of Delaware*

Electrical Engineering

🌐 <https://www.eecis.udel.edu/~arce/>



**Huseyin Arslan** | *University of South Florida*

Electrical Engineering

🌐 <http://wcsp.eng.usf.edu/team.html>



**Pranesh Belgod Aswath** | *The University of Texas at Arlington*

Materials Science

🌐 <https://www.kaust.edu.sa/en/study/faculty/husam-n-alshareef>



**Matthew L. Becker** | *Duke University*

Chemistry

🌐 <https://sites.duke.edu/mlbeckergroup/people/current-group/matthew-l-becker/>



**Barry B. Bercu** | *University of South Florida Medicine*

Medicine

🌐 <https://health.usf.edu/medicine/pediatrics/directories/emeritus-faculty>



**Richard George Blair** | *University of Central Florida*

Chemistry

🌐 <https://sciences.ucf.edu/physics/blair-research/>



**Gerardus Boons** | *University of Georgia*

Biochemistry

🌐 <https://www.chem.uga.edu/directory/people/geert-jan-boons>





**Brett E. Bouma** | *Massachusetts General Hospital Research Institute*

Physics

🌐 <http://wellman.massgeneral.org/faculty-bouma-pi.htm>



**Alan Conrad Bovik** | *The University of Texas at Austin*

Electrical Engineering

🌐 <https://www.ece.utexas.edu/people/faculty/alan-bovik>



**Paul V. Braun** | *University of Illinois Urbana-Champaign*

Materials Science

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**Raj Bridgelall** | *North Dakota State University*

Artificial Intelligence

🌐 <https://www.ugpti.org/about/staff/viewbio.php?id=79>



**Marco Mattos Carvalho** | *Florida Institute of Technology*

Computer Science

🌐 <https://www.fit.edu/faculty-profiles/5/marco-carvalho/>



**Shih-Fu Chang** | *Columbia University*

Computer Science

🌐 <https://www.ee.columbia.edu/shih-fu-chang>



**Christopher S. Chen** | *Boston University*

Biomedical Engineering

🌐 <https://www.bu.edu/eng/profile/christopher-chen-m-d-ph-d/>



**Ray T. Chen** | *The University of Texas at Austin*

Electrical Engineering

🌐 <https://www.ece.utexas.edu/people/faculty/ray-chen>



**Wei Chen** | *The University of Texas at Arlington*

Medical Physics

🌐 <https://www.uta.edu/academics/schools-colleges/science/departments/physics/faculty>



**Floyd Ski Chilton III** | *The University of Arizona*

Biochemistry

🌐 <https://nutrition.cals.arizona.edu/person/floyd-ski-chilton-phd>



**Wonbong Choi** | *University of North Texas*

Materials Science

🌐 <https://materials.engineering.unt.edu/people/wonbong-choi>



**Marc P. Christensen** | *Clarkson University*

Electrical Engineering

🌐 <https://www.clarkson.edu/news/marc-p-christensen-phd-pe-named-17th-president-clarkson-university>





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🌐 <https://icahn.mssm.edu/profiles/carlos-cordon-cardo>



**Sean R. Cutler** | *University of California, Riverside*

Agriculture and Life Sciences

🌐 <https://profiles.ucr.edu/app/home/profile/cutler>



**Dipankar Dasgupta** | *The University of Memphis*

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🌐 [https://www.memphis.edu/cs/people/faculty\\_pages/dipankar-dasgupta.php](https://www.memphis.edu/cs/people/faculty_pages/dipankar-dasgupta.php)



**Rafael V. Davalos** | *Virginia Polytechnic Institute and State University*

Biomedical Engineering

🌐 <https://beam.vt.edu/people/faculty/davalos.html>



**Mark Thomas Dertzbaugh** | *U.S. Army Medical Research & Development Command (USAMRDC)*

Medicine

🌐 <https://mrdc.health.mil/index.cfm/about/leadership/part#:~:text=Mark%20Dertzbaugh%20is%20the%20Principal,University%20of%20Alabama%20at%20Birmingham>



**Raymond Joseph Dingleline** | *Emory University*

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🌐 <http://www.pharm.emory.edu/dingleline/people/dingleline-cv.html>



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🌐 <https://www.lsu.edu/vetmed/faculty/dugas.php>



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**Ehud Gazit** | *Tel Aviv University*

Biochemistry

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**Lee R. Gehrke** | *Massachusetts Institute of Technology*

Biomedical Engineering

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**Guy M. Genin** | *Washington University in St. Louis*

Mechanical Engineering

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**Maria Laura Gennaro** | *Rutgers, The State University of New Jersey*

Medicine

🌐 <https://globalhealth.rutgers.edu/who-we-are/maria-laura-gennaro/>





**Charles Gersbach** | *Duke University*

Biomedical Engineering

🌐 <https://bme.duke.edu/faculty/charles-gersbach>



**Roozbeh Ghaffari** | *Northwestern University*

Biomedical Engineering

🌐 <https://bioelectronics.northwestern.edu/people/ghaffari-roozbeh.html> OR <https://www.mccormick.northwestern.edu/research-faculty/directory/affiliated/ghaffari-roozbeh.html>



**Joseph C. Glorioso III** | *University of Pittsburgh*

Biology

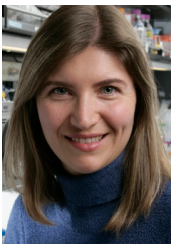
🌐 <https://www.mmg.pitt.edu/people/glorioso>



**Yury Gogotsi** | *Drexel University*

Materials Engineering

🌐 <https://drexel.edu/engineering/about/faculty-staff/G/gogotsi-yury/>



**Viviana Gradinaru** | *California Institute of Technology*

Biomedical Engineering

🌐 <https://www.bbe.caltech.edu/people/viviana-gradinaru>



**Warren M. Grill** | *Duke University*

Biomedical Engineering

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**Cuntai Guan** | *Nanyang Technological University, Singapore*

Computer Science

🌐 <https://personal.ntu.edu.sg/ctguan/index.html>



**Farshid Guilak** | *Washington University in St. Louis*

Orthopaedics

🌐 <https://orthopaedicresearch.wustl.edu/labs/farshid-guilak/>



**Peixuan Guo** | *The Ohio State University*

Biomedical Engineering

🌐 <https://pharmacy.osu.edu/directory/peixuan-guo>



**Mool C. Gupta** | *University of Virginia*

Electrical Engineering

🌐 <https://engineering.virginia.edu/faculty/mool-c-gupta>



**Susan C. Hagness** | *University of Wisconsin-Madison*

Electrical Engineering

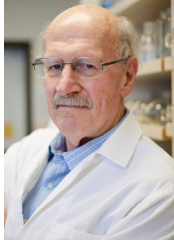
🌐 [https://directory.engr.wisc.edu/ece/faculty/hagness\\_susan](https://directory.engr.wisc.edu/ece/faculty/hagness_susan)



**William Hahn** | *Harvard University/Dana-Farber Cancer Institute*

Medicine

🌐 <https://www.dfcc.harvard.edu/insider/member-detail/member/william-c-hahn-md-phd/>



**R.E.W. (Bob) Hancock** | *The University of British Columbia*

Infectious Disease

🌐 <http://cmdr.ubc.ca/bobh/about-hancock/>



**Jo Handelsman** | *University of Wisconsin-Madison*

Biology

🌐 <https://wid.wisc.edu/people/jo-handelsman/>



**Joshua M. Hare** | *University of Miami*

Cardiology

🌐 <https://umiamihealth.org/sylvester-comprehensive-cancer-center/research/faculty/joshua-hare-md>



**Vincent G. Harris** | *Northeastern University*

Electrical Engineering

🌐 <https://coe.northeastern.edu/people/harris-vincent/>



**Bin He** | *Carnegie Mellon University*

Biomedical Engineering

🌐 <https://www.cmu.edu/bme/People/Faculty/profile/bhe.html>



**Daniel A. Henderson** | *New Jersey Institute of Technology*

Entrepreneurship

🌐 [https://research.njit.edu/nai/sites/research.nai/files/Daniel%20Henderson\\_0.pdf](https://research.njit.edu/nai/sites/research.nai/files/Daniel%20Henderson_0.pdf)





**Payam Heydari** | *University of California, Irvine*

Electrical Engineering

🌐 <https://payamheydari.eng.uci.edu>



**Anthony J. Hickey** | *The University of North Carolina at Chapel Hill*

Biomedical Engineering

🌐 <https://pharmacy.unc.edu/2019/01/anthony-hickey-named-director-of-unc-catalyst-for-rare-diseases/>



**Elizabeth M.C. Hillman** | *Columbia University*

Biomedical Engineering

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**Michael Hindle** | *Virginia Commonwealth University*

Health Sciences

🌐 <https://app.pharmacy.vcu.edu/mhindle>



**John A. Hossack** | *University of Virginia*

Biomedical Engineering

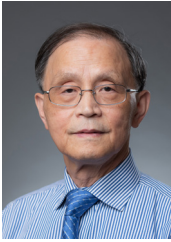
🌐 <https://engineering.virginia.edu/faculty/john-hossack>



**Jinlian Hu** | *City University of Hong Kong*

Materials Science

🌐 <https://www.cityu.edu.hk/bme/jinliahu/>



**Hao Huang** | *University of Houston*

Electrical Engineering

🌐 <https://www.ece.uh.edu/faculty/huang>



**Ru Chih Huang** | *Johns Hopkins University*

Biochemistry

🌐 <https://bio.jhu.edu/directory/ru-chih-huang/>



**Patrick Hwu** | *H. Lee Moffitt Cancer Center & Research Institute*

Medicine

🌐 <https://moffitt.org/about-moffitt/executive-leadership/patrick-hwu-md/>



**Petros Ioannou** | *University of Southern California*

Electrical Engineering

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**Ravinder K. Jain** | *The University of New Mexico*

Physics

🌐 <https://engineering.unm.edu/faculty/directory/electrical-and-computer/ravinder-jain.html>



**Klavs F. Jensen** | *Massachusetts Institute of Technology*

Chemical Engineering

🌐 <https://cheme.mit.edu/profile/klavs-f-jensen/>



**Jean X. Jiang** | *The University of Texas Health Science Center at San Antonio*

Biochemistry

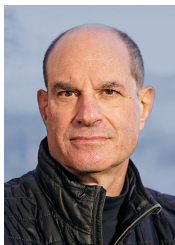
🌐 <https://www.uthscsa.edu/academics/medicine/profile/jiangj>



**Jian Jin** | *Mount Sinai Health System*

Chemistry

🌐 <https://icahn.mssm.edu/profiles/jian-jin>



**David Julius** | *University of California, San Francisco*

Physics

🌐 <https://physiology.ucsf.edu/faculty>



**Katalin Kariko** | *University of Pennsylvania*

Biochemistry

🌐 <https://www.med.upenn.edu/apps/faculty/index.php/g325/p13418>



**Michael Khonsari** | *Louisiana State University*

Mechanical Engineering

🌐 <https://www.lsu.edu/eng/mie/people/faculty/khonsari.php>



**Anastasia Khvorova** | *University of Massachusetts Medical School*

Biochemistry

🌐 <https://umassmed.edu/khvorovalab/people/anastasia-khvorova/>





**Joseph Anthony King Jr.** | *U.S. Department of Energy - Advanced Research Projects Agency - Energy (ARPA-E)*

Physics

🌐 <https://arpa-e.energy.gov/about/team-directory/dr-joseph-king>



**Michael R. King** | *Vanderbilt University*

Biomedical Engineering

🌐 <https://engineering.vanderbilt.edu/bio/michael-king>



**William P. King** | *University of Illinois Urbana-Champaign*

Mechanical Engineering

🌐 <https://kinglab.mechse.illinois.edu/>



**John Kitching** | *National Institute of Standards and Technology*

Physics

🌐 <https://www.nist.gov/people/john-kitching>



**Shohei Koide** | *New York University*

Biochemistry

🌐 <https://med.nyu.edu/faculty/shohei-koide>



**Ilya Kolmanovsky** | *University of Michigan*

Mechanical Engineering

🌐 <https://aero.engin.umich.edu/people/kolmanovsky-ilya/>



**Vijay Kumar** | *University of Pennsylvania*

Mechanical Engineering

🌐 <http://www.kumarrobotics.org/dr-vijay-kumar/>



**Debomoy Kumar Lahiri** | *Indiana University*

Biochemistry

🌐 <https://medicine.iu.edu/faculty/13390/lahiri-debomoy>



**Nancy E. Lane** | *University of California, Davis*

Medicine

🌐 <https://health.ucdavis.edu/musculoskeletalhealth/bios/lane.html>



**Changzhi Li** | *Texas Tech University*

Electrical Engineering

🌐 [https://www.depts.ttu.edu/ece/faculty/changzhi\\_li/index.php](https://www.depts.ttu.edu/ece/faculty/changzhi_li/index.php)



**Jianrong Li** | *The Ohio State University*

Infectious Disease

🌐 <https://vet.osu.edu/about-us/people/jianrong-li>



**Kai Liu** | *Georgetown University*

Physics

🌐 <https://physics.georgetown.edu/kai-liu/>



**Yuhwa Lo** | *University of California, San Diego*

Electrical Engineering

🌐 <https://matsci.ucsd.edu/faculty/yu-hwa-lo>



**Gabriel Lopez-Berestein** | *University of Texas MD Anderson Cancer Center*

Medicine

🌐 [https://faculty.mdanderson.org/profiles/gabriel\\_lopez-berestein.html](https://faculty.mdanderson.org/profiles/gabriel_lopez-berestein.html)



**Jiebo Luo** | *University of Rochester*

Computer Science

🌐 [https://www.cs.rochester.edu/people/faculty/luo\\_jiebo/index.html](https://www.cs.rochester.edu/people/faculty/luo_jiebo/index.html)



**David MacMillan** | *Princeton University*

Chemistry

🌐 <https://chemistry.princeton.edu/faculty-research/faculty/david-macmillan/>



**Upamanyu Madhow** | *University of California, Santa Barbara*

Electrical Engineering

🌐 <https://wsl.ece.ucsb.edu/people/upamanyu-madhow>



**Bangalore S. Manjunath** | *University of California, Santa Barbara*

Electrical Engineering

🌐 <https://vision.ece.ucsb.edu/people/bs-manjunath>





**Sanford David Markowitz** | *Case Western Reserve University*

Medicine

🌐 <https://case.edu/cancer/research/research-labs/markowitz-lab>



**Nicholas McKeown** | *Stanford University*

Computer Science

🌐 <http://yuba.stanford.edu/~nickm/>



**Gerard Medioni** | *University of Southern California*

Computer Science

🌐 <https://viterbi.usc.edu/directory/faculty/Medioni/Gerard>



**Anand S. Mehta** | *Medical University of South Carolina*

Pharmacology

🌐 <https://stanfordhealthcare.org/doctors/m/anand-mehta.html>



**Benjamin Locke Miller** | *University of Rochester*

Biomedical Engineering

🌐 <https://www.urmc.rochester.edu/people/21977435-benjamin-l-miller>



**Ronald C. Montelaro** | *University of Pittsburgh*

Biochemistry

🌐 <https://www.mmg.pitt.edu/people/montelaro>



**Orhun K. Muratoglu** | *Massachusetts General Hospital Research Institute*

Materials Science

🌐 <https://researchers.mgh.harvard.edu/profile/2407222/Orhun-Muratoglu>



**Nosang Vincent Myung** | *University of Notre Dame*

Chemical Engineering

🌐 <https://engineering.nd.edu/faculty/nosang-myung/>



**Barbara Anne Osborne** | *University of Massachusetts Amherst*

Biology

🌐 <https://www.vasci.umass.edu/research-faculty/barbara-a-osborne>



**Adegboyega K. Oyelere** | *Georgia Institute of Technology*

Chemistry

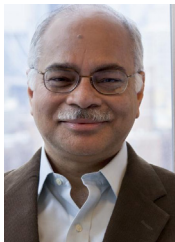
🌐 <https://sites.gatech.edu/oyelere-lab/>



**George R. Painter** | *Emory University*

Chemical Engineering

🌐 <https://med.emory.edu/departments/pharmacology-chemical-biology/news/stories-2022/painter-endowed-prof-2022.html>



**Shivendra S. Panwar** | *New York University*

Electrical Engineering

🌐 <http://engineering.nyu.edu/people/shivendra-panwar>



**Ardem Patapoutian** | *The Scripps Research Institute*

Biology

🌐 <https://www.scripps.edu/research/faculty/patapoutian>



**Fang-Zheng Peng** | *Florida State University*

Electrical Engineering

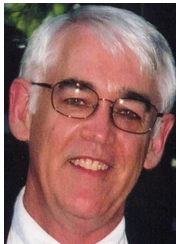
🌐 <https://eng.famu.fsu.edu/ece/people/peng>



**Randall Scott Prather** | *University of Missouri-Columbia*

Animal Sciences and Zoology

🌐 <https://cafnr.missouri.edu/person/randall-prather/>



**Robert K. Prud'homme** | *Princeton University*

Chemical Engineering

🌐 <https://cbe.princeton.edu/people/robert-prudhomme>



**Lili Qiu** | *The University of Texas at Austin*

Computer Science

🌐 <https://www.cs.utexas.edu/~lili/>



**Ramamoorthy Ramesh** | *University of California, Berkeley*

Materials Science

🌐 [https://mse.berkeley.edu/people\\_new/ramesh/](https://mse.berkeley.edu/people_new/ramesh/)



**Anshuman Razdan** | *University of Oregon*

Computer Science

🌐 <https://research.uoregon.edu/about>



**Danny Reible** | *Texas Tech University*

Chemical Engineering

🌐 <https://www.depts.ttu.edu/cweb/research/reiblesgroup/biography.php>



**Amy Reibman** | *Purdue University*

Computer Engineering

🌐 [https://engineering.purdue.edu/ECE/People/ptPeopleListing?group\\_id=2571&resource\\_id=117177](https://engineering.purdue.edu/ECE/People/ptPeopleListing?group_id=2571&resource_id=117177)



**Stephen J. Riederer** | *Mayo Clinic*

Medical Imaging

🌐 <https://www.mayo.edu/research/faculty/riederer-stephen-j-ph-d/bio-00026656>



**J. Paul Robinson** | *Purdue University*

Biomedical Engineering

🌐 [https://engineering.purdue.edu/BME/People/ptProfile?resource\\_id=7591](https://engineering.purdue.edu/BME/People/ptProfile?resource_id=7591)



**Krishan Sabnani** | *Johns Hopkins University*

Computer Science

🌐 <https://engineering.jhu.edu/faculty/krishan-sabnani/>





**Juan G. Santiago** | *Stanford University*

Mechanical Engineering

🌐 <https://profiles.stanford.edu/juan-santiago>



**Justin Schwartz** | *The Pennsylvania State University*

Materials Science

🌐 <https://www.engr.psu.edu/justin-schwartz/index.aspx>



**Charles L. Sentman** | *Dartmouth*

Biomedical Engineering

🌐 <https://geiselmed.dartmouth.edu/faculty/facultydb/view.php?uid=139>



**Jay Ashok Shendure** | *University of Washington*

Medicine

🌐 <https://www.gs.washington.edu/faculty/shendure.htm>



**A. Dean Sherry** | *The University of Texas at Dallas*

Chemistry

🌐 <https://profiles.utsouthwestern.edu/profile/16608/dean-sherry.html>



**Molly S. Shoichet** | *University of Toronto*

Chemical Engineering

🌐 <https://chem-eng.utoronto.ca/faculty-staff/faculty-members/molly-s-shoichet/>



**Justin Siegel** | *University of California, Davis*

Biochemistry

🌐 <https://chemistry.ucdavis.edu/people/justin-siegel>



**Rajiv K. Singh** | *University of Florida*

Materials Science

🌐 <https://mse.ufl.edu/people/emeritus-faculty/name/rajiv-singh/>



**Kazem Sohraby** | *Utah Valley University*

Electrical Engineering

🌐 <https://uvu.edu/directory/employee/?id=a1hNSTkvWjVEY1dtd3BJcy9UUnZMZz09>



**Florian Solzbacher** | *The University of Utah*

Computer Engineering

🌐 [https://faculty.utah.edu/u0432274-Florian\\_Solzbacher/hm/index.html](https://faculty.utah.edu/u0432274-Florian_Solzbacher/hm/index.html)



**Nicole Steinmetz** | *University of California, San Diego*

Biomedical Engineering

🌐 <https://iem.ucsd.edu/researchers/people/profiles/nicole-steinmetz.html>



**Robert M. Strongin** | *Portland State University*

Chemistry

🌐 <https://www.pdx.edu/chemistry/stronginmembers>



**Saraswati Sukumar** | *Johns Hopkins University*

Oncology

🌐 <https://www.hopkinsmedicine.org/profiles/details/saraswati-sukumar>



**Charles R. Sullivan** | *Dartmouth*

Electrical Engineering

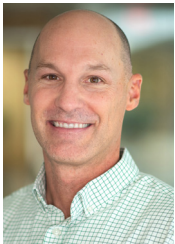
🌐 <https://engineering.dartmouth.edu/people/faculty/charles-sullivan>



**Madhavan Swaminathan** | *The Pennsylvania State University*

Electrical Engineering

🌐 <https://www.psu.edu/news/engineering/story/madhavan-swaminathan-named-new-head-electrical-engineering/>



**Dennis Sylvester** | *University of Michigan*

Electrical Engineering

🌐 <https://sylvester.engin.umich.edu/>



**Mark Tehranipoor** | *University of Florida*

Electrical Engineering

🌐 <https://tehranipoor.ece.ufl.edu/>



**Sylvia W. Thomas** | *University of South Florida*

Electrical Engineering

🌐 <https://www.usf.edu/research-innovation/rf/bios/sylvia-thomas.aspx>



**Kenneth William Tobin** | *Oak Ridge Associated Universities*

Electrical Engineering

🌐 <https://www.ornl.gov/our-people/kenneth-tobin-jr> OR <https://orau.org/about/leadership.htmls>



**Carlo Giovanni Traverso** | *Massachusetts Institute of Technology*

Biomedical Engineering

🌐 <https://engineering.mit.edu/faculty/giovanni-traverso/>



**Guochuan Emil Tsai** | *University of California, Los Angeles*

Psychiatry

🌐 <https://lundquist.org/guochuan-emil-tsai-md-phd>



**Erik Tucker** | *Oregon Health & Science University*

Biomedical Engineering

🌐 <https://www.ohsu.edu/people/erik-i-tucker>



**Dustin Tyler** | *Case Western Reserve University*

Biomedical Engineering

🌐 <https://engineering.case.edu/ebme/tyler>



**Yonhua Tzeng** | *National Cheng Kung University*

Electrical Engineering

🌐 [https://www.ee.ncku.edu.tw/en/teacher/index2.php?teacher\\_id=11](https://www.ee.ncku.edu.tw/en/teacher/index2.php?teacher_id=11)





**Eric David Wachsman** | *University of Maryland, College Park*

Materials Science

🌐 <https://energy.umd.edu/director>



**Joseph Wang** | *University of California, San Diego*

Biomedical Engineering

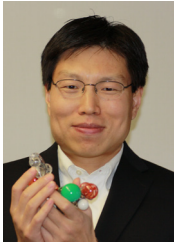
🌐 <https://iem.ucsd.edu/researchers/people/profiles/joseph-wang.html>



**Kang L. Wang** | *University of California, Los Angeles*

Electrical Engineering

🌐 <http://www.ee.ucla.edu/kang-wang/>



**Yadong Wang** | *Cornell University*

Biomedical Engineering

🌐 <https://www.engineering.cornell.edu/faculty-directory/yadong-wang>



**Zhong Lin (Z.L.) Wang** | *Georgia Institute of Technology*

Marine Science

🌐 <https://nanoscience.gatech.edu/zlwang/wang.html>



**Daniel Martin Watterson** | *Northwestern University*

Biochemistry

🌐 <https://www.feinberg.northwestern.edu/faculty-profiles/az/profile.html?xid=13872>



**Drew Weissman** | *University of Pennsylvania*

Biochemistry

🌐 <https://www.med.upenn.edu/apps/faculty/index.php/g275/p20322>



**Douglas H. Werner** | *The Pennsylvania State University*

Electrical Engineering

🌐 <https://pennstate.pure.elsevier.com/en/persons/douglas-henry-werner> OR <http://cearl.ee.psu.edu/staff/DWerner.html>



**Justin Williams** | *University of Wisconsin-Madison*

Biomedical Engineering

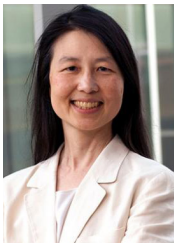
🌐 [https://directory.engr.wisc.edu/bme/faculty/williams\\_justin](https://directory.engr.wisc.edu/bme/faculty/williams_justin)



**R. Stanley Williams** | *Texas A&M University*

Electrical Engineering

🌐 <https://engineering.tamu.edu/electrical/profiles/r-stanely-williams.html>



**Jeannette M. Wing** | *Columbia University*

Computer Science

🌐 <http://news.columbia.edu/content/President-Bollinger-Names-Microsoft-Research-Head-Jeannette-Wing-to-Lead-Columbias-Data-Science-Institute>



**Peter Johannes Winzer** | *Technical University of Graz*

Electrical Engineering

🌐 <https://www.tugraz.at/en/research/research-and-technology-advisory-committee/>



**Joseph C. Wu** | *Stanford University*

Medicine

🌐 <https://med.stanford.edu/wulab.html>



**Charles E. Wyman** | *University of California, Riverside*

Chemical Engineering

🌐 <https://profiles.ucr.edu/app/home/profile/charlesw>



**Ganapati Dadasaheb Yadav** | *Institute of Chemical Technology, Mumbai*

Chemical Engineering

🌐 [https://www.ictmumbai.edu.in/emp\\_profiledetail.aspx?nDeptID=ge](https://www.ictmumbai.edu.in/emp_profiledetail.aspx?nDeptID=ge)



**Hao Yan Ph.D.** | *Arizona State University*

Chemistry

🌐 <https://yanlab.asu.edu/People.html>



**Jianhua Joshua Yang** | *University of Southern California*

Computer Engineering

🌐 <https://viterbi.usc.edu/directory/faculty/Yang/J-Joshua>



**Yuanyuan Kara Yang** | *Stony Brook University*

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🌐 [https://www.stonybrook.edu/commcms/electrical/people/-core\\_faculty/yang\\_yuanyuan](https://www.stonybrook.edu/commcms/electrical/people/-core_faculty/yang_yuanyuan)



**Raymond W. Yeung** | *The Chinese University of Hong Kong*

Electrical Engineering

🌐 <https://www.ie.cuhk.edu.hk/people/raymond.shtml>



**Roe-Hoan Yoon** | *Virginia Polytechnic Institute and State University*

Civil Engineering

🌐 <https://www.mining.vt.edu/people/faculty/roe-hoan.html>



**Mone Zaidi** | *Icahn School of Medicine at Mount Sinai*

Endocrinology

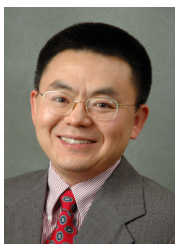
🌐 <https://www.mountsinai.org/profiles/mone-zaidi>



**Chang-Guo Zhan** | *University of Kentucky*

Health Sciences

🌐 <https://pharmacy.uky.edu/people/chang-guo-zhan>



**Ji-Cheng (JC) Zhao** | *University of Maryland, College Park*

Materials Science

🌐 <https://mse.umd.edu/clark/faculty/1195/JiCheng-Zhao>

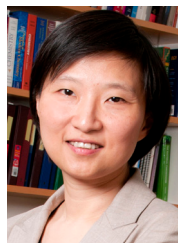


**Yuntian Theodore Zhu** | *City University of Hong Kong*

Materials Science

🌐 <https://www.cityu.edu.hk/mse/people/mse-faculty/zhu-yuntian>





**Xiaowei Zhuang** | *Harvard University*

Chemistry

🌐 <http://zhuang.harvard.edu/>



**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*

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.



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

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.



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

Louis Foreman is founder and Chief Executive of Enventys ([www.enventys.com](http://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.





**Robert S. Langer, Sc.D.** | *National Medal of Technology and Innovation Recipient, National Medal of Science Recipient, National Inventors Hall of Fame Inductee, 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*

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.



**Crystal Leach, Ph.D. | *Program Director, National Science Foundation***

Crystal Leach joined the National Science Foundation as a Program Director in the Industry-University Cooperative Research Center (IUCRC) program in 2021. Crystal is an Associate Professor of Practice in the School of Chemical, Materials and Biomedical Engineering at the University of Georgia, where she has served as the founding Director of Industry Collaborations since 2016, working with faculty and administration to build industry partnerships that align with UGA's research capabilities and strategic priorities. Crystal has been a leader in expanding UGA's innovation and entrepreneurial ecosystem, serving as co-PI and business mentor for UGA's NSF-funded Innovation Corps program. In 2019 she developed and successfully implemented the first Innovation Bootcamp for female faculty, post-doctoral fellows, and graduate students at UGA. Previously, she spent 18 years in Research and Development at Kimberly-Clark, a Fortune 500 health and hygiene company, where she led engineering teams to develop 25+ medical products to market globally. Crystal earned a bachelor's degree in chemical engineering and a master's in biomedical engineering at The University of Akron, then her doctorate in textiles and polymer science at Clemson University. She is a member of the Society of Women Engineers and the Society for Biomaterials and has presented at numerous conferences. Her many accomplishments include: she holds four U.S. and European patents; was named one of The University of Akron's Distinguished Engineering Alumni in 2005; and was elected as a Fellow to the American Institute of Medical and Biological Engineering in 2018.



**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.

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## 2022 FELLOWS SELECTION COMMITTEE\*

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**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, Immediate 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.



**Phillip Singerman** | *Associate Director for Innovation and Industry Services, National Institute of Standards and Technology*

Phillip Singerman is the Senior Advisor on Technology Transfer and Commercialization to the Montgomery County Economic Development Corporation and Elected Fellow of the National Academy of Public Administration. From 2011-2020 he served as the Associate Director for Innovation and Industry Services at the National Institute of Standards and Technology (NIST). In this capacity he was responsible for the NIST suite of external partnership programs, including the Hollings Manufacturing Extension Partnership, the Baldrige Performance Excellence Program, the Office of Advanced Manufacturing, NIST technology transfer, economic analysis, and small business innovation research awards.

Singerman has more than 40 years of experience in tech based economic development; he was the first chief executive of two of the best known and longest lasting private-public partnerships; the Ben Franklin Technology Center of Southeastern Pennsylvania and the Maryland Technology Development Corporation. During the Clinton Administration he served as U.S. Assistant Secretary of Commerce for Economic Development, a Presidential appointment requiring Senate confirmation.



**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.



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