



12TH ANNUAL MEETING  
JUNE 25-27, 2023  
WASHINGTON, D.C.

# Diversifying Innovation

for a Strong Economy  
and a  
Sustainable Future





## Cultivating the next generation of science and tech innovators

and the innovation and entrepreneurship ecosystems that are critical to their success



VentureWell fosters collaboration among the best minds from research labs, classrooms, and beyond to advance innovation and entrepreneurship education. We provide unique opportunities for STEM students and researchers to fully realize their potential to improve the world.

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# INNOVATE

## Auburn University: Utilizing Metagenomic Innovations to Improve Human, Animal and Plant Health

### Dr. Mark R. Liles

Dr. Mark R. Liles is a professor of microbiology in the Department of Biological Sciences at Auburn University and serves as the associate dean for research and graduate studies in the College of Sciences and Mathematics. Liles has made important contributions in the areas of metagenomic research and disease control in agriculture and aquaculture. Among his honors and awards are NIH predoctoral and postdoctoral fellowships, 78 different grants received as PI or co-PI with over \$13 million in total awarded funds in over 30 years as a microbiology researcher, recognition as Auburn University's Outstanding Graduate Mentor (2009) and the College of Sciences and Mathematics Young Faculty Scholar Award (2017). He has published 133 peer-reviewed publications. Liles is a member of the American Society for Microbiology and a founding member of the Society for Functional Metagenomics. He holds six U.S. patents and eight foreign patents that have been licensed to multiple companies.

#### Key patented technologies include:

- A vaccine to protect farmed fish against the leading cause of disease in the aquaculture industry in the U.S. and China;
- Improved efficacy of "plant probiotics" by applying a pectin-rich amendment derived from orange peels as a seed treatment in combination with bacterial spores that enhance plant growth and prevent disease from plant pathogens; and
- The application of thermostable cellulose-degrading enzymes discovered from a petroleum reservoir 2.5 Km below the ocean floor off the coast of Norway. This was the result of a successful international collaboration, with application in lignocellulosic biofuels.

Liles has cofounded three biotech companies: Varigen Biosciences (Varizymes), Terra Bioforge and Teliome. Varizymes produces enzymes used for a COVID-19 home detection kit that received emergency use authorization, as well as other enzymes required for molecular diagnostics, PCR and next-generation sequencing. Terra Bioforge uses synthetic biology tools to produce natural products (antibiotics, anti-cancer) using a CRISPR/Cas9 system to clone and express biosynthetic gene clusters that encode druggable molecules. Terra Bioforge has recently received significant investment from HudsonAlpha's AgTech Accelerator program. Teliome develops probiotics and orally delivered vaccines to prevent disease in aquaculture-farmed fish/shellfish.



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[research.auburn.edu](https://research.auburn.edu)

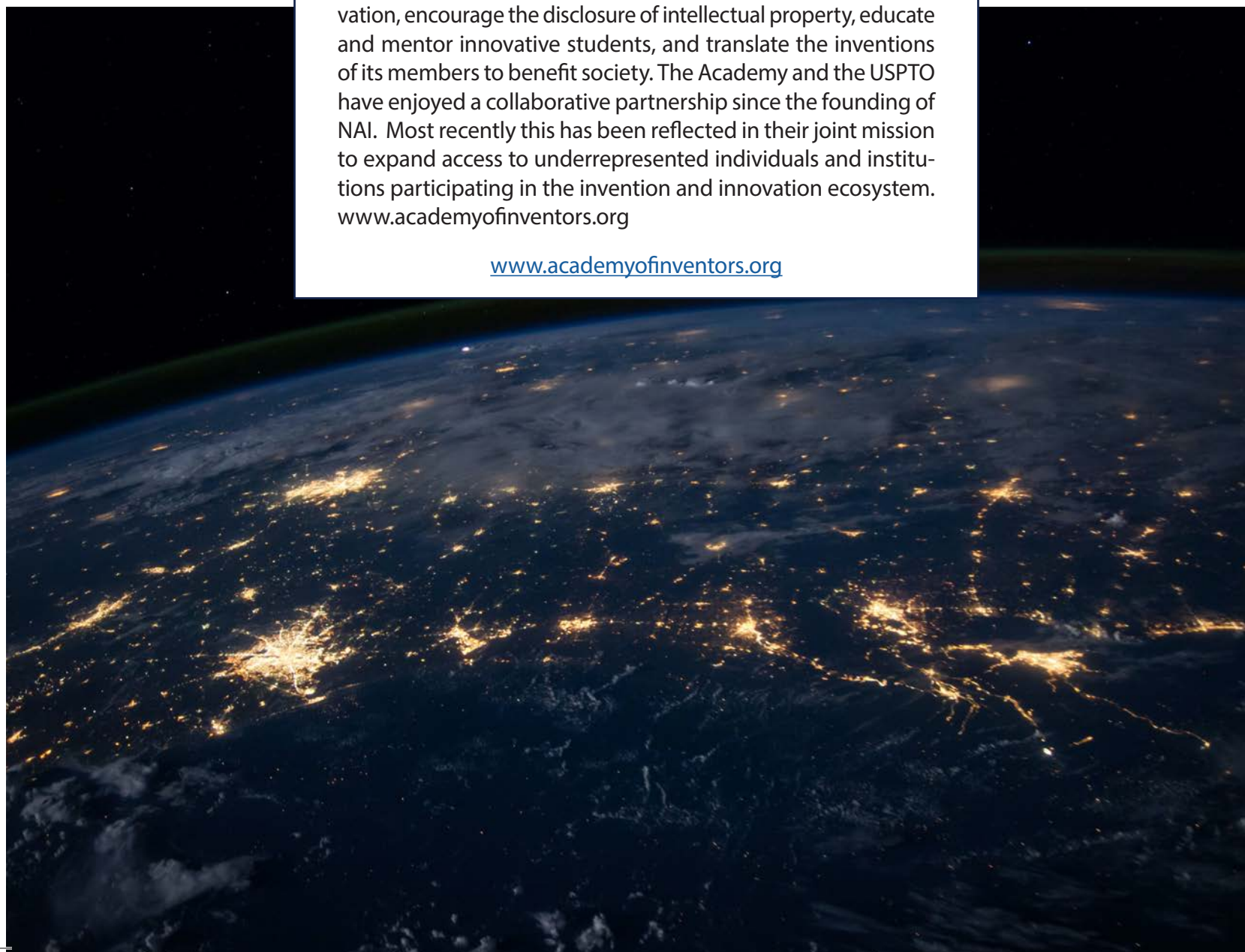






The National Academy of Inventors is a member organization comprising U.S. and international universities, and governmental and non-profit research institutes, with over 4,000 individual inventor members and Fellows spanning more than 250 institutions. It was founded in 2010 to recognize and encourage 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. The Academy and the USPTO have enjoyed a collaborative partnership since the founding of NAI. Most recently this has been reflected in their joint mission to expand access to underrepresented individuals and institutions participating in the invention and innovation ecosystem. [www.academyofinventors.org](http://www.academyofinventors.org)

[www.academyofinventors.org](http://www.academyofinventors.org)







### Distinguished Colleagues, Partners, and Friends:

On behalf of the National Academy of Inventors (NAI) Board of Directors and staff, it is my distinct pleasure to welcome you to NAI's 12th Annual Meeting in Washington, D.C.

In line with this year's theme, "Diversifying Innovation for a Strong Economy and a Sustainable Future", we have designed a program filled with engaging speakers and panelists to facilitate discussions on the crossroads of sustainability and economic progress and how diversifying our innovation ecosystem is the driving force behind both.

I look forward to this event each year to watch NAI inventors from around the world gather to share insights, form collaborations, and encourage each other. We developed this program with you in mind and we hope that the discussions started during the course of this Annual Meeting continue beyond these walls. Take your insights, ideas, and ambitions for propelling the innovation ecosystem forward out into the world and continue to connect with your peers and friends made here. Together we can solve the world's most complex challenges.

While our Annual Meeting is a forum of discussion and collaboration, it is also a chance for celebration. This year, NAI welcomes 169 new Fellows who represent a truly outstanding caliber of inventors. Since 2012, the Fellows program has grown to include 1,736 academic inventors, representing over 300 non-profit research institutes, universities, and government agencies worldwide. Our Fellows collectively hold more than 53,000 issued U.S. patents and have generated more than 13,000 licensed technologies.

In addition to our Fellows, we will also be inducting 95 new Senior Members this year. Our Senior Member program has expanded greatly since its inception in 2018. With now over 420 Senior Members, this program recognizes rising luminaries in their fields who foster a spirit of innovation at their institutions and educate the next generation of inventors.

We hope you will join us for the Fellows and Senior Member Induction ceremonies to celebrate these amazing innovators. Their contributions in their respective fields cannot be overstated. Thank you to their family, friends, and colleagues who are with us for the celebration.

I would also like to take this opportunity to acknowledge and celebrate our Member Institutions. We could not do this work without their support. NAI is proud to have more than 260 institutions of higher learning

in our global network, representing 47 American states and 15 countries. Our Member Institutions are home to our global network of NAI Chapters. Our Chapters serve as a vital part of the Academy's mission, offering the unique benefit of local collaboration, support, and recognition for individual inventors. Our Chapter network boasts over 2,400 individual members and we welcomed 6 new chapters over the past year.

We are especially grateful for our strong alliance with the United States Patent and Trademark Office (USPTO). They have been our partners since the Academy's inauguration in 2012 and have been instrumental in shaping what NAI is today. I'd like to thank Kathi Vidal, Under Secretary of Commerce for Intellectual Property and Director of the USPTO, and Derrick Brent, Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the USPTO, for joining us at this Annual Meeting to add their insight to our panel discussions and help us welcome our newest class of Fellows and Senior Members. The USPTO's insightful partnership can be seen at many levels of our organization — on our Board of Directors and committees, and in our publications and new initiatives. Together, the USPTO and the Academy are working together through our Joint-Project Agreement to develop ways to expand access to underrepresented individuals and institutions participating in the invention and innovation ecosystem.

As the Academy continues to grow in membership and visibility, we are developing initiatives and programs to help answer the needs of academic inventors and the broader innovation ecosystem and allow them to thrive. It is you, our engaged members, partners, and friends, that makes this work possible. I am truly proud of the Academy's accomplishments and I thank you for the impactful roles you play in support of the continued success of the National Academy of Inventors. It is an honor to lead this exciting organization and I look forward to a very bright future.

Enjoy the Meeting!

Paul R. Sanberg, FNAI  
President

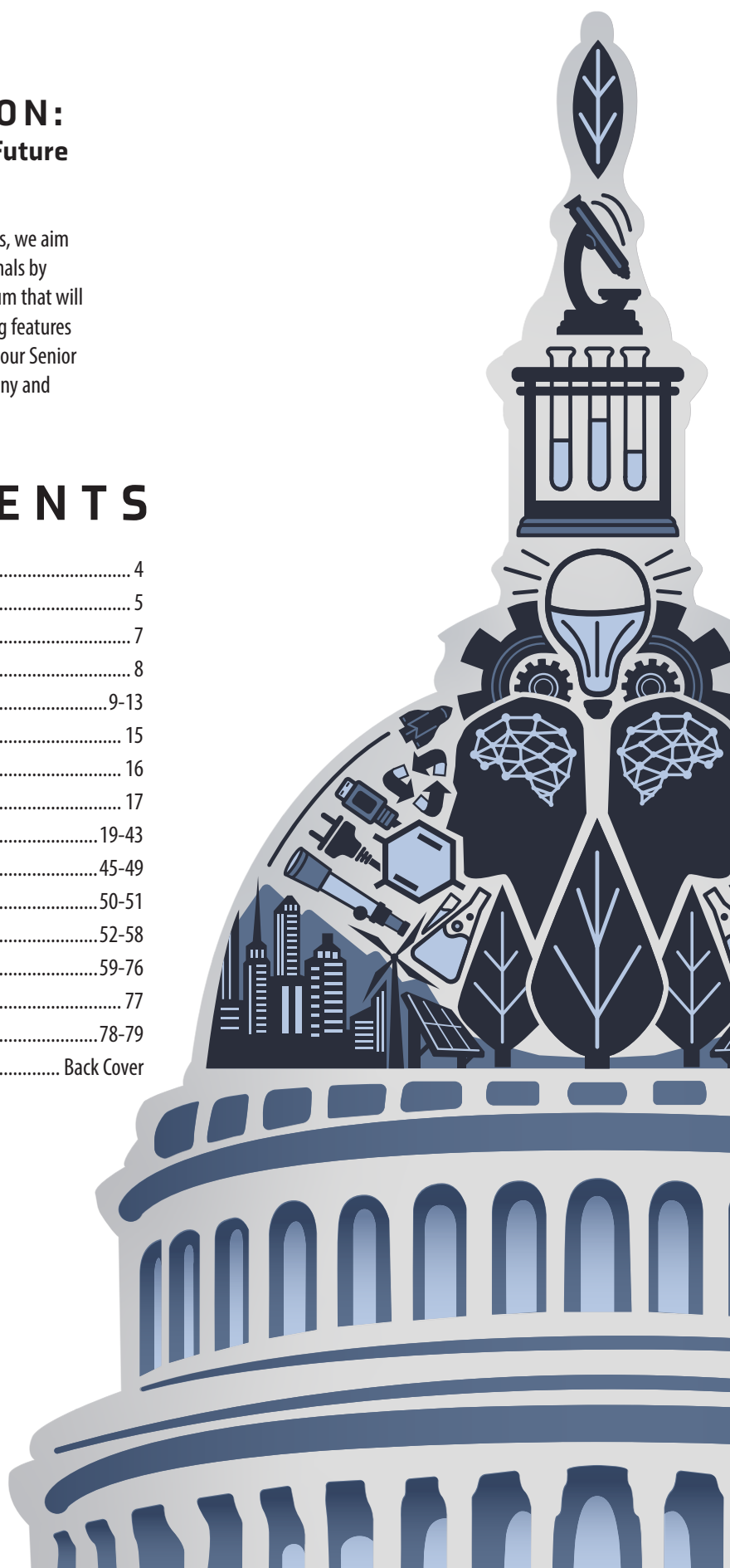


## DIVERSIFYING INNOVATION: for a Strong Economy and a Sustainable Future

For the Twelfth Annual Meeting of the National Academy of Inventors, we aim to honor and empower the world's brightest innovators and professionals by creating powerful connections between them, generating a momentum that will enhance and transform our innovation ecosystem. The Annual Meeting features stimulating presentations, networking opportunities, a celebration of our Senior Members, and culminates in the formal NAI Fellows Induction Ceremony and Signature Gala.

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## TWELFTH ANNUAL MEETING

## SUMMARY AGENDA

## SUNDAY, JUNE 25, 2023

8:00 AM – 4:00 PM	<b>Meeting Registration &amp; Information Desk Open</b> (Grand Ballroom Foyer)
12:00 PM – 2:30 PM	<b>NAI Board Meeting &amp; Brunch</b> (Edgar's Kitchen Private Dining Room)
4:00 PM	<b>Bus Departure for USPTO</b> (Mayflower Hotel Lobby)
5:00 PM – 7:00 PM	<b>USPTO Tour</b> (USPTO Building) <i>Sponsored by University of Georgia</i>
	<b>USPTO Fellows Plaque Unveiling</b> <i>Sponsored by Florida International University</i>
	<b>USPTO Cocktail Reception</b> <i>Sponsored by Smith &amp; Hopen</i>

## MONDAY, JUNE 26, 2023

8:00 AM – 4:00 PM	<b>Meeting Registration &amp; Information Desk Open</b> (Grand Ballroom Foyer)
8:00 AM – 8:50 AM	<b>Welcome Breakfast</b> (State-East Ballroom) <i>Sponsored by University of Houston</i>
8:00 AM – 8:45 AM	<b>Private Breakfast</b> (By Invitation Only - Senate Room)
9:00 AM	<b>Welcome Remarks - Introduction of Master of Ceremonies</b> (Grand Ballroom)
9:05 AM – 9:45 AM	<b>Keynote Speaker: John Burke</b> (Grand Ballroom)
9:45 AM – 10:30 AM	<b>Innovation Panel - I-Corps &amp; HUBS</b> (Grand Ballroom) <i>Sponsored by North Carolina State University</i>
10:30 AM – 10:40 AM	<b>BREAK</b>
10:40 AM – 11:15 AM	<b>National Academy of Inventors Fellows Panel</b> (Grand Ballroom)
11:15 AM – 12:00 PM	<b>Federal Agency Panel</b> (Grand Ballroom)
12:00 PM – 12:50 PM	<b>Innovation and Inspiration Luncheon</b> (State-East Ballroom)
1:00 PM – 1:15 PM	<b>Keynote Speaker: Stephen Klasko</b> (Grand Ballroom)
1:15 PM – 1:30 PM	<b>Keynote Speaker: Ganapati D. Yadav, FNAI</b> (Grand Ballroom)
1:30 PM – 2:15 PM	<b>Policy Panel</b> (Grand Ballroom)
2:15 PM – 2:30 PM	<b>BREAK</b> (Grand Ballroom) <i>Sponsored by University of Connecticut</i>
2:30 PM – 3:15 PM	<b>Vice Presidents of Research &amp; Innovation Panel</b> (Grand Ballroom)
3:15 PM – 4:00 PM	<b>Next Generation Panel - Find &amp; Grow the Next Generation of Inventors</b> (Grand Ballroom)
4:00 PM – 6:00 PM	<b>Next Generation Student Showcase</b> <i>Sponsored by Florida High Tech Corridor</i>
	<b>Connection Space and Cocktail Reception</b> (Palm Court Ballroom)
6:00 PM – 7:00 PM	<b>Senior Member Induction Ceremony</b> (State-East Ballroom)
7:00 PM – 7:45 PM	<b>Senior Member Reception</b> (State-East Ballroom)

## TUESDAY, JUNE 27, 2023

8:00 AM – 4:00 PM	<b>Meeting Registration &amp; Information Desk Open</b> (Grand Ballroom Foyer)
8:00 AM – 8:50 AM	<b>Networking Breakfast</b> (State-East Ballroom)
9:00 AM	<b>Welcome Remarks - Introduction of Master of Ceremonies</b>
9:05 AM – 9:45 AM	<b>Quantum Panel</b> (Grand Ballroom Foyer) <i>Sponsored by The University of Maryland - College Park</i>
9:45 AM – 10:25 AM	<b>Federal Funding Panel</b> (Grand Ballroom)
10:25 AM – 10:35 AM	<b>BREAK</b>
10:35 AM – 11:15 AM	<b>Tech Transfer Panel</b> (Grand Ballroom)
11:15 AM – 12:00 PM	<b>President's Panel</b> (Grand Ballroom)
12:00 PM – 12:50 PM	<b>State of the Academy Luncheon</b> (State-East Ballroom) <i>Sponsored by Fulgent Genetics</i>
	<b>Keynote Speaker: Paul Sanberg, FNAI, President, National Academy of Inventors</b>
	<b>Keynote Speaker: Sethuraman Panchanathan, FNAI, Director NSF</b> (Grand Ballroom)
1:00 PM – 1:45 PM	<b>Higher Education Fireside Chat</b> (Grand Ballroom) <i>Sponsored by Texas Tech University</i>
1:45 PM – 2:30 PM	<b>BREAK</b>
2:25 PM – 2:30 PM	<b>DEIB &amp; JPA Panel</b> (Grand Ballroom) <i>Sponsored by Tufts University</i>
2:30 PM – 3:25 PM	<b>Closing Remarks</b> (Grand Ballroom)
3:25 PM – 3:30 PM	<b>BREAK</b>
3:30 PM – 5:30 PM	<b>Fellows to Assemble</b> (State-East Ballroom)
5:30 PM	<b>Fellows Induction Ceremony</b> (State-East Ballroom)
6:00 PM – 7:30 PM	<b>Gala Cocktail Hour</b> (State-East Foyer)
7:30 PM – 8:30 PM	<b>Gala Dinner, Awards Presentation &amp; Entertainment</b> (Grand Ballroom)
8:30 PM – 10:00 PM	





**National Academy of Inventors** is excited to welcome you to the 12th Annual Meeting, hosted in the illustrious and historic Washington, D.C. at the iconic Mayflower Hotel. Settled along the beautiful Potomac River, D.C. originated as a small federal district that has grown into a bustling and dynamic city of 700,000 people, with over 131 distinct neighborhoods. As the capital of the nation, D.C. is well-known not only as the seat of American government and politics, but also as a city ripe with culture. From iconic monuments, impressive museums, and lush parks, to storied streets that were the stage for historic events, D.C. encapsulates the story and spirit of the American people. D.C. and the surrounding area also exemplify American innovation, being home to the United States Patent and Trademark Office and to some of this country's leading universities and academic and research institutions.





## SUNDAY, JUNE 25, 2023

<b>8:00 AM – 4:00 PM</b>	<b>Meeting Registration &amp; Information Desk Open</b> Location: Grand Ballroom Foyer
<b>12:00 PM – 2:30 PM</b>	<b>NAI Board Meeting &amp; Brunch</b> Location: Edgar's Kitchen Private Dining Room
<b>4:00 PM</b>	<b>Bus Departure for U.S. Patent and Trademark Office</b> Location: Mayflower Hotel Lobby
<b>5:00 PM – 7:00 PM</b>	<b>U.S. Patent and Trademark Office Tour</b> <i>Sponsored by University of Georgia</i> Location: U.S. Patent and Trademark Office Building, 600 Dulany St, Alexandria, VA  <b>U.S. Patent and Trademark Office Fellows Plaque Unveiling   Presented by Paul R. Sanberg, FNAI</b> , President, National Academy of Inventors and <b>Kathi Vidal</b> , Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office <i>Sponsored by Florida International University</i>  <b>U.S. Patent and Trademark Office Cocktail Reception</b> <i>Sponsored by Smith &amp; Hopen</i>

## MONDAY, JUNE 26, 2023

<b>8:00 AM – 4:00 PM</b>	<b>Meeting Registration &amp; Information Desk Open</b> Location: Grand Ballroom Foyer
<b>8:00 AM – 8:50 AM</b>	<b>Welcome Breakfast</b> <i>Sponsored by University of Houston</i> Location: State-East Ballroom
<b>8:00 AM – 8:45 AM</b>	<b>Private Breakfast (By Invitation Only)</b> Location: Senate Room
<b>9:00 AM</b>	<b>Welcome Remarks   Paul R. Sanberg, FNAI</b> , President, National Academy of Inventors  <b>Introduction of Master of Ceremonies   Elizabeth Dougherty, HonNAI</b> , Eastern Regional Outreach Director, U.S. Patent and Trademark Office Location: Grand Ballroom
<b>9:05 AM – 9:45 AM</b>	<b>Keynote Speaker   John Burke</b> , Principal Director of Quantum Sciences at the Office of the Under Secretary of Defense for Research and Engineering Location: Grand Ballroom
<b>9:45 AM – 10:30 AM</b>	<b>Innovation Panel - I-Corps &amp; HUBS   How NSF I-Corp Hubs Facilitate Innovation Across the Nation   Moderated by Wade Fulghum, HonNAI</b> , Assistant Vice Chancellor for Research Commercialization, North Carolina State University <i>Sponsored by North Carolina State University</i> Location: Grand Ballroom <ul style="list-style-type: none"> <li>• <b>Charlson Bell</b>, Director of Entrepreneurship and Biomedical Innovation, Mid-South I-Corps Hub; Vanderbilt University</li> <li>• <b>Latane E. Brackett</b>, Principal Manager, Innovation Programs, GEM I-4</li> <li>• <b>David Grewell, FNAI</b>, Director; Professor and Chair, Great Plains I-Corps HUB, North Dakota State University</li> <li>• <b>Pamela McCauley</b>, Associate Dean for Academic Programs, Diversity, Equity and Inclusion, North Carolina State University</li> </ul>



## MONDAY, JUNE 26, 2023 (CONTINUED)

10:30 AM – 10:40 AM	<b>BREAK</b>
10:40 AM – 11:15 AM	<p><b>National Academy of Inventors Fellows Panel   <i>The Commercialization Journey in the Patenting Process</i>   Moderated by Guochuan Emil Tsai, FNAI</b>, Professor of Psychiatry, David Geffen School of Medicine at UCLA Location: Grand Ballroom</p> <ul style="list-style-type: none"> <li>• <b>Robert Anderson, FNAI</b>, Adjunct Professor (Retired); Illinois Institute of Technology Professor, Chemical and Biological Engineering</li> <li>• <b>Peixuan Guo, FNAI</b>, Endowed Chair, Pharmaceuticals and Pharmacology, The Ohio State University</li> <li>• <b>Robert Prud'homme, FNAI</b>, Professor, Chemical and Biological Engineering, Princeton University</li> <li>• <b>Yadong Wang, FNAI</b>, McAdam Family Foundation Professor of Heart Assist Technology, Cornell University</li> </ul>
11:15 AM – 12:00 PM	<p><b>Federal Agency Panel   <i>Emerging Trends and Sustainability Within the Federal Agencies and Organizations</i>   Moderated by Helena Wisniewski, FNAI</b>, Professor of Entrepreneurship Management, Marketing, Logistics, and Business Analytics, University of Alaska, Anchorage Location: Grand Ballroom</p> <ul style="list-style-type: none"> <li>• <b>Sean Kanuck</b>, National Intelligence Officer (NIO) for Cyber Issues</li> <li>• <b>Tanya Parypa</b>, Regional Director, National Security Innovation Network (NSIN)</li> <li>• <b>Sunita Satyapal</b>, Director, Hydrogen and Fuel Cell Technologies Office and DOE Hydrogen Program Coordinator, US Department of Energy</li> <li>• <b>Anthony Tether</b>, Former Director, Defence Advanced Research Projects Agency (DARPA)</li> </ul>
12:00 PM – 12:50 PM	<p><b>Innovation and Inspiration Luncheon   Led by Jamie Renee</b>, Executive Director, National Academy of Inventors Location: State-East Ballroom</p>
1:00 PM – 1:15 PM	<p><b>Keynote Speaker   Stephen Klasko, HonNAI</b>, Inventor, Distinguished Author and Retired President Thomas Jefferson University Location: Grand Ballroom</p>
1:15 PM – 1:30 PM	<p><b>Keynote Speaker   Ganapati D. Yadav, FNAI</b>, Emeritus Professor of Eminence, Institute of Chemical Technology Mumbai, India Location: Grand Ballroom</p>
1:30 PM – 2:15 PM	<p><b>Policy Panel   <i>The Need for a National Innovation Policy and the Role Universities Should Play</i>   Moderated by Suzanne Harrison, HonNAI</b>, Chief Executive Officer, Percipience, LLC Location: Grand Ballroom</p> <ul style="list-style-type: none"> <li>• <b>Sally Benson</b>, Deputy Director for Energy and Chief Strategist for the Energy Transition, OSTP</li> <li>• <b>Daniel Correa</b>, Chief Executive Officer, Federation of American Scientists</li> <li>• <b>Kate Hudson</b>, Associate Vice President and Counsel for Policy and Federal Relations, AAU</li> </ul>
2:15 PM – 2:30 PM	<p><b>BREAK</b> <i>Sponsored by University of Connecticut</i> Location: Grand Ballroom Foyer</p>





## MONDAY, JUNE 26, 2023 (CONTINUED)

- 2:30 PM – 3:15 PM** **Vice Presidents of Research & Innovation Panel | *Accelerating Translational Research and the Impact on Diverse Communities* | Moderated by Sylvia Thomas, FNAI**, Interim Vice President for Research. President & Chief Executive Officer of the USF Research Foundation, Inc.  
Location: Grand Ballroom
- **Calum Drummond, FNAI**, Deputy Vice Chancellor Research and Innovation and Vice President, Royal Melbourne Institute of Technology, Australia
  - **Bernard Pragash Arulanandam, FNAI**, Vice Provost for Research, Tufts University
  - **Mladen Vouk**, Vice Chancellor for Research, North Carolina State
  - **Jeannette M. Wing, FNAI**, Executive Vice President for Research Professor of Computer Science, Columbia University
- 3:15 PM – 4:00 PM** **Next Generation Panel - Find & Grow the Next Generation of Inventors | *The Importance of Mentorship in the Innovation Space and How Today's Inventors Can Find and Grow the Inventors of Tomorrow* | Moderated by James Howard, HonNAI**, Executive Director, Black Inventors Hall of Fame  
Location: Grand Ballroom
- **Phoebe Miles**, Co-founder and Interim Chief Executive Officer, Cade Museum for Creativity & Innovation
  - **Jeanne Sinquefield**, Chairman, Sinquefield Charitable Foundation
- 4:00 PM – 6:00 PM** **Next Generation Student Showcase**  
*Sponsored by Florida High Tech Corridor*  
Location: Palm Court Ballroom
- 4:00 PM – 6:00 PM** **Connection Space with Cocktail Reception**  
Location: Palm Court Ballroom
- 6:00 PM – 7:00 PM** **Senior Member Induction Ceremony**  
**Presented by Paul Sanberg, FNAI**, President, National Academy of Inventors  
**Presented by Derrick Brent**, Deputy Director, U.S. Patent & Trademark Office  
Location: State-East Ballroom
- 7:00 PM – 7:45 PM** **Senior Member Reception**  
Location: State-East Foyer

## TUESDAY, JUNE 27, 2023

- 8:00 AM – 4:00 PM** **Meeting Registration & Information Desk Open**  
Location: Grand Ballroom Foyer
- 8:00 AM – 8:50 AM** **Networking Breakfast**  
Location: State-East Ballroom
- 9:00 AM** **Welcome Remarks | Paul R. Sanberg, FNAI**, President, National Academy of Inventors  
**Introduction of Master of Ceremonies | Elizabeth Dougherty, HonNAI**, Eastern Regional Outreach Director, U.S. Patent and Trademark Office  
Location: Grand Ballroom



## TUESDAY, JUNE 27, 2023 (CONTINUED)

9:05 AM – 9:45 AM

**Quantum Panel | *How Best to Build a Quantum Ecosystem of Research Institutions, Government Agencies, Industry Partners, Innovative Startups and More* | Moderated by Darryll J. Pines**

President, University of Maryland, College Park

*Sponsored by The University of Maryland - College Park*

Location: Grand Ballroom

- **Laurie Locascio, FNAI**, Director, National Institute of Standards and Technology
- **Christopher R. Monroe**, Professor, Duke University
- **Jacob Taylor**, Adjunct Professor, Joint Center for Quantum Information and Computer Science

9:45 AM – 10:25 AM

**Federal Funding Panel | *Traditional and Non-Traditional Funding Sources to Support the Transition of Invention from the Laboratory to the Marketplace* | Moderated by Almesha Campbell, HonNAI**, Assistant Vice President, Research & Economic Development, Jackson State University

Location: Grand Ballroom

- **Shobha Parthasarathi**, Advisor, Xontogeny
- **Jennifer Shieh**, Director of Ecosystem Development, Office of Investment and Innovation, Small Business Administration
- **Marc Singer**, Managing Partner & Co-Founder, Osage University Partners
- **Allen Walker**, Senior Advisor, Technology, Innovation and Partnerships, National Science Foundation

10:25 AM – 10:35 AM

BREAK

10:35 AM – 11:15 AM

**Tech Transfer Panel | *The Impact of Innovation in University Culture and the Best Practices of Academic Invention and Industry Engagement* | Moderated by Stephen Susalka, HonNAI**, Chief Executive Officer, AUTM

Location: Grand Ballroom

- **James Lillard, FNAI**, Senior Associate Dean, Research Affairs, Morehouse School of Medicine
- **Tatiana Litvin-Vechnyak**, Vice President for Technology Commercialization, Georgetown University
- **Stephen Nappi**, Interim Vice President Research, Temple University
- **Kenneth Porter, SMNAI**, Director, UM Ventures, University of Maryland - College Park

11:15 AM – 12:00 PM

**President's Panel | *The Role of Universities in Driving the Regional, State and National Economy* | Moderated by Paul Sohl, HonNAI**, Chief Executive Officer, Florida High Tech Corridor

Location: Grand Ballroom

- **Marc Christensen, FNAI**, President, Clarkson University
- **Teik C. Lim, FNAI**, President, New Jersey Institute of Technology
- **Moez Limayem, HonNAI**, President, University of North Florida
- **Randy Woodson**, Chancellor, North Carolina State University



## TUESDAY, JUNE 27, 2023 (CONTINUED)

12:00 PM – 12:50 PM	<b>State of the Academy Luncheon</b> <i>Sponsored by Fulgent Genetics</i> Location: State-East Ballroom  <b>Keynote Speaker   Paul Sanberg, FNAI</b> , President, National Academy of Inventors
1:00 PM – 1:45 PM	<b>Keynote Speaker   Sethuraman Panchanathan, FNAI</b> , Director, National Science Foundation Location: Grand Ballroom
1:45 PM – 2:25 PM	<b>Higher Education Fireside Chat   <i>Strengths, Challenges, Value and Impact of Academic Invention</i>   Moderated by Cameron Smith</b> , Assistant Vice President - Research Commercialization <i>Sponsored by Texas Tech University</i> Location: Grand Ballroom  <b>Mark Becker</b> , President, Association of Public and Land-Grant Universities (APLU)  <b>Barbara Snyder</b> , President, Association of American Universities (AAU)
2:25 PM – 2:30 PM	<b>BREAK</b>
2:30 PM – 3:25 PM	<b>Diversity, Equity, Inclusion, Belonging and Joint Project Agreement Panel   <i>Expanding Access and Engagement with Historically Underserved Communities</i>   Moderated by Kathi Vidal</b> , Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office <i>Sponsored by Tufts University</i> Location: Grand Ballroom  <ul style="list-style-type: none"> <li>• <b>Introduction by Bernard Pragash Arulanandam, FNAI</b>, Vice Provost for Research, Tufts University</li> <li>• <b>Karen Burg, FNAI</b>, Vice President of Research, University of Georgia</li> <li>• <b>Almesha Campbell, HonNAI</b>, Assistant Vice President for Research and Economic Development, Jackson State University, Chair AUTM</li> <li>• <b>Robert Duncan, FNAI</b>, President's Distinguished Chair in Physics, Texas Tech University</li> <li>• <b>Lateef Mtima</b>, Professor of Law, Howard University</li> </ul>
3:25 PM – 3:30 PM	<b>Closing Remarks</b>  <b>Elizabeth Dougherty, HonNAI</b> , Eastern Regional Outreach Director, U.S. Patent and Trademark Office Location: Grand Ballroom
3:30 PM – 5:30 PM	<b>BREAK</b>
5:30 PM	<b>Fellows to Assemble</b> Location: State East Ballroom
6:00 PM – 7:30 PM	<b>Fellows Induction Ceremony</b>  <b>Presented by Paul Sanberg, FNAI</b> , President, National Academy of Inventors  <b>Presented by Kathi Vidal</b> , Director, U.S. Patent & Trademark Office
7:30 PM – 8:30 PM	<b>Gala Cocktail Hour</b> Location: State East Foyer
8:30 PM – 10:00 PM	<b>Gala Dinner, Awards Presentation &amp; Entertainment</b> Location: Grand Ballroom







## 2022-2023 BOARD OF DIRECTORS

### **Paul R. Sanberg, President**

Distinguished University Professor  
Former Senior Vice President for Research, Innovation,  
and Knowledge Enterprise  
*University of South Florida*  
NAI Fellow

### **Kenneth Blank, Treasurer**

President  
*University Research Strategies, LLC*  
NAI Fellow

### **Karen J.L. Burg**

Vice President for Research  
Harbor Lights Endowed Chair  
Department of Small Animal Medicine and Surgery  
*University of Georgia*  
NAI Fellow

### **Elizabeth Dougherty**

Eastern Region Outreach Director Office  
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Office of the Under-Secretary for Science and Research  
*Smithsonian Institution*  
Research Biologist, Center for Species Survival  
Smithsonian Conservation Biology Institute  
*National Zoological Park*

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*Texas Tech University*  
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### **Anna M. Leese de Escobar**

Distinguished Senior Scientist of Cryogenic Electronics  
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NAI Fellow



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President and Chief Executive Officer  
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### **Robert Anderson, FNAI**

Director of Technology and Intellectual Property - Retired, Illinois Tech

Robert Anderson received a Bachelor's degree in Chemical Engineering from Illinois Tech in 1962 and an MBA from Northwestern in 1984. He worked for UOP LLC for 37 years. After working in R&D, process development, and engineering development, he became general manager of a small subsidiary company, global director of the petrochemical technology business, then managing director of three European subsidiaries, vice president of quality and productivity, and vice president of marketing. After retirement he returned to Illinois Tech as director of technology transfer and intellectual property where he developed the commercialization process. He also joined the chemical engineering department as an adjunct professor where he taught courses in project management, entrepreneurship and intellectual property, and energy, environment and economics. He and his wife, Lynne, live at Wyndemere Retirement Community in Wheaton, IL, where he serves as president of the Residents' Association. Proud Member of the Fellows Class of 2022.



### **Bernard P. Arulanadam, FNAI**

Vice Provost for Research, Tufts University

Dr. Bernard Arulanandam, PhD, MBA, is Tufts University Vice Provost for Research, where he oversees the Tufts research enterprise. Dr. Arulanandam is a strong advocate for multidisciplinary research efforts, building strategic external partnerships, promoting innovation and technology transfer, cultivating faculty and staff professional development opportunities, and enhancing research and scholarly activities for students, which will ensure Tufts' status as a student-centered, research-intensive institution. Dr. Arulanandam was named a fellow of the American Association for the Advancement of Science in 2016, a fellow of the American Academy of Microbiology in 2017 and a fellow of the National Academy of Inventors in 2019. Dr. Arulanandam obtained a Ph.D. in Microbiology and Immunology at the Medical College of Ohio and received a postdoctoral fellowship at the Albany Medical College in New York and an executive M.B.A. at The University of Texas at San Antonio. Proud Member of the Fellows Class of 2018.



### **Mark Becker**

President Association of Public and Land-Grant Universities (APLU)

Mark Becker is President of the Association of Public & Land-Grant Universities (APLU), a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities in the U.S., Canada, and Mexico.

From January 2009 to August 2021, as president of Georgia State University, Becker led the transformation of GSU from a little known "commuter school" into one of the nation's premier urban research universities. The university more than doubled sponsored research funding during his tenure, and became a national leader in the introduction of innovative programs and initiatives to foster student success.

Prior to Georgia State, Becker held academic appointments at the University of Florida, University of Washington, University of Michigan, and leadership positions at the University of Minnesota and University of South Carolina.



### Charlson Bell

Director of Entrepreneurship and Biomedical Innovation, Vanderbilt Center for Innovation and Design, The Wond'ry and Biomedical Innovation

Charleson S. Bell, PhD is the Director of Entrepreneurship and Biomedical Innovation at the Vanderbilt Center for Innovation and Design, Wond'ry. He is also the Hub Director of the NSF I-Corps Hub, Mid-South Region ("Mid-South Hub"). He is a Research Assistant Professor of Biomedical Engineering at Vanderbilt University, and Associate Director of the Medical Innovators Development Program in the Vanderbilt School of Medicine. Dr. Bell is a "Triple 'Dore" earning his Bachelors in Engineering, Masters in Science, and Doctor of Philosophy in Biomedical Engineering – the first African-American to earn a PhD in Biomedical Engineering at Vanderbilt. Dr. Bell's Department of Defense funded research seeks to improve point-of-care deployability, interoperability, and smartphone-compatibility. Dr. Bell has always possessed an entrepreneurial spirit and embraces new endeavors and innovations with great enthusiasm and passion. He has garnered multiple patents across many fields and co-authored multiple peer-reviewed publications.



### Sally Benson

Deputy Director for Energy and Chief Strategist for the Energy Transition, White House Office of Science and Technology Policy

An internationally-recognized energy expert, Dr. Benson serves as Deputy Director for Energy & Chief Strategist for the Energy Transition at OSTP. Trained as an earth scientist and engineer, she is an expert on a wide variety of topics related to energy and the environment. For the past 25 years, she has focused on deep decarbonization of the global energy system. She comes to OSTP from Stanford University where she is the Precourt Family Professor of Energy Resources Engineering, in the School of Earth, Energy and Environmental Sciences. During her time at Stanford, she was also the Director of the Global Climate and Energy Project, a research program focused on discovering and developing new technologies for reducing carbon dioxide emissions from the energy system. Prior to joining Stanford University, she was at Lawrence Berkeley National Laboratory.



### Latane E. Brackett

Principal Manager of Innovation Programs, National GEM Consortium

Latane served as a highly accomplished Supply Chain/Manufacturing Operations Executive developing future leaders, creating performance cultures, and driving sustainable productivity. He has 30 years of experience in the pharmaceutical and food manufacturing industry working as a corporate engineer, plant manager, director of operations, and vice president of supply chain and operations. He was an Adjunct Instructor for both the Great Lakes Hub's Regional Cohort and Energy I-Corps National Cohort. He is the Principal Manager of Innovation Programs at the National GEM Consortium. In this role, he partners with the National Innovation Network to create pathways for graduate research Fellows to pursue entrepreneurial pathways. Latane is an Executive Coach, a National Instructor for Energy I-Corps, and a Startup Coach for the DOE SBIR Workshop. Latane Brackett earned his Bachelor of Science in Electronics Engineering at Norfolk State University. He earned his Masters of Business Administration at Texas A&M Commerce.





### **Derrick Brent**

Deputy Director, United States Patent and Trademark Office

Derrick Brent is the Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office (USPTO). He serves as the principal advisor to Kathi Vidal, Under Secretary of Commerce for Intellectual Property and Director of the USPTO, for one of the largest intellectual property (IP) offices in the world, with more than 13,000 employees and an annual budget of more than \$4 billion.

Deputy Director Brent has served in all three branches of the federal government and the private sector. He clerked for the Hon. Algenon L. Marbley, Chief Judge of the U.S. District Court for the Southern District of Ohio, and served for six years as a Senior Trial Attorney at the U.S. Department of Justice, Civil Rights Division, where he received a Special Achievement Award for his trial work. Also, he served as a Chief Counsel in the U.S. Senate, where handled IP issues along with other areas such as constitutional law, civil rights, and judicial nominations.

Deputy Director Brent's experience in the private sector includes serving as Vice President/Associate General Counsel for Masimo, on the leadership team at Cut Golf, and as an engineer at General Motors.

Deputy Director Brent received a Bachelor of Science degree in mechanical engineering from The Ohio State University and a Juris Doctor degree from the Northwestern University School of Law (now the Northwestern University Pritzker School of Law).



### **Karen J.L. Burg, FNAI**

Vice President for Research, Harbor Lights Endowed Chair, Department of Small Animal Medicine and Surgery University of Georgia AAAS-Lemelson Invention Ambassador

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 a Massachusetts Institute of Technology's TR100 Young Innovator, an American Institute for Medical and Biological Engineering Fellow, an American Council on Education Fellow, an International Union of Societies for Biomaterials Science and Engineering Fellow, a Biomedical Engineering Society Fellow, a U.S. Department of Defense Era of Hope Scholar, and an American Association for the Advancement of Science-Lemelson Invention Ambassador.

Karen has given over 200 invited presentations and authored over 140 peer reviewed publications on the subject of engineered tissues. She has seven patents issued, fifteen disclosures and/or provisional patent applications recorded, with one patent serving as the basis for a diagnostics company. A Burg invention was one of ten technologies featured in the inaugural Avon Foundation for Women – National Institutes of Health – Center for Advancing Innovation Breast Cancer Start-Up Challenge. Karen served as the principal investigator for the 2015 National Science Foundation Innovation-Corps L (NSF I-Corps L) Team Flipped Research Mentoring and is a member of the 2016 NSF I-Corps L teaching team. Proud Member of the Fellows Class of 2014.

**John Burke**

Principal Director for Quantum Science, Office of the Under Secretary of Defense for Research and Engineering

Dr. John Burke serves as the Principal Director for Quantum Science in the Office of the Under Secretary of Defense for Research and Engineering. In this role he leads the Department's efforts at technology modernization in quantum science, one of DoD's top technology modernization priority areas.

Prior to this position, Dr. Burke was a DARPA Program Manager developing quantum science and technology for sensing, timing and computing applications. Previously, Dr. Burke worked in the Air Force Research Laboratory Space Vehicles Directorate as a nationally recognized Principal Investigator.

**Almesha Campbell**

Honorary NAI Member, Assistant Vice President for Research and Economic Development, Jackson State University

Almesha L. Campbell, Ph.D. is the Assistant Vice President for Research and Economic Development at Jackson State University (JSU). She supports the Vice President with overall responsibility for the Division of Research and Economic Development, which oversees Grants and Contracts, Sponsored Programs, Research Compliance, Technology Transfer and Commercialization, Federal Relations, and the Center for Innovation, Entrepreneurship and Economic Development. For over 10 years, she served as the Director for Technology Transfer and Commercialization at JSU and continues to manage the intellectual property process from triage of invention disclosures to commercialization. She is the JSU principal investigator of the recently awarded Mid-South I-Corps Hub led by Vanderbilt University, two NSF EAGER awards, and is Co-PI for the NSF Enabling SBE Science via the Network for Transformative Research program. She currently serves as the Chair of the AUTM Board of Directors.

**Anne Chasser, HonNAI**

Strategic Advisor, Experienced Leader in Intellectual Property, Government and Higher Education

Anne Chasser was Commissioner for Trademarks at the United States Patent and Trademark Office from 1999 to 2002. While Commissioner, she managed the restructure of the trademark organization and its transition into a Performance Based Agency (PBO) of the federal government.

During her decades long career in academic education Anne launched a highly profitable licensing enterprise at Ohio State University and held a senior position at the University of Cincinnati related to their branding and intellectual property portfolio.

Anne also served as President of the International Trademark Association and played an instrumental role in the founding of the National Academy of Inventors. She was the organization's first treasurer and facilitated the beginning of NAI's partnership with the USPTO.



### **Marc Christensen, FNAI**

President, Clarkson University

Marc P. Christensen is the 17th President of Clarkson University, a private, national research university and leader in technological education, innovation, entrepreneurship, and sustainability. Selected as a fellow of the National Academy of Inventors in 2022, Christensen is a leader in photonics and computational imaging research and technology development, recognized as one of the nation's key leaders in mapping photonic technology onto applications used for national security. Early in his career the United States Defense Advanced Research Projects Agency (DARPA) identified Christensen as a "rising star in microsystems research" and selected him to be one of the first of the 24 DARPA Young Faculty Award recipients. He has led a number of large multi-institutional collaborations focused on sensing and imaging at resolutions that previously defied quantification. He has co-authored over 100 journal and conference papers. He holds ten patents spanning the fields of free space optical interconnections and computational imaging. Proud Member of the Fellows Class of 2022.



### **Daniel Correa**

Chief Executive Officer, Federation of American Scientists (FAS)

In 2019, Dan founded the Day One Project at FAS. Prior to joining FAS, Correa led the Technology and Public Policy Project at Stanford's Freeman Spogli Institute, an initiative to enlist leading technical and policy experts to develop actionable policy proposals across a range of cutting-edge international and domestic science and technology issues. In 2017, he founded the Federal Innovation Council as an initiative of the Partnership for Public Service. He previously helped shape science and technology policy for the Obama Administration for four years, serving as Assistant Director for Innovation Policy at the White House Office of Science and Technology Policy. He received a law degree from Yale Law School, a master's degree in economics from Yale University, and a bachelor's degree from Dartmouth College.



### **Elizabeth Dougherty, HonNAI**

Eastern Regional Outreach Director, United States Patent and Trademark Office

Elizabeth Dougherty is the Director of Inventor Education, Outreach, and Recognition in the Office of Innovation Development at the United States Patent and Trademark Office (USPTO). In this capacity, she develops, implements and supervises programs that support the independent inventor community, small businesses, entrepreneurs, and the intellectual property interests of colleges and universities; she supervises the development of outreach programs to women, minority and other underserved communities; she also builds and maintains relationships with state and local governments to promote local programs that support invention and innovation in the United States. Ms. Dougherty has spearheaded a number of special projects with such organizations and oversees a portfolio of ongoing and future initiatives designed to assist independent inventors, entrepreneurs, and minorities.



### **Calum Drummond, FNAI**

Deputy Vice-Chancellor Research and Innovation, Royal Melbourne Institute of Technology

Professor Calum J. Drummond FNAI AO is RMIT Deputy Vice-Chancellor Research and Innovation. He is an active research professor and has published over 250 articles and patents in the area of advanced materials. He has a PhD and DSc from The University of Melbourne. He joined RMIT University in 2014 from CSIRO where he was Group Executive for Manufacturing, Materials and Minerals. He spent the first 27 years of his career in CSIRO as an ARC Queen Elizabeth II Fellow, Project Leader, Program Leader, ARC Federation Fellow, Chief of 2 Divisions, and Group Executive. He is a Fellow of the Australian Institute of Company Directors (FAICD). He has been an Australian Research Council Federation Fellow and the inaugural Vice President Research at CAP-XX. He is an Officer of the Order of Australia (AO). Proud Member of the Fellows Class of 2018.



### **Robert Duncan, FNAI**

President's Distinguished Chair in Physics, Professor of Physics, Texas Tech University

Currently President's Distinguished Chair in Physics at Texas Tech University (TTU). Former Vice Chancellor for Research at University of Missouri, and Former Senior Vice President for Research at (TTU). Robert V. Duncan, Ph.D. also serves on the Scientific Advisory Board of the US Air Force, and on both the current (and on the last) Decadal Survey for Biological and Physical Sciences in Space (BPSS) of the National Academy of Science. Duncan was the Gordon and Betty Moore Distinguished Scholar in the Division of Physics, Mathematics, and Astronomy, and a member of the visiting Faculty, at Caltech. Duncan has served as the first Associate Dean for Research at UNM, and as the Founding Director of the New Mexico Consortium at Los Alamos National Laboratory. He has published extensively in experimental low-temperature physics, with over 70 articles in peer-reviewed journals. He has co-invented twelve U.S. patents, with multiple international filings. Proud Member of the Fellows Class of 2014.



### **Guochuan Emil Tsai, FNAI**

Professor of Psychiatry, David Geffen School of Medicine at UCLA

Professor Tsai was a faculty at Harvard and now professor at UCLA School of Medicine. His expertise in brain science, psychiatry and management included education at Johns Hopkins Medical School and Carey School of Business. Trained at Massachusetts General Hospital and McLean Hospital, world rank teaching hospitals of Harvard in general psychiatry and child and adolescent psychiatry, he is a diplomate of American Board of Psychiatry and Neurology on both adult and child psychiatry. He is elected to fellow of National Academy of Inventors, American College of Neuropsychopharmacology. He has published more than one hundred scientific articles with fifteen thousand citations as well as more than one hundred patents. His pioneer research opens the field of glutamatergic treatment for brain disorders; he is the first to report the therapeutic efficacy of NMDA modulation for a wide variety of CNS disorders; that set the tone of this line of novel treatment. The new therapeutic classes he validates include: full and partial agonists of NMDA receptor, inhibitors for glycine transporter inhibitor and D-amino acid oxidase. These discoveries are the cornerstone of the SyneuRx, a pharmaceutical venture now has a world-leading pipeline in CNS therapeutics. Recently, he discovered an array of novel chemicals that are inhibitor of 3CL protease for processing of SARS-CoV-2 viral proteins, and TMPRSS2 for viral entry of SARS-CoV-2 and influenza viruses. These therapeutic entities will advance the therapeutic options for twindemic. Proud Member of the Fellows Class of 2022.



### **Wade Fulghum, HonNAI**

Assistant Vice Chancellor for Research Commercialization, North Carolina State University

NC State's innovative research discoveries seek to address the world's grandest challenges thereby improving the world we live in and driving economic growth. Wade Fulghum serves as the Assistant Vice Chancellor for Research Commercialization (ORC) at NC State University. ORC serves as the stewards of all intellectual property created at NC State, and leads many programs and efforts that are changing the research culture, generating maximum impact from research, connecting and uniting the Wolfpack, and contributing to the regional ecosystem.

Wade served as the principal investigator and Managing Director for the National Science Foundations (NSF) I-Corps Site for NC State, and serves as the principal investigator for the NSF Mid-Atlantic Hub in collaboration with 12 leading research institutions in the region. He is the co-founder of the Wolfpack Investor Network (WIN) and serves as the Managing Director and Chair of the WIN Steering Committee. Wade served as the Chair of the North Carolina Small Business Technology Development Center (SBTDC) Research Triangle Advisory Board, and on the statewide SBTDC Advisory Board, as well the NC State Alumni Entrepreneurs Network Board. Other responsibilities include service on the Daugherty Endowment Committee, chair of the Intellectual Property Committee for NC State, Board Member for the Council for Entrepreneurial Development (CED), and a member of NC State's Strategic Task Force and Corporate Relations Strategic Task Force.

Prior to assuming the leadership role for ORC Wade served as the Director of New Ventures over six years and has been responsible for the structure and support of launching over 150 research-based startup companies. Wade received his Bachelors of Finance from the University of Florida as well as a Masters of Business Administration from Hawaii Pacific University focusing on Organizational Change Management. He brings over thirty years of experience both as a small business owner and advising companies and organizations globally and is a veteran of the US Army. In his spare time, he enjoys working out, mountain biking, gardening, cooking, sports, music, and bird watching.



### **David Grewell, FNAI**

Founder and Director, NSF Industry-University Collaborative Research Center for Bioplastics and Biocomposites and of the Great Plains Region, NSF I-Corps Hub

Professor David Grewell received his BS, MS, and Ph.D. in Welding Engineering from The Ohio State University. He holds 17 patents, has authored numerous publications (including three books), and has been given numerous honors and awards. He is the chair of the Department of Industrial and Manufacturing Engineering at North Dakota State University. He was previously a Professor at Iowa State University in the Department of Agricultural and Biosystems Engineering for 14 years. Before returning to academia, he worked at Emerson Electric for nearly 14 years. Starting July 1, he will be the Dean for the College of Engineering and Engineering Technology at Northern Illinois University. Dr. Grewell is the founder and Director of the NSF Industry/University Collaborative Research Center for Bioplastics and Biocomposites and of the Great Plains Region NSF I-Corps Hub. Proud Member of the Fellows Class of 2019.





### **Peixuan Guo, FNAI**

Sylvan G. Frank Endowed Chair in Pharmaceuticals and Drug Delivery and Director of the Center for RNA

Dr. Peixuan Guo, a pioneer of RNA nanotechnology, has held three endowed chair positions at three different prestigious universities, and currently is the Sylvan G. Frank Endowed Chair in Pharmaceuticals and Drug Delivery and the director of the Center for RNA Nanobiotechnology and Nanomedicine at The Ohio State University. He is the president of the International Society of RNA Nanotech and Nanomedicine. He received his Ph.D. from U Minnesota in 1987 and conducted his postdoc at NIH under Bernard Moss. He joined Purdue University in 1990 and became a full professor in 1997, honored as a Purdue Distinguished Faculty Scholar in 1998. He served as the Director of the NIH Nanomedicine Development Center (NDC) from 2006-2011, was the Director of NCI Cancer Nanotech Platform Partnership Program from 2012-2017. To date, Dr. Guo invented 70 patents. He received the 2021 Innovator of the year at The Ohio State University. Proud Member of the Fellows Class of 2022.



### **Suzanne Harrison, HonNAI**

Founder and Principal, Percipience, LLC.

Suzanne S. Harrison is an author, patent futurist, economist and USPTO PPAC member. She works with companies both large and small to help them utilize their patent data to make more informed decisions and realize the true value of their intellectual property. Her specialties are quantifying legal risk, forecasting patent trends, increasing diversity in innovation and helping companies place IP bets now to ensure access to innovation and markets in the future. She is a Founder and Principal of Percipience LLC, a board-level advisory group focused on IP and innovation strategy, management, and quantifying and mitigating IP risk. Since 1995, she has led a group called the ICM Gathering, an invitation-only group of 20 companies that meet regularly to define, create, benchmark and test best practices in IP management. She holds an undergraduate degree in economics from UC Davis, and an MBA from the University of Chicago.



### **James Howard, HonNAI**

Executive Director, The Black Inventors Hall of Fame

James Howard is a lecturer, design historian, industrial designer/inventor of some 300 products with 20 patents. He owns and operates entrepreneurial U, a specialty private career school of Design Thinking. He serves as Executive Director of THE BLACK INVENTORS HALL OF FAME, a virtual museum devoted to immortalizing African Americans whose noteworthy inventions have improved lives yet gone unnoticed, on the Board of Directors for the United States Intellectual Property Alliance and on the advisory board for the American Institutes for Research.

He is co-producer of the groundbreaking film, The Great Equalizer, examining fairness in the patent system. For four years, James was a subject matter expert on Design Thinking for the Keller Innovation Center at Princeton University. James earned a Master and Bachelor of Fine Arts -Industrial Design at University of Illinois, Urbana, IL. James was recently awarded an Honorary member of the National Academy of Inventors.



### **Kate Hudson**

Associate Vice President and Counsel, Policy and Federal Relations

Kate Hudson serves as the Associate 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.



### **Sean Kanuck**

Chief Executive Officer (EXDEC), EXEDEC and an Affiliate of Stanford University's Center for International Security

Sean Kanuck is CEO of the strategic consulting firm EXEDEC and an Affiliate of Stanford University's Center for International Security and Cooperation (CISAC). Previously, Sean served as the first U.S. National Intelligence Officer for Cyber Issues from 2011 to 2016 after a decade of experience in the CIA's Information Operations Center, including both analytic and field assignments. He was also appointed Chair of the Research Advisory Group for the Global Commission on the Stability of Cyberspace and Director of Cyber, Space and Future Conflict at the International Institute for Strategic Studies.

Sean holds degrees from Harvard University (J.D.; A.B. in Government & Philosophy), the London School of Economics (M.Sc. in International Relations), and the University of Oslo (LL.M. in Public International Law). He teaches graduate courses at George Washington University's Elliott School of International Affairs and George Mason University's Law School.



### **Stephen Klasko, HonNAI**

Esteemed Author, Retired President of the Thomas Jefferson University

Dr. Klasko is an inventor, author, an entrepreneur and a believer in the creative and optimistic transformation of healthcare and higher education. He has been a CEO, a university president, and a dean of two medical colleges. Currently he is pursuing his passion to bridge academic health centers with the emerging world of digital medicine and innovation. As President of Thomas Jefferson University, he directed a merger between an almost two century old health science university and a nationally ranked university for design and architecture, heralded by the Chronicle of Higher Education as one of the “few successful mergers between academic entities.” As CEO of Jefferson Health, he presided over the growth of the system from \$1.5 billion to \$9 billion including the acquisition of Health Partners Plan, making Jefferson the first integrated delivery and financial system in Philadelphia history.

His most recent book, *Feelin’ Alright: How the Message in the Music Can Make Healthcare Healthier* uses music and creativity to tackle some of the thorniest issues in healthcare, academics and health equity. His fifth book (with Hemant Taneja of General Catalyst) in 2021, *UnHealthcare: A Manifesto for Health Assurance* has become the manual for both founders and health system CEOs for bringing together the venture capital world with the traditional healthcare ecosystem and has been translated in several languages.

Dr. Klasko serves as an Executive in Residence at General Catalyst, North American ambassador for Sheba Medical Center in Israel, and as CMO and Operating Partner of Abundant Venture Partners. He is also the lead independent director of Teleflex, a seventy year old NYSE medical device company. In 2022, President Biden appointed him to the National Board of Education Sciences.

Over the past five years he has been awarded by Fast Company as one of the “top 25 most creative people in business,” by Modern Healthcare as the “#2 most influential person in healthcare” and by Ernst and Young as the “entrepreneur of the year.”

In addition to being one of the founding members of the NAI, Dr. Klasko was instrumental in initiating the very first chapter at the University of South Florida in Tampa. He lives in Miami with his wife Colleen Wyse, a fashion executive with senior positions in Vogue, W and Glamour.



### **James Lillard, FNAI**

Director, Office of Tech Transfer, Director and Senior Associate Dean for Research, Innovation and Commercialization, Morehouse School of Medicine

James Lillard, PhD MBA holds a B.S. in Electrical Engineering & Computer Science from the Ohio State University and a Ph.D. in Microbiology & Immunology from the University of Kentucky. He completed post-doctoral training in mucosal immunology at the University of Alabama at Birmingham and an Executive MBA from Emory University. Dr. Lillard develops bio- and health-technologies for chronic diseases. His research spans oncology, immunology, and biodefense, with over \$70 million in funding and publications that have been cited over 10,000 times. Dr. Lillard has held leadership positions, including the Gibson Endowed Chair in Medicine, Senior Scientist at the Brown Cancer Center. While at the Morehouse School of Medicine (MSM), Dr. Lillard established the Office of Tech Transfer, where he serves as its Director and the Senior Associate Dean for Research, Innovation, and Commercialization. Proud Member of the Fellows Class of 2020.



## Teik C. Lim, FNAI

President, New Jersey Institute of Technology

Dr. Teik C. Lim is the 9th President of New Jersey Institute of Technology and also holds the title of Distinguished Professor of Mechanical Engineering. Dr. Lim's career has spanned from the private sector to university administration. He worked at SDRC before joining OSU Center for Automotive Research. Dr. Lim has also worked at the University of Texas at Arlington, University of Cincinnati, and University of Alabama. Dr. Lim earned his BSME degree from Michigan Tech, his MSME from the UMR, and his Ph.D. in ME from OSU. Dr. Lim is internationally recognized as a leading scholar in the field of structural vibrations and acoustics as well as modeling and simulation technology. He is a Fellow of the NAI, ASME and SAE. Dr. Lim also was recognized with numerous awards including the Distinguished Alumni Award for Academic Excellence from his alma mater, The Ohio State University. Proud Member of the Fellows Class of 2018.



## Moez Limayem, HonNAI

President, University of North Florida

Dr. Moez Limayem joined the University of North Florida as its seventh president on August 1, 2022. An energetic and passionate leader, President Limayem comes to UNF with a demonstrated commitment to student success. In every step of his career, he has worked to open doors, enhance resources and create valuable experiences for students.

Prior to joining UNF, President Limayem served for a decade as the Lynn Pippenger Dean of the Muma College of Business at the University of South Florida. During his tenure as dean, the college boasted strong job placement rates and the freshman retention rate rose to 95%. Working with his team, Limayem enhanced the college's profile raising more than \$126 million in private donations. He also led university efforts related to career preparation and placement, internships and talent development of students. Earlier in his career, he served as the associate dean for research and graduate programs at the University of Arkansas Sam M. Walton College of Business.

Limayem is the recipient of numerous academic and professional awards including honors recognizing efforts to foster diversity and inclusion. In March, Limayem was named among Tampa Bay's Most Influential Business Leaders of 2022 by the Tampa Bay Business Journal. As a founding member of the National Academy of Inventors, Dr. Layman played an instrumental role as the principal investigator of numerous grants through his university.



## Tatiana Litvin-Vechnyak

Vice President for Technology Commercialization, Georgetown University

Tatiana currently leads technology transfer efforts at Georgetown University's Office of Technology Commercialization, the team responsible for growth and support of Innovation and Faculty Entrepreneurship. She is a strategic leader and IP licensing professional with over 18 years of experience in IP protection strategy and due diligence, business development and licensing of Life Sciences, Physical Sciences and Agriculture innovations. Prior to Georgetown University, Tatiana was the Associate Vice President of Innovation Ventures (IV) at Rutgers University where she led the efforts related to technology transfer and new venture formation, as well as activities focused on management of the intellectual property assets of the university. While at Rutgers, she revamped the University's patent policy, established a robust and diverse fellowship program that has alumni in technology transfer worldwide, and contributed to the launch of the university's gap funding program, TechAdvance. She recently joined the Board of Directors for AUTM.

**Laurie Lacascio, FNAI**

Director, NIST and the Under Secretary of Commerce for Standards and Technology

Laurie E. Locascio is the 17th director of NIST and the fourth Under Secretary of Commerce for Standards and Technology. In this role, she provides high-level oversight and direction of NIST.

Dr. Locascio most recently served as vice president for research at the University of Maryland College Park and University of Maryland Baltimore, where she focused on the development of large interdisciplinary research programs, technology commercialization, innovation and economic development efforts, and strategic partnerships with industry, federal, academic and nonprofit collaborators. She also served as a professor in the Fischell Department of Bioengineering at the A. James Clark School of Engineering with a secondary appointment in the Department of Pharmacology in the School of Medicine.

Before joining the University of Maryland, Dr. Locascio worked at NIST for 31 years, rising from a research biomedical engineer to eventually leading the agency's Material Measurement Laboratory (MML). She also served as the acting associate director for laboratory programs, the No. 2 position at NIST, providing direction and operational guidance for NIST's lab research programs.

Dr. Locascio's most recent honors and awards include the 2021 induction as a fellow of the National Academy of Inventors, the 2017 American Chemical Society Earle B. Barnes Award for Leadership in Chemical Research Management, and the 2017 Washington Academy of Sciences Special Award in Scientific Leadership. She has published 115 scientific papers and has received 12 patents in the fields of bioengineering and analytical chemistry. Her honors and awards also include the Department of Commerce Silver and Bronze Medal Awards, the American Chemical Society Division of Analytical Chemistry Arthur F. Findeis Award, the NIST Safety Award and the NIST Applied Research Award. She is also a fellow of the American Chemical Society and the American Institute for Medical and Biological Engineering.

Dr. Locascio has a B.S. in chemistry from James Madison University, an M.S. in bioengineering from the University of Utah, and a Ph.D. in toxicology from the University of Maryland Baltimore. Proud Member of the Fellows Class of 2020.





## Pamela McCauley

Associate Dean for Academic Programs, Diversity, Equality and Inclusion in the Wilson College of Textiles, North Carolina State University

Dr. Pamela McCauley is the Associate Dean for Academic Programs, Diversity, Equity and Inclusion in the Wilson College of Textiles at North Carolina State University. She is an internationally recognized Industrial Engineering researcher in the development of mathematical models, ergonomics, biomechanics and leadership in STEM. Dr. McCauley served as the Director of the Ergonomics Laboratory in the Department of Industrial Engineering at the University of Central Florida, and also as Program Director for the National Science Foundation, Computer Information Science and Engineering Directorate's I-Corps Program. She previously held the position of Martin Luther King, Jr. Visiting Associate Professor of Aeronautics and Astronautics at MIT, and has written over 100 technical publications, an internationally-used ergonomics textbook, and books on STEM leadership.



## Phoebe Miles

Chief Executive Officer and Co-Founder, Cade Museum for Creativity and Innovation

Phoebe Miles is the CEO and Co-founder of the Cade Museum for Creativity and Invention in Gainesville, Florida. The museum, named after Gatorade inventor (and Ms. Miles' father) James Robert Cade, exists to transform communities by inspiring and equipping future inventors, entrepreneurs, and visionaries. The original content of the Cade Museum features hands-on creativity and STEM classes, online videos, rotating exhibits, a weekly Radio Cade podcast, and the Cade Prize, a preeminent annual competition for inventors and entrepreneurs that has awarded \$600,000 in seed awards to date. The Cade Prize has grown from a regional prize to a national one. Ms. Miles designed the Museum's proprietary education curriculum, Invent Possible, a framework for lifelong STEM learning through the lens of invention. Ms. Miles received a B.A. in German, a B.A. in History, and a teacher's certificate from the University of Washington in 1987.



## Christopher Monroe

Professor of Physics and ECE, Duke University and Co-Founder and Chief Scientist of IonQ, Inc.

Christopher Monroe is Professor of Physics and ECE at Duke University and the co-Founder and Chief Scientist of IonQ, Inc. He is an atomic physicist and quantum engineer, specializing in the isolation and control of individual atoms for applications in quantum information science. At NIST in the 1990s, Monroe co-led the team that demonstrated the first quantum logic gate. At the University of Michigan and the University of Maryland, Monroe's research group pioneered all aspects of trapped atomic ion based quantum computers, making the first steps toward a scalable, reconfigurable, and modular quantum computer system. In 2016, he co-founded IonQ, the first public pure-play quantum computing company that is leading the way in the fabrication of full-stack quantum computers. Monroe is a member of the National Academy of Sciences and is one of the architects of the U.S. National Quantum Initiative passed by Congress in 2018.



### Lateef Mtima

Founder and Director of the Institute for Intellectual Property and Social Justice, Professor of Law, Howard University

Lateef Mtima is a Professor of Law at the Howard University School of Law, and the Founder and Director of the Institute for Intellectual Property and Social Justice, an accredited NGO member of the World Intellectual Property Organization (WIPO), which advocates for core principles of socially equitable access, inclusion, and empowerment in the development and implementation of the IP ecosystem. A graduate of Amherst College and Harvard Law School, Professor Mtima has testified before Congress in support of legislation to promote IP inclusivity, and is the co-editor/contributing author of the Cambridge Handbook on Intellectual Property and Social Justice (Cambridge University Press 2023).



### Stephen Nappi

Associate Vice President of Technology Commercialization and Business Development, Interim Vice President for Research, Temple University

Stephen Nappi has been working with university researchers to advance their discoveries for more than 20 years. Mr. Nappi joined Temple University in 2008 as its Director of Technology Transfer and advanced to Associate Vice President of Technology Commercialization and Business Development in 2013 where he heads the university's efforts to identify, protect and commercialize research-based discoveries while growing an ecosystem to support technology acceleration and startup creation. In 2022, Mr. Nappi was appointed Interim Vice President for Research to oversee the research enterprise for the university.

At Temple, Mr. Nappi benefits from a growing research environment that has led to the creation of over 35 startup companies in the past 10 years. These companies have successfully launched 5 products and collectively raised more than \$160M in funding in the past 2 years.

Mr. Nappi holds a BBA in business management and marketing from Florida Atlantic University.



### Sethuraman Panchanathan, FNAI

Director, National Science Foundation

The Honorable Sethuraman Panchanathan is a computer scientist and engineer and the 15th director of the U.S. National Science Foundation (NSF)—a \$9.5B independent federal agency charged with advancing fields of scientific discovery, technological innovation, and STEM education.

Dr. Panchanathan's career in science, technology, engineering, and education spans more than three decades. He was executive vice president of the Arizona State University Knowledge Enterprise, where he founded the Center for Cognitive Ubiquitous Computing. Prior to becoming director of NSF, he served on the National Science Board for six years and served on and chaired numerous high-level research and innovation organizations. He is a fellow of the National Academy of Inventors, American Association for the Advancement of Science, and the Association for Computing Machinery. His scientific contributions have advanced areas of human-centered multimedia computing, haptic user interfaces, person-centered ubiquitous computing technologies for empowering individuals with a range of abilities. Proud Member of the Fellows Class of 2013.

**Shobha Parthasarathi**

Advisor, Xontogeny

Shobha is an experienced healthcare executive with a track record of advancing and investing in innovative technologies at public and private companies. She brings a combination of 20+ years of research, business development, strategic partnerships and venture investing experience. Her global network spans across academia, startups, investors, accelerators and incubators, disease foundations, global pharmaceutical, and healthcare companies. She enjoys problem solving around growth, business model innovation and transformation initiatives and has enabled progression of over 50+ early-stage companies that have generated greater than \$6B in follow-on investments from public and private sources. Her career highlights include investments that have led to FDA drug approvals/marketed products, company acquisitions and IPO exits. She currently leads identifying investment opportunities for Xontogeny and the Perceptive Xontogeny Venture (PXV) Fund. She holds a Ph.D. in Molecular Genetics and Microbiology and began her career as a research scientist in drug discovery at Takeda (Millennium Pharmaceuticals).

**Tanya Parypa**

Northwest Regional Director, National Security Innovation Network (NSIN)

Tanya Parypa is the Northwest Regional Director of the National Security Innovation Network (NSIN) where her mission is to build networks of innovators in academia, industry, and the Department of Defense (DoD) to solve national security problems. She has over 21 years of experience as a Civilian working for the Department of Navy (DON), a Bachelor's degree from the University of Washington in Electrical Engineering, and a Master's degree from Penn State University in Engineering Management with a Minor in Engineering Leadership and Innovation Management. The first 14 years of her career were at Puget Sound Naval Shipyard (PSNS) where she began as a Shipfitter Helper, then shifted to a Marine Electrician Apprentice before working as an Electrical Engineering Technician. The last seven years of her career as a Civilian for the Navy were served at the Naval Undersea Warfare Center (NUWC) Division Keyport, a Navy lab and depot.



### **Darryll Pines**

President, University of Maryland, College Park

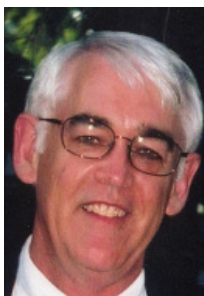
Darryll J. Pines has proudly served as the 34th president of the University of Maryland since July 2020. The Glenn L. Martin Professor of Aerospace Engineering, Pines has emphasized achieving excellence in all aspects of university life while creating a diverse and multicultural community that allows everyone to reach their full potential. He has led efforts to address the grand challenges of our time, and 50 university projects have received \$30 million in university-sponsored grants to study and implement solutions in areas such as sustainability, literacy, and food, energy and water insecurity. Pines also co-founded the 120 Initiative, an effort to reduce gun violence in collaboration with the Consortium of Universities of the Washington Metropolitan Area. Pines received a B.S. in mechanical engineering from the University of California, Berkeley, and M.S. and Ph.D. in mechanical engineering from the Massachusetts Institute of Technology.



### **Kenneth Porter, SMNAI**

Director, UM Ventures, University of Maryland, College Park

Dr. Porter became interested in intellectual property when he and a team of chemists at Duke University invented a DNA sequencing technology for the Human Genome Sequencing Project (see US Pat. Nos. 5,683,869, 5,859,231, 6,376,178, and 6,808,897). He entered the technology transfer profession at Duke, then moved to the University of Colorado to lead the tech transfer office at CU-Boulder. In 2007, he moved to San Antonio to build the first multi-institutional technology management office at the University of Texas. He has formed a company to create networks of institutions, with the aim of streamlining early-stage technology development by utilizing computer support and expert networks. He provided leadership at Innovate Calgary as VP for Intellectual Property Management and Director for Social/Clinical Innovation, and is currently Director of UM Ventures, College Park, at the University of Maryland. Ken was elected with the Class of 2022 as a Senior Member of the National Academy of Inventors.



### **Robert Prud'homme, FNAI**

Professor, Department of Chemical Engineering and Found Director, Engineering Biology Program, Princeton University

Robert Prud'homme is a Professor in the Department of Chemical Engineering, and founding Director of the Engineering Biology Program at Princeton University. He received his BSE in Chemical Engineering at Stanford. After service in the US Army he entered a special studies graduate program in Environmental Science and Public Policy at Harvard (1972-1973). He did his PhD in Chemical Engineering at the University of Wisconsin - Madison, and joined the Princeton faculty after graduation. He has served on the Executive Committee of the American Institute of Chemical Engineers Materials Science Division. He has served as the President of the US Society of Rheology (1978-2010) and was the Director of the Princeton NSF NIRT Center on nanoparticle formation (1985-1990). The confined impinging jet technology developed in his lab is used in all COVID LNP vaccines and is used by the Bill and Melinda Gates Foundation to produce drugs for global health applications. Proud Member of the Fellows Class of 2022.



### **Jamie Renee**

Executive Director, National Academy of Inventors

Jamie Renee serves as the Executive Director for the National Academy of Inventors (NAI). Before assuming the role as Executive Director, she served for two years as the Senior Advisor to the Academy's Founder and President, Dr. Paul Sanberg, overseeing strategic partnerships, board engagement, and team development. As Executive Director, she is committed to growing the impact of NAI through strategic partnerships and intentional member engagement and making strides in reaching and involving underrepresented populations in the innovation and invention ecosystem.

Jamie has a heart for humanity and a mind for business. Korn Ferry ranked her business acumen in the top 2.5% of executive leaders worldwide. She has more than 25 years of corporate and nonprofit experience, having served in leadership roles within Home Depot, OAI, The Children's Home, United Way, and Habitat for Humanity. An alumna of the University of North Florida, Jamie is certified in Strength-based Professional Coaching from Gallup, Social Responsibility Planning from Yale, and Culture Creation from Harvard.

Before her appointment at the Academy, Jamie founded Good Day Solutions, a consulting firm specializing in strategic planning and culture alignment. Her firm worked with organizations and leaders committed to leveraging best practices that put people first and build a culture of inclusivity, trust, and cohesion. She has extensive experience developing and implementing strategic plans, leadership and team coaching, and project implementation. Having overseen multiple mergers and acquisitions, her passion for building cohesive teams and inspiring positive change helps take teams and operations to new levels.

Jamie is an avid life-long learner and loves to teach what she learns. As part of her commitment to "be the good in the world," she founded Engage364, a nonprofit focused on mobilizing business leaders to engage with at-risk youth to help them discover and make a plan for their purpose.



### **Paul R. Sanberg**

President and Founder of National Academy of Inventors

Dr. Paul R. Sanberg is the former Senior Vice President for Research, Innovation and Knowledge Enterprise at University of South Florida, and currently Distinguished University Professor of Medicine, Engineering, and Business, and Executive Director of the Center of Excellence for Aging and Brain Repair.

His innovations have been instrumental in translating new pharmaceutical and cellular therapeutics to clinical trials and commercialization for Tourette syndrome, stroke, ALS, Alzheimer's, Huntington's and Parkinson's disease. He is an inventor on 167 U.S. and international patents; author of over 700 scientific articles and 14 books, with about 40,000 citations. He has served on editorial boards for numerous scientific journals, is co-editor-in-chief of NAI's journal Technology and Innovation, and has received numerous scientific awards, including the AIMBE Advocate Award; Australian Alumni Award (ANU); Bryden Alumni Award (York U); Fulbright Specialist; McGovern Science & Society Award (Sigma Xi); Ove Ferno Prize; Florida Academy of Sciences Medalist; Florida Inventors Hall of Fame inductee; Fellow of AAAS, ACNP, AIMBE, BMES, IEEE, Sigma Xi, the Royal Societies of the Arts, Biology, Chemistry, Medicine and Public Health; and AAAS-Lemelson Invention Ambassador.

He served twice on the nomination evaluation committee for the National Medal of Technology and Innovation; and advisory board for the APLU Commission on Innovation, Competitiveness, and Economic Prosperity. Dr. Sanberg was the first in his family to graduate college. He has been a master flight instructor and airplane enthusiast most of his adult life and is a Fellow of the Royal Aeronautical Society. He was recently inducted to the Johns Hopkins Society of Scholars. Dr. Sanberg is a Charter Fellow of the Class of 2012.





### Sunita Satypal

Director, U.S. Department of Energy, (DOE) Hydrogen and Fuel Cell Technologies Office

Dr. Sunita Satypal is the Director for the U.S. Department of Energy's (DOE's) Hydrogen and Fuel Cell Technologies Office and coordinates activities across offices for the U.S. DOE Hydrogen Program. She is responsible for more than \$1.6 billion in hydrogen and fuel cell research, development, demonstration, and deployment activities within the office and for coordinating more than \$9.5 billion in hydrogen activities across DOE. She has more than two and a half decades of experience across industry, academia, and government, including at United Technologies managing research and business development, and as a visiting professor. She also coordinates international hydrogen activities as Vice-Chair of the International Partnership for Hydrogen and Fuel Cells in the Economy. She received her Ph.D. from Columbia University and did postdoctoral work in Applied and Engineering Physics at Cornell University. She has numerous publications, including in Scientific American, 10 patents, and recognitions including two Presidential Rank Awards.



### Jennifer Shieh

Director of Ecosystem Development, Office of Investment and innovation, Small Business Administration

At the US Small Business Administration Office of Investment and Innovation, I support high-tech small businesses turning ideas into solutions through America's Seed Fund - the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) programs. With more than half a decade of experience funding biotech companies through the National Institutes of Health (NIH), as Small Business Coordinator at the National Heart Lung and Blood Institute Office of Translational Alliances and Coordination (NHLBI OTAC) and Program Director at the National Cancer Institute SBIR Development Center, I facilitate programs & policies to transition research from lab to market and foster a diverse & inclusive entrepreneurial community.

As Assistant Director for Entrepreneurship at the White House Office of Science and Technology Policy (OSTP), I worked with incredible leaders to transform technology transfer for Federally-funded research, champion open innovation through prizes and citizen science, ensure US leadership in R&D infrastructure, and shift paradigms in research to prevent Veteran suicide.

While working on my PhD in Neuroscience, I was fortunate enough to get many opportunities to combine professional and personal interests: working (and playing) at the Tech Museum of Innovation, co-authoring a neuroscience techniques textbook, and dancing my dissertation.

Growing up scientifically in the MIT and Stanford communities, immersed in the spirit of entrepreneurship, I tried my hand as a Jill-of-all-Trades at a mobile games startup (Subversus Interactive) and a cloud-based enterprise software startup that makes applications for scientists (Syapse). I also found my way to the Koshland Science Museum of the National Academy of Sciences as a Mirzayan Science and Technology Policy Fellow, where I thoroughly enjoyed (and hope to continue) my pursuit of engaging the public with science, improving education, and generally learning how scientists can make the world a better place through policy.

You are likely to find me on the dance floor, at a live performance of some sort, and/or exploring new places and ideas.

Specialties: startups, investment, science policy, neurobiology, cell biology, advanced imaging technology



## Marc Singer

Managing Partner and Co-Founder, Osage University Partners (OUP)

Marc Singer is a Managing Partner and Co-Founder of Osage University Partners ("OUP"), which he joined in 2008. OUP partners with high quality university and research institutions to serve as their coinvestment vehicle in start-ups that are licensing their technology. OUP works with its partner institutions to build a broad venture capital portfolio across a range of advanced technologies, including software, hardware, advanced materials, life sciences, and more. OUP has partnered with 100 research institutions and has approximately \$800 million in capital under management and has invested in over 130 university start-ups. Marc manages all of OUP's technology investing activities, including software, hardware, semiconductors, advanced materials, healthcare IT, and more. Marc has spent the last thirty years in venture capital. Marc earned his BS from The Wharton School of the University of Pennsylvania.



## Jeanne Sinquefield

Co-Founder, Invention Scouts, in addition, Inventor, Philanthropist, Musician, Author, Statistician

Jeanne Cairns Sinquefield, PhD.

Education -B.A. UCSB '68; , M.A. '70, Phd. '72', MBA '79. U.of Chicago

Faculty - U. of Chicago, U. of Indonesia (72-78) . Work -CBOT designing futures and options on futures contracts 79-82', Exec VP & Head of Trading Dimensional Funds Advisors '82'-2005'.

Jeanne is an Inventor, philanthropist, musician. author , statistician. She co-founded "Invention Scouts" in 2014 with the goal to find and grow Inventors and their teams through scouting.

The first Summer camp program used a Tipi for classes. We now have Invention Lab Trailers , the Sinquefield Invention Campus ( 4 buildings - ILab, Woodworking, Blacksmith/welding, Skilled/Trades Lab.), and the Sinquefield Innovation Space ( Engineer/Programming Health/Safety, Science/Nature Lab and Audio/Visual/Design Studio. 1,000s of scouts have participated in our programs and Invention Jamborees from across the country.



## Cameron Smith

Assistant Vice President for Research Commercialization, Texas Tech University

Cameron Smith is the Assistant Vice President for Research Commercialization overseeing the Office of Research Commercialization, a system office serving the Texas Tech University System (TTUS) and its five component institutions including Texas Tech University, Angelo State University, Texas Tech University Health Sciences Center, Midwestern State University and the Texas Tech University Health Sciences Center El Paso.

On behalf of the TTUS, Cameron oversees the intellectual property (IP) portfolio, actively managing the filing and prosecution of patent applications through outside counsel. He also approves and executes new license agreements as well as manages both the IP and office budgets. He is a licensed Patent Attorney with experience in IP asset protection and management and is a Certified Licensing Professional with technology transfer and licensing expertise. Cameron works to guide System inventors to both patentable and marketable aspects of their research in both the life sciences and engineering. With experience in private practice as well as in-house, he is a valuable resource for faculty and students with questions about the patenting and commercialization process. The focus of Cameron's work revolves around bridging the gap between industry and academia by first identifying and protecting intellectual assets within the System, and then negotiating and executing commercialization agreements to bring the invention to market, ultimately generating revenue back the inventor and the institution.

**Barbara Snyder**

President, Association of American Universities (AAU)

Barbara R. Snyder is President of the Association of American Universities. Prior to that, from 2007 to 2020, she served as President of Case Western Reserve University, where she encouraged interdisciplinary excellence, catalyzed institutional collaboration, and reinvigorated alumni engagement and fundraising. Snyder began her academic career as an assistant professor at Case Western Reserve's School of Law, then joined the faculty of Moritz College of Law at The Ohio State University. After serving in several leadership positions at Moritz and within the central university, Snyder became OSU's Interim Executive Vice President and Provost in 2003 before securing the permanent position the following year. She graduated from the University of Chicago School of Law, where she served as executive editor of its law review and earned her bachelor's degree from Ohio State. Snyder is a director of KeyCorp and Progressive Corporation. She is an elected member of the American Law Institute.

**Paul Sohl, HonNAI**

Chief Executive Officer, Florida High Tech Corridor, Rear Admiral

Paul Sohl is CEO of the Florida High Tech Corridor, an organization serving a 23-county region anchored by three of the country's largest research institutions: the University of Central Florida, the University of South Florida and the University of Florida. The Corridor's mission is to converge and catalyze the capacity of high tech, innovation, and bright minds to generate a global ripple effect that advances the lives of people in the communities it serves. As CEO, Sohl facilitates connection and collaboration between the three universities and their partners in academia, industry and economic development. Sohl joined The Corridor in June 2020, following more than three decades of service in the U.S. Navy. In his last command, Sohl led over 500 civilian and military personnel at the Navy's Operational Test & Evaluation Force in Norfolk, Virginia, where he directed the operational testing and evaluation of Navy warfighting systems and capabilities. As a founding institution that played an integral part in establishing the Nai, the FHTC is more than an initiative or facilitator; it is a force multiplier.



### **Stephen Susalka, HonNAI**

Chief Executive Officer, AUTM

Dr. Stephen J. Susalka is the Chief Executive Officer of AUTM, a 2,500+ member non-profit association, focused on supporting and enhancing technology transfer globally, and oversees a cooperative agreement with the Federal Laboratory Consortium for Technology Transfer to support federal technology transfer for more than 300 federal labs across the US. As an international leader in technology commercialization, Dr. Susalka uses his experience in intellectual property protection, licensing, and company formation to empower, promote and connect AUTM members as they advance the next generation of ground-breaking innovations into the products and services of tomorrow. A regular speaker on technology transfer issues, Dr. Susalka has frequently presented on Capitol Hill and internationally on topics ranging from start-up formation to the evolution of the profession. Dr. Susalka earned his Ph.D. in Neuroscience from the University of Virginia and is a registered U.S. Patent Agent.



### **Jacob Taylor**

Director, National Quantum Initiative, White House Office of Science and Technology Policy

Jake Taylor's research career in quantum information science spans two decades, and includes pioneering work in semiconductor-based qubits, superconductor-based qubits, quantum transducers, topological photonics, and diamond-based quantum sensors. From 2017-2020, Jake led the U.S. effort in creating and implementing the National Quantum Initiative while at the White House Office of Science and Technology Policy. A fellow of the American Physical Society and of Optica (formerly OSA), Jake has also been awarded the silver and gold medals by the U.S. Department of Commerce for his research and his work in advancing quantum information science.



### **Anthony Tether**

Director -Retired, Defence Advanced Research Projects Agency (DARPA)

Dr. Anthony J. Tether was Director of the Defense Advanced Research Projects Agency (DARPA) from 2001 to his retirement in 2009 where he was responsible for management of the Agency's projects for high-payoff, innovative research and development. In 2009, he re-formed The Sequoia Group (TSG), which provides program management and strategy development services to government and industry. He is on several Advisory and Corporate Boards, and is a Distinguished Fellow with the Council on Competitiveness located in Washington DC. Dr. Tether has served on Army, Navy and Defense Science Boards, and on the Office of National Drug Control Policy Research and Development Committee. He is an Institute of Electrical and Electronics Engineers (IEEE) Life Fellow for leadership in the advancement of commercial and defense technologies. He received a Bachelor's of Electrical Engineering from Rensselaer Polytechnic Institute, and a Master of Science and Ph.D. in Electrical Engineering from Stanford University.

**Sylvia Thomas, FNAI**

Interim Vice President for Research and President, Chief Executive Officer of the USF Research Foundation, University of South Florida

Sylvia Wilson Thomas, PhD, was appointed interim Vice President for Research and President & CEO of the USF Research Foundation, Inc. on November 10, 2021. She is a Professor in Electrical Engineering, affiliate faculty in Medical Engineering, and former Assistant Dean (Engineering) at the University of South Florida (USF) College of Engineering in Tampa, Florida. She is a Senior Member of the National Academy of Inventors (NAI) and a fellow of the American Institute for Medical and Biological Engineering (AIMBE). She holds B.S. and M.S. degrees in Electrical Engineering from Vanderbilt University, where she was a Patricia Roberts Harris Fellow. Dr. Thomas received her Ph.D. in Electrical Engineering from Howard University, as a NSF Materials Research Center of Excellence Fellow and was a National Science Foundation (NSF) EAPSI research fellow in Korea at Chonbuk National University during her doctoral program.

Dr. Thomas serves as President of the Institute of Electrical and Electronics Engineers Engineering in Medicine and Biology Florida West Coast Section, advisor for Society of Women Engineers and National Society of Black Engineers, and member of the Board of Directors for Black Girls Code and Florida Senate Appointee to the Florida Education Fund Board of Directors.

Dr. Thomas is a motivational speaker/consultant for science, technology, engineering, and mathematics (STEM) education, continued/graduate education, K-12 efforts, career transitioning, mentoring and professional development. Her involvement and constant dedication to STEM education, diversity, and professional development have led to her recognition in local and national news and publications, including the most prestigious 2020 US Black Engineer BEYA Educational Leadership Award, 2018 USF Undergraduate Teaching Award, 2018 Women in Leadership and Philanthropy Award, 2016 STEM Woman of the Year Award-Pinellas Cty Girls Inc., and 2015 USF Graduate Faculty Mentor Award.

Professor (12 PhDs, 10 MS), Committee member (50 PhD/MS), REU mentor (over 90 undergraduates, inclusive of role as NSF REU PI, 3 Senior Design projects and 1 Honors Thesis), and RET mentor (30 teachers, inclusive of role as NSF RET CoPI). She has also fostered and been engaged in collaborations and engineering education efforts in Italy, Puerto Rico, Singapore, Portugal, South Korea, Mexico, and South Africa. Proud Member of the Fellows Class of 2022.





### Kathi Vidal

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

Kathi Vidal serves as the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (USPTO) – America’s Innovation Agency. As the chief executive of the USPTO, she leads one of the largest intellectual property (IP) offices in the world, with more than 13,000 employees and an annual budget of nearly \$4 billion. She is the principal IP advisor to the President and the Administration, through the Secretary of Commerce, and is focused on incentivizing and protecting U.S. innovation, entrepreneurship, and creativity, and helping American workers and businesses compete and collaborate, especially in key technology areas and across demographics. As Director of the USPTO, Vidal is working to expand American innovation for and from all, including serving as the Vice Chair of the Council for Inclusive Innovation (CI2), alongside Secretary of Commerce Gina M. Raimondo and the Council members; serving as a Co-Chair of the National Advisory Council on Innovation and Entrepreneurship (NACIE); and the Co-Founder, with the Secretary, of the Women’s Entrepreneurship (WE) initiative.

Prior to leading the USPTO, Director Vidal held top leadership positions at Winston & Strawn LLP and Fish & Richardson P.C. She has served a wide range of clients, from individual inventors and entrepreneurs, to some of our country’s most well-known and successful companies. Director Vidal holds bachelor’s and master’s degrees in electrical engineering, has five years of industry experience in manufacturing and design, and has deep technical expertise in a myriad of technologies, from consumer products to artificial intelligence. In her various roles, Director Vidal has received numerous accolades, created innovative initiatives and programs, and been recognized as a trailblazer and thought leader.



### Mladen Vouk

Vice Chancellor for Research and Innovation, North Carolina State University

Mladen Alan Vouk received Ph.D. from the King’s College, University of London, U.K. Dr. Vouk is Vice Chancellor for Research and Innovation at NC State University. and Distinguished Professor of Computer Science. Dr. Vouk has extensive experience in both commercial software production and academic computing. He is the author/co-author of over 300 publications. His interests include software and security engineering, bioinformatics, scientific computing and analytics, information technology assisted education, and high-performance, cloud and quantum computing. Dr. Vouk is a member of the IFIP Working Group 2.5 on Numerical Software, and a recipient of the IFIP Silver Core award. He is an IEEE Fellow, and a recipient of the IEEE Distinguished Service and Gold Core Awards. He is a member of several IEEE and other professional societies.

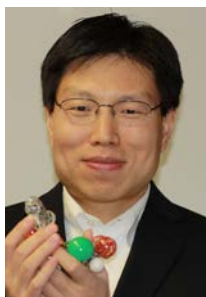


### Allen Walker

Senior Advisor, TIP Chief of Staff, U.S. National Science Foundation’s Directorate for Technology, Innovation and Partnerships (TIP)

Allen Walker is a senior advisor in the U.S. National Science Foundation’s newly established Directorate for Technology, Innovation and Partnerships (TIP). In this position, Walker focuses on potential partnerships through engagement with stakeholders across government, academia, industry, and nonprofits. He also advises directorate leadership on research and development strategy and policy. He acts as the TIP Chief of Staff supporting the Assistant Director.

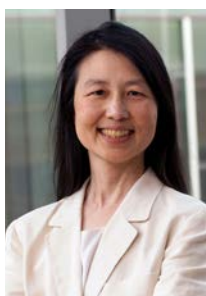
Prior to joining the NSF in 2023, Walker was the Special Assistant to the Defense Advanced Research Projects Agency (DARPA) Director, advising on transitioning advanced technologies to the U.S. Army. In 2022, he retired from the U.S. Army after a 26-year distinguished military career, including 10 years in leadership and senior positions. Walker holds a bachelor’s degree in computer science from Drew University and a master’s degree in operations from the U.S. Air Force Air University.



### Yadong Wang, FNAI

McAdam Family Foundation Professor, Cornell University

Yadong Wang is the McAdam Family Foundation Professor at Cornell University. He obtained his Ph.D. degree at Stanford University in 1999, conducted his postdoctoral research at MIT, and joined the Georgia Institute of Technology in 2003 as an assistant professor. He was recruited to the University of Pittsburgh in 2008 and to Cornell in 2017. He has published on topics ranging from Chemistry, Materials Science to Biomedical Engineering. He is a fellow of AIMBE and is a newly elected fellow of the National Academy of Inventors. His research focuses on the design and application of biomaterials. Several of his inventions are licensed, one of which is commercially available and approved for clinical use. He co-founded three companies, one of which is marketing advanced medical adhesives. Proud Member of the Fellows Class of 2022.



### Jeanette Wing, FNAI

Executive Vice President for Research and Professor of Computer Science, Columbia University

Jeannette M. Wing is the Executive Vice President for Research and Professor of Computer Science at Columbia University. She joined Columbia in 2017 as the inaugural Avaneessians Director of the Data Science Institute. From 2013 to 2017, she was a Corporate Vice President of Microsoft Research. She is Adjunct Professor of Computer Science at Carnegie Mellon where she twice served as the Head of the Computer Science Department and had been on the faculty since 1985.

From 2007-2010 she was the Assistant Director of the Computer and Information Science and Engineering Directorate at the National Science Foundation. She received her S.B., S.M., and Ph.D. in Computer Science from the Massachusetts Institute of Technology. Her current research is on trustworthy AI. General research interests are trustworthy computing, security and privacy, specification and verification, concurrent and distributed systems, programming languages, and software engineering. Proud Member of the Fellows Class of 2022.



### Helena Wisniewski, FNAI

Chair of the Management, Marketing, Logistics and Business Analytics Department and Professor of Entrepreneurship in the College of Business and Public Policy

Dr. Helena Wisniewski has leadership experience in academia, industry, government, and on public and private boards. She is Chair of the Management, Marketing, Logistics, and Business Analytics Department and a Professor of Entrepreneurship in the College of Business and Public Policy (CBPP) at the University of Alaska Anchorage, where she created the first AI course in CBPP, the AI webinar series, and established the Alaska Data Science & AI Lab to use AI to solve challenges while facilitating experiential learning for students. She is the Founding Director of the Arctic Domain Awareness Center, which she created to develop and transition technologies to improve crisis response capabilities in the Arctic. She previously was Vice Provost for University Research and Dean of the Graduate School at UAA and established an ecosystem of entrepreneurship and innovation. Before UAA, she was Vice President for Research and Enterprise Development at Stevens Institute of Technology. Proud Member of the Fellows Class of 2015.



### **Randy Woodson**

Chancellor, North Carolina State University

Dr. Randy Woodson became the 14th chancellor of North Carolina State University in April 2010. Woodson leads the largest university in North Carolina, with more than 38,000 students and a \$2 billion budget, with a special focus on student success, collaborative partnerships, and ground-breaking research and innovation.

Under his leadership, NC State has become a pre-eminent research enterprise known for solving real-world challenges – a true Think and Do university. Woodson's strategic vision has enabled the university to advance in areas of student success, innovative research, and collaborative partnerships. This has resulted in students ready to solve real-world challenges, public-private partnerships that transform ideas into solutions, and a creative, engaging center of learning and exploration for all.

True to its land-grant heritage, NC State creates economic, societal and intellectual prosperity for the people of North Carolina and the country -- with increasing momentum under Woodson's direction.



### **Ganapati D. Yadav, FNAI**

Vice Chancellor and R.T. Mody Distinguished Professor, Institute of Chemical Technology (ICT), Mumbai

Professor Ganapati D. Yadav is the Vice Chancellor and R.T. Mody Distinguished Professor of the Institute of Chemical Technology (ICT), Mumbai. He is J.C. Bose National Fellow and Adjunct Professor at RMIT University in Melbourne, Australia and University of Saskatchewan, Canada. He is internationally recognized by many prestigious awards, fellowships and honours for his seminal contributions to education, research and innovation in green chemistry and engineering, catalysis, chemical engineering, biotechnology, nanotechnology, energy engineering and development of clean and green technologies. He has provided inspiring leadership to the Institute of Chemical Technology (ICT), the Indian Institute of Chemical Engineers (IChE), Catalysis Society of India, and Maharashtra Academy of Sciences. He was conferred Padma Shri, the fourth highest civilian honour by the President of India on March 28, 2016. The D.Y. Patil University, Kolhapur conferred upon him D. Sc. (Hon. Causa) in April 2016. According to the National Institutional Ranking Framework (NIRF)-MHRD, the ICT is ranked SECOND among all universities in India. His research productivity is phenomenal: supervision of 85 doctoral and 94 masters theses, over 350 original research papers, 75 national and PCT patents; 3 books; h-index of 46, i10 index of 174; 7600+ citations. He is a Fellow of Indian National Science Academy, National Academy of Sciences, India and TWAS among others. He was honoured with D. M. Trivedi Lifetime Achievement Award by Indian Chemical Council (2013) and Dr. B. P. Godrej Lifetime Achievement Award of IChE (2013). The Indian Chemical Council conferred upon him Life Time Achievement Award and gold medal (2014). The American Chemical Society (ACS) published a Festschrift (special issue) of Industrial and Engineering Chemistry Research (2014) in his honour and he is the Founder President ACS India International Chapter. He is on editorial boards of prestigious journals like: ACS Sustainable Chemistry & Engineering, Green Chemistry, Applied Catalysis A: Gen, Journal of Molecular Catalysis A: Chem., Catalysis Communications, International Journal of Chemical Reactor Engineering, Clean Technologies and Environmental Policy, Current Catalysis, etc. Proud Member of the Fellows Class of 2022.





FLORIDA ATLANTIC UNIVERSITY

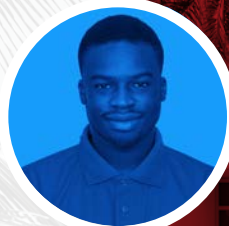


# CONGRATS FAU INNOVATORS

Congratulations to all the FAU inventors recognized by the National Academy of Inventors this year.

The **FAU NAI Chapter** is the recipient of the inaugural Chapter Excellence Award.

Undergraduate student **Danny Alice** was selected to present his invention at the Next Generation Student Showcase.



Scan to view all FAU chapter members.  
To learn more about FAU, visit [fau.edu](https://fau.edu).





Arizona State University (ASU) is a top-ranked public metropolitan research university, with five academic campuses and four innovation campuses across greater Phoenix and four regional learning centers throughout Arizona. ASU is a comprehensive public research university, measured not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves. For three years in a row, U.S. News & World Report has ranked ASU as the #1 Most Innovative School in America.



Auburn University, chartered in 1856, is a public land-grant, sea-grant, and space-grant institution with an enrollment of 29,000 students and a three-part mission of teaching, research, and outreach. Recognized in the Carnegie Classification as a "Higher Research Activity" doctoral university, AU has a \$5.4 billion annual impact on the state economy and features a growing research park established in 2008. Strategic areas of research emphasis include health sciences, advanced manufacturing, and cybersecurity.



NAI is honored to welcome The Chinese University of Hong Kong (CUHK) as its first Sustaining International Member Affiliate. The university, which overlooks Tolo Harbour, is the largest educational institution in Hong Kong, averaging twenty-thousand students each year. The university is honored to be ranked #53 in the world.

With a strong focus on innovation, CUHK's top areas of research are Interdisciplinary and Translational Biomedical, Artificial Intelligence, and Robotics & Automation. "As a member of the NAI community, we look forward to increasing recognition of the economic impact generated from academic discovery at CUHK," says Daniel HS Lee AVPO and Chief Innovation and Enterprise Officer at the university. "It also offers our researchers a direct communication channel with others in their specialized areas of concentration. This access to the NAI network is invaluable for collaborating."





Established in 1809, Miami University is consistently ranked among the top 50 national public universities by U.S. News & World Report for providing students with an Ivy League-quality education at a public school price. Located in quintessential college town Oxford, Ohio—with regional campuses in Hamilton and Middletown, a learning center in West Chester, and a European study center in Luxembourg—Miami serves more than 21,600 undergraduates across 120 areas of study, and more than 2,500 graduate students through 70 master's and doctoral degree programs. At this comprehensive research university, students engage and conduct research with premiere teacher-scholars. Miami adds \$2.3 billion each year to Ohio's economy through innovative partnerships and job creation. Miami is a NCAA Division I school, serving more than 500 student athletes across 19 varsity sports.



NEW YORK UNIVERSITY

Founded in 1831, NYU is one of the world's foremost research universities and is a member of the selective Association of American Universities. NYU has degree-granting university campuses in New York, Abu Dhabi, and Shanghai; has eleven other global academic sites, including London, Paris, Florence, Tel Aviv, Buenos Aires, and Accra; and both sends more students to study abroad and educates more international students than any other U.S. college or university. Though its numerous schools and colleges, NYU is a leader in conducting research and providing education in the arts and sciences, engineering, law, medicine, business, dentistry, education, nursing, the cinematic and performing arts, music and studio arts, public administration, social work, and professional studies, among other areas.

**NC STATE**  
UNIVERSITY

NC State University is a research powerhouse and a powerful economic engine for North Carolina. The Office of Research Commercialization (ORC) plays a crucial role in this by protecting and promoting University research discoveries and intellectual property, working with and guiding industry partners, and promoting the acceleration of startups. We're driving economic growth by facilitating the commercialization of research discoveries.



جامعة الأمير محمد بن فهد  
PRINCE MOHAMMAD BIN FAHD UNIVERSITY

Founded in 2006, PMU is a fast growing private institution of higher learning in the Kingdom of Saudi Arabia. This university, with its highly innovative student-centered approach to impart education, offers a chance to students to explore genuine paths to learn and innovate when being groomed for their future roles as hardcore professionals. PMU intends on building its potential and entrepreneurial spirit through its colleges, to be a leader in conducting research and providing education in the engineering, computer science, business, law and other areas.



TEXAS TECH UNIVERSITY®

Texas Tech University is located in Lubbock, Texas. Created by legislative action in 1923 as Texas Technological College, the name was changed to Texas Tech University in 1969. Campus physical facilities include a total of 7,449,218 square feet in 188 buildings. The university is composed of more than 26,400 undergraduate, 5,200 graduate and 700 law students. Annually, total research expenditures exceed \$125 million. The Carnegie Foundation classifies Texas Tech University as a RU/H: Research Universities (high research activity).



The University of California, Riverside (UCR) is a powerful engine of economic growth for Inland Southern California and beyond, having contributed more than \$2.7 billion to the U.S. economy during the fiscal year 2015-16 alone. UCR students and visitors contribute more than \$287 million to the Inland region. The campus proudly partners with entrepreneurs, corporate leaders, and fellow research enterprises from around the world.



UNIVERSITY OF  
CENTRAL FLORIDA

The University of Central Florida (UCF) and its 13 colleges provide opportunities to 66,000 students from all 50 states and 140 countries. Located in Orlando, Florida, UCF is the nation's second-largest university with 210 degree programs to choose from. UCF is ranked as one of the "Most Innovative" universities by U.S. News & World Report, a best-value university by The Princeton Review and Kiplinger's, and one of the nation's most affordable colleges by Forbes.



The University of Florida's mission is to prepare our students to lead and influence the next generation and beyond for economic, cultural and societal benefit. Recognized as among the top 10 public universities by U.S. News & World Report, UF is one of the nation's largest public universities, and is the only member of the Association of American Universities in Florida. UF scientists and scholars conduct about \$800 million in research annually and UF consistently ranks among the top universities at transferring its discoveries to the marketplace. Teaching, research and scholarship, and service span all of UF's academic disciplines and represent its commitment to be a premier university that the state, nation and world look to for leadership.



The University of Nebraska-Lincoln is a top-tier national research university and a member of the Big Ten Academic Alliance. Like the university's founders in 1869, students and faculty at Nebraska look challenges and opportunities in the eye, using fresh thinking and creativity to forge new paths. The expansive geography of the state fosters a closeness and collaboration that makes way for solutions applied nearby and around the world, including innovative public-private partnerships and through Nebraska Innovation Campus, the university's rapidly growing research campus. Nebraska is the state's flagship and land grant university and continues to grow in size and prominence. Nebraska has nearly 26,000 students and more than 180 undergraduate and 120 graduate degree programs, and is ranked as a best-value university by Fiske Guide to Colleges, Kiplinger's and others.



The first and foremost comprehensive national university in the United Arab Emirates. Founded in 1976 by the late Sheikh Zayed Bin Sultan Al Nahyan, UAEU aspires to become a comprehensive, research-intensive university and currently enrolls approximately 14,968 Emirati and international students. As the UAE's flagship university, UAEU offers a full range of accredited, high-quality graduate and undergraduate programs through nine Colleges: Business and Economics; Education; Engineering; Agriculture & Veterinary Medicine; Humanities and Social Sciences; IT; Law; Medicine and Health Sciences; and Science. With a distinguished international faculty, state-of-the art new campus, and full range of student support services, UAEU offers a living-learning environment that is unmatched in the UAE.

In its drive to achieve international research stature, UAEU works with its partners in industry to provide research solutions to challenges faced by the nation, the region, and the world. The University has established research centers of strategic importance to the country and the region which are advancing knowledge in critical areas ranging from water resources to cancer treatments. UAEU is currently ranked #5 in the Arab World and #296 worldwide. UAEU's academic programs have been developed in partnership with employers, so our graduates are in high demand. UAEU alumni hold key positions in industry, commerce, and government throughout the region. Our continuing investments in facilities, services, and staff ensure that UAEU will continue to serve as a model of innovation and excellence.



The University of South Florida, established in 1956 and located in Tampa, is a high-impact, global research university dedicated to student success. The USF System includes three campuses: USF Tampa; USF St. Petersburg; and USF Sarasota-Manatee. Serving more than 49,000 students, the USF System has an annual budget of \$1.6 billion and an annual economic impact of \$4.4 billion. USF is ranked in the Top 30 nationally for research expenditures among public universities, according to the National Science Foundation. In 2016, the Florida Legislature designated USF as "Emerging Preeminent," placing USF in an elite category among the state's 12 public universities. USF is a member of the American Athletic Conference.



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Auburn University	Massachusetts General Hospital Research Institute
Australian National University	Massachusetts Institute of Technology
Baylor College of Medicine	Mayo Clinic
Binghamton University, State University of New York	Medical University of South Carolina
Boise State University	Miami University
Boston University	Michigan State University
Brown University	Missouri University of Science and Technology
California State University, Long Beach	Morehouse School of Medicine
Carnegie Mellon University	Nanyang Technological University, Singapore
Case Western Reserve University	National Institutes of Health
Chapman University	National Taiwan University
Cold Spring Harbor Laboratory	Naval Information Warfare Center - NIWC Pacific
Colorado State University	New Jersey Institute of Technology
Columbia University	New York University
Cornell University	North Carolina State University
Dartmouth	North Dakota State University
Drexel University	Northeastern University
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Florida State University	Portland State University
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Hamad Bin Khalifa University	Rensselaer Polytechnic Institute
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Illinois Institute of Technology	Rowan University
Indiana University	Royal Melbourne Institute of Technology
Institute for Human & Machine Cognition	Rutgers, The State University of New Jersey
Iowa State University	Saint Louis University
Jackson State University	Shanghai Jiao Tong University
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King Abdulaziz University	Southern Methodist University
King Abdullah University of Science and Technology	Southern Research Institute





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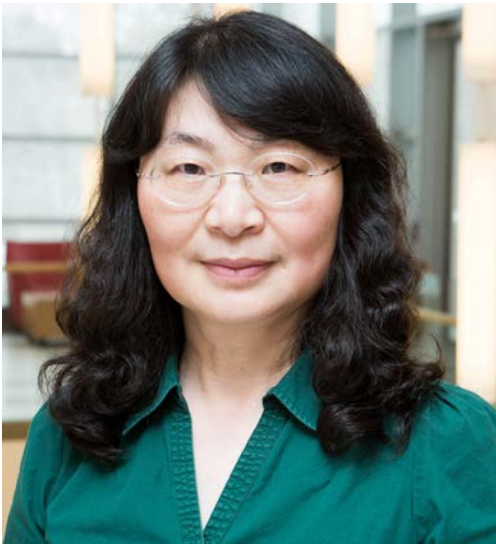
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# CONGRATULATIONS

## 2022 Fellow of the National Academy of Inventors



**Yuanyuan Yang, PhD**

Distinguished Professor  
Department of Electrical and Computer Engineering  
Associate Dean for Diversity and Academic Affairs  
College of Engineering and Applied Sciences

### GROWING OUR LEGACY OF INNOVATORS

**NAI Fellows**

Esther Takeuchi, PhD (2012)  
Benjamin Chu, PhD (2013)  
Benjamin S. Hsiao, PhD (2013)  
Iwao Ojima, PhD (2014)  
Jahangir Rastegar, PhD (2015)  
Lorne Golub, DMD, MSc (2016)  
Arie Kaufman, PhD (2017)  
Clinton Rubin, PhD (2017)  
Kenneth Kaushansky, MD (2018)

F. William Studier, PhD (2018)  
Israel Kleinberg, DDS, PhD (2019)  
Stanislaus Wong, PhD (2019)  
Serge Luryi, PhD (2021)  
Craig Lehmann, PhD (2021)

**NAI Senior Member**

Harbans S. Dhadwal, PhD  
Fu-Pen Chiang, PhD  
Anurag Purwar, PhD



**Stony Brook University**

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# EXCELLENCE IN INNOVATION



An **educational powerhouse** in the heart of the thriving Dallas-Fort Worth Metroplex, The University of Texas at Arlington is a comprehensive research, teaching, and public service institution whose mission is the **advancement of knowledge** and the **pursuit of excellence**. Our status as a **Carnegie R-1 “Very High Research Activity”** university highlights the innovative spirit that drives our **distinguished researchers** who are leading the way in **developing impactful solutions** to some of the world’s most pressing challenges.

*UTA contributed to the UT System acquiring the third-most U.S. patents granted to universities worldwide.*

Representation in the  
National Academy of Inventors:

**5** *Senior Members*

**20** *Fellows*

**UTA**  THE UNIVERSITY OF TEXAS  
AT ARLINGTON





# LEADING INNOVATION

## WHO WE ARE

At the University of Houston, we spur innovation by encouraging the very spark of an idea to the transfer of knowledge and technology. The UH ecosystem powers the innovation engine that the Energy Capital of the World runs on, and by fostering a strong entrepreneurial environment that supports new innovation and startup ventures through incubator and accelerator programs and resources, our excellence has earned UH the distinction of being an Innovation and Economic Prosperity University.

2023 NAI Senior Members at UH: Shishir Shah, Triantafillos Mountziaris, James Briggs & Gomika Udugamasooriya



## WHAT WE DO

- Nation's #1 Entrepreneurship Program
- Ranked in Top 100 Global Universities for Patents seven years running
- Home to 50+ startup companies
- Three UH-affiliated Student Teams competed at DOE's EnergyTechUP National Pitch Competition
- 350 Student Businesses Started
- Nearly 150 UH faculty members recognized for receiving major grants or patents in FY20 and 21.
- An annual average of more than \$60 million in licensing income in FY19, FY20 and FY21

*UH's Office of Technology Transfer and Innovation is industry's gateway to innovation.*



2022 NAI Fellow  
Hao Huang,  
Distinguished  
Adjunct Professor  
at the Cullen  
College of  
Engineering

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Division of Energy and Innovation  
UNIVERSITY OF HOUSTON

## AFFILIATIONS, PARTNERS AND ORGANIZATIONS



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## UH AND THE NAI

- 35 total members
- 17 NAI Fellows
- 18 Senior Members



## THE UNIVERSITY OF GEORGIA

congratulates its faculty on their recent elections  
to the National Academy of Inventors.

### 2022 FELLOWS



**Geert-Jan Boons** is the UGA Foundation Distinguished Professor in Biochemical Sciences in the Complex Carbohydrate Research Center. Boons and his colleagues are at the forefront of research to understand the role of “glycans”—the carbohydrate portions of organic molecules—in a wide variety of disease processes, as well as how to modulate glycans for therapeutic benefit.



**Naola Ferguson-Noel** is a professor in the College of Veterinary Medicine’s Poultry Diagnostic and Research Center. Her research has made many important contributions in diagnosing and preventing avian mycoplasmosis, an infectious disease that negatively impacts poultry and the food supply chain worldwide. She was named UGA’s Inventor of the Year in 2022.

### 2023 SENIOR MEMBERS



**Hitesh Handa**  
Professor  
College of Engineering



**Leidong Mao**  
Professor  
College of Engineering



**Christine Szymanski**  
Professor  
Department of Microbiology



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## NAI 12TH ANNUAL MEETING

# Creating Sustainable Solutions



NAI is dedicated to finding sustainable solutions to ensure a better tomorrow. In line with this year's Annual Meeting theme, "Diversifying Innovation for a Stronger Economy and Sustainable Future", we are implementing new features to reduce our environmental footprint. Over the next few years, you will begin to see more changes as we find solutions that help make our Annual Meeting more sustainable.

### This year we are:

- Minimizing printed materials and utilizing digital signage
- Offering complementary reusable water bottles and a water refill station to all attendees to reduce plastic waste
- Publishing our Fellows Book digitally to reduce paper waste
- Paper hotel key card instead of plastic
- Program Agenda printed on a smaller scale and on recycled paper
- Concierge totes are made from pre-consumer recycled cotton and are produced in partnership with 1% For the Planet.

Thank you to our Sustainability partner, Engineering for One Planet powered by the Lemelson Foundation, who has helped us create a more sustainable Annual Meeting.



Engineering for One Planet

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For more than 25 years, **The Florida High Tech Corridor** has been a force multiplier helping to unleash the *expotential* of the 23-county region we serve. We converge and catalyze the capacity of high tech, innovation and bright minds by aligning opportunities and resources in academia, industry and economic development.

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# CONGRATULATIONS

FLORIDA INVENTORS HALL OF FAME  
RECOGNIZES INDUCTEES WHO HAVE  
BEEN NAMED NAI FELLOWS.

## WE SALUTE YOU!

NORMA ALCANTAR 2018	MARY HELEN MCCAY 2017
MICHAEL BASS 2013	SHYAM MOHAPATRA 2012
ISSA BATARSEH 2015	ISRAEL MOREJON 2016
EMERY BROWN 2015	NICHOLAS MUZYCZKA 2016
WILLIAM DALTON 2013	JOSHUA ROKACH 2018
MARK DEAN 2014	JEAN-FRANÇOIS ROSSIGNOL 2020
KENNETH FORD 2012	JONATHON ROTHBERG 2017
OPHIR FRIEDER 2013	PAUL R. SANBERG 2012
RICHARD GITLIN 2012	ANDREW SCHALLY 2015
D. YOGI GOSWAMI 2012	CHRISTINE SCHMIDT 2018
ROBERT HOWARD GRUBBS 2013	SUDIPTA SEAL 2013
ROBERT HOLTON 2018	KRISHNA SINGH 2017
RICHARD HOUGHTEN 2012	MARION J. SOILEAU 2012
THOMAS LIPO 2012	NAN-YAO SU 2012
ALAN LIST 2012	SHIN-TSON WU 2012
ALAN MARSHALL 2016	
T. DWAYNE MCCAY 2016	
JANET YAMAMOTO 2014	



FLORIDA INVENTORS  
— HALL OF FAME —







# CONGRATULATIONS!

The University of Texas at San Antonio would like to congratulate all our faculty members who are now senior members in the National Academy of Inventors.



## Robert Lyle Hood, Ph.D.

Assistant Professor  
Mechanical Engineering  
College of Engineering and Integrated Design



## Chung-Yu Hung, Ph.D.

Associate Professor  
Molecular Microbiology & Immunology  
College of Sciences



## Jose Lopez-Ribot, Pharm.D., Ph.D.

Professor  
Molecular Microbiology & Immunology  
College of Sciences

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## SCHOOL OF MEDICINE

### DEPARTMENT OF PSYCHIATRY

#### Congratulations!

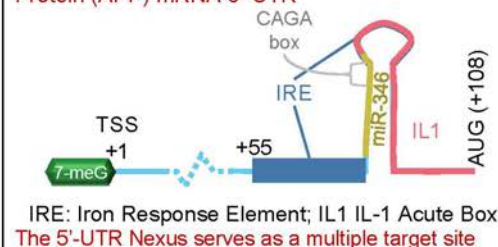
Debomoy K. Lahiri, PhD, FAAAS, FNAI,  
Distinguished Professor Indiana University  
Departments of Psychiatry, and Medical & Molecular Genetics;  
Member, Stark Neuroscience Research Institute,  
REC-leader, Indiana Alzheimer's Disease Research Center



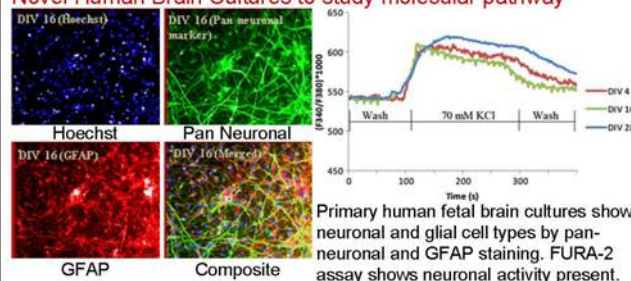
#### Major contributions by the Lahiri Lab and collaborators:

- Identifying novel drug targets for Alzheimer's disease (AD)
- Discovery of non-cholinergic properties of cholinesterase inhibitors (e.g., A $\beta$  reduction)
- Testing such a drug (posiphen) in late-stage clinical trials for AD and related disorders
- Invention of novel rapid method of genomic DNA extraction used worldwide
- Invention of methods of detecting specific protein levels in autism and fragile X subjects
- Demonstrating APOE $\epsilon$ 4 allele as a predictor of cholinesterase inhibitor outcomes in AD
- Identifying mRNA 5'-untranslated region (5'-UTR) as a novel drug target
- Novel *primary* human brain cultures to study biochemical pathways and testing drugs
- Latent Early-Life Associated Regulation (LEARn) model of sporadic neuropsychiatric disorders that accounts for both genetic and environmental influences during lifespan.

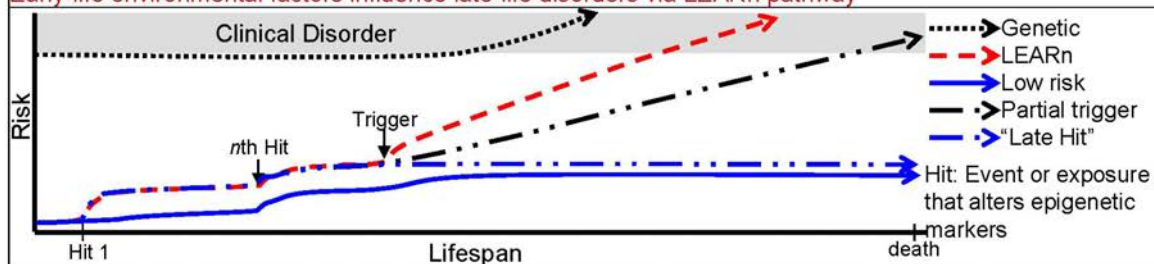
#### Novel Multiple Drug Target: Amyloid Precursor Protein (APP) mRNA 5'-UTR



#### Novel Human Brain Cultures to study molecular pathway



#### Early-life environmental factors influence late-life disorders via LEARn pathway



Of course, nothing hAPPens in isolation, many thanks to the team (partial list)



#### Further Activities:

- Continually funded by NIH- National Institute on Aging for over three decades.
- Founder and Editor-in-Chief of *Current Alzheimer Research*.
- Fellow of the American Association for the Advancement of Science.
- Fellow of the National Academy of Inventors.
- Received grants from commercial partners (e.g., Axonyx, Baxter, Forest, Jansen, Novartis).
- Received Zenith Award from Alzheimer's Association.



# CONGRATULATIONS

## NAI FELLOW INDUCTEES OF 2022

**RICHARD GEORGE BLAIR**



**and all 18 University of Central Florida NAI Fellows**



College of Engineering

**CONGRATULATIONS TO  
J. PAUL ROBINSON AND AMY R. REIBMAN  
ON THEIR INDUCTION**



**J. PAUL ROBINSON**

**DISTINGUISHED PROFESSOR OF  
CYTOMETRY IN THE VETERINARY COLLEGE'S  
DEPARTMENT OF BASIC MEDICAL SCIENCES  
AND A PROFESSOR IN THE WELDON SCHOOL  
OF BIOMEDICAL ENGINEERING**



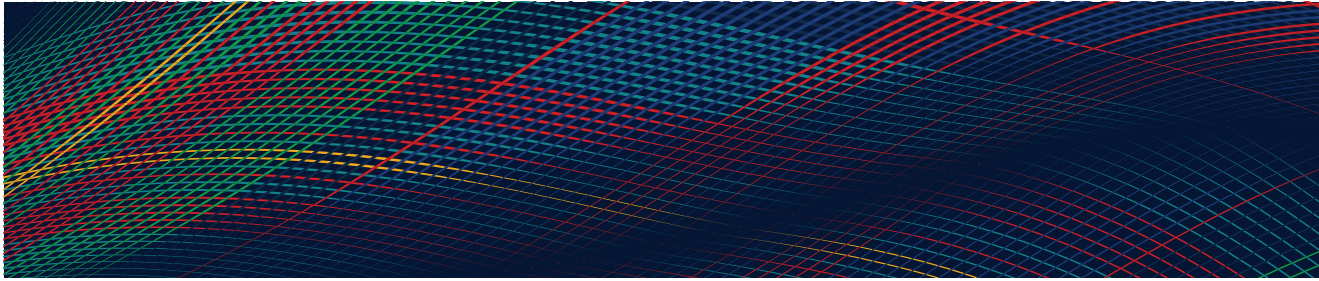
**AMY R. REIBMAN**

**THE ELMORE PROFESSOR OF ELECTRICAL AND  
COMPUTER ENGINEERING**

**14 PURDUE FACULTY ARE NAI FELLOWS  
PURDUE IS NO. 5 INTERNATIONALLY IN U.S. UTILITY PATENTS  
ENGINEERING GENERATED 67% OF THOSE PATENTS (2022)**

*The Persistent Pursuit of the Next Giant Leap*





We congratulate our colleague on being elected  
as a fellow of the National Academy of Inventors.

**Dr. Bin He** | Trustee Professor, Biomedical Engineering,  
Electrical & Computer Engineering, Neuroscience Institute

**Carnegie Mellon University**

[cmu.edu](http://cmu.edu)

# Get social!

## Follow NAI on social media!



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National Academy of Inventors



National Academy of Inventors

## Tag us in your news and Annual Meeting photos!





## Congratulations to Prof. Michael R. King, FNAI

Class of 2022  
Fellow



“For technologies  
that employ cellular  
and molecular  
transport to improve  
human health”



Louisiana State University and the  
Office of Research & Economic  
Development congratulate

**Tammy Dugas, PhD**

Veterinary Medicine Comparative Biomedical  
Sciences

**Michael Khonsari, PhD**

Mechanical and Industrial Engineering

2022 Fellows of the  
National Academy of Inventors



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## Office of Research Commercialization

**NC State** is a sustaining member of NAI, and we would like to recognize these innovators that have been elected as NAI Fellows & Senior Members from 2022-2023.

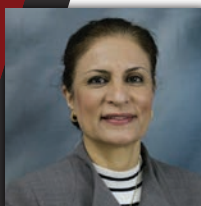
Do you want to get involved?  
Contact [commercialization@ncsu.edu](mailto:commercialization@ncsu.edu)

## NAI Fellow



**Yuntian Zhu, Ph.D. | 2022**  
*Materials Science & Engineering*  
Deformation physics in nanocrystalline materials

## NAI Senior Members



**Afsaneh Rabiei, Ph.D. | 2023**  
*Mechanical & Aerospace Engineering*  
Advanced materials, metal foams, coatings, and composites



**Zlatko Sitar, Ph.D. | 2023**  
*Materials Science & Engineering*  
Bulk & thin film growth, characterization, and device development in wide bandgap semiconductors





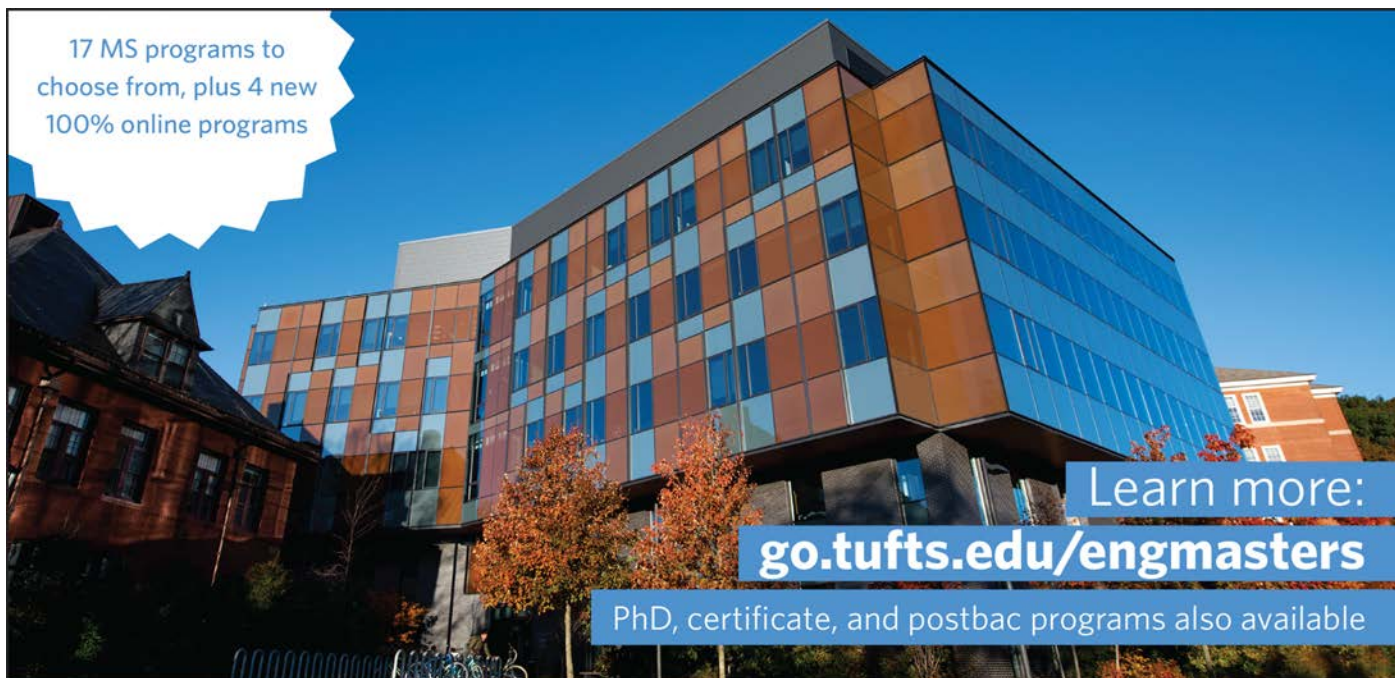
## Congratulations to all of our NAI Fellows!

Texas Tech University System (TTUS) is proud to have 11 of its faculty researchers recognized as NAI Fellows over the past ten years, with its most recent honorees, Dr. Changzhi Li and Dr. Danny Reible, being named to the 2022 class of fellows. Congratulations Drs. Li and Reible! On behalf of the Office of Research Commercialization (ORC), we extend a warm thanks to all of our inventors and look forward to continuing to serve you in the years to come!

*The ORC, serving TTUS, has seen record metrics and growth this past year, increasing its technology transfer activity to a historic high. With 25 issued U.S. patents, new license agreements up 80%, and licensing revenue up 112%, the ORC is poised to continue facilitating the impact faculty technologies have on society.*



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*The University of Oregon congratulates*

**Anshuman ("AR") Razdan**  
Vice President for Research and Innovation  
Professor of Computer Science

**NATIONAL ACADEMY OF INVENTORS  
2022 CLASS OF FELLOWS**

[research.uoregon.edu](https://research.uoregon.edu)

**O** Office of the Vice President  
for Research and Innovation





# Reinvention

never stops.

Neither  
do we.



[innovation.pitt.edu](http://innovation.pitt.edu)

Congratulations to our inductees  
into the National Academy of  
Inventors:

**2022 Fellow Joseph C. Glorioso  
III, 2022 Fellow Ronald C.  
Montelaro; 2023 Senior Member  
Xinyan (Tracy) Cui, 2023 Senior  
Member Jonathan Pearlman.**

**N** THE UNIVERSITY OF NEBRASKA-LINCOLN  
**CONGRATULATES**

## Ronald Faller

Willa Cather Research Professor of Civil  
and Environmental Engineering  
Director, Midwest Roadside Safety Facility  
2022 Fellow of the National Academy of Inventors



## Wei Qiao

Clyde Hyde Professor of Electrical and  
Computer Engineering  
2023 Senior Member of the National  
Academy of Inventors



NAI Fellows and Senior Members from the University of Nebraska: Brian A. Larkins (2012), Prem S. Paul (2012), James L. Van Etten (2012), Donald P. Weeks (2013), James Linder (2014), John A. Woollam (2014), Rodney S. Markin (2015), Shane M. Farritor (2016), George Burba (senior member, 2018), Lyle R. Middendorf (2018), Robert "Bob" Wilhelm (2018), Carrick Detweiler (senior member, 2021), Carl Nelson (senior member, 2022), Ronald Faller (2022), Wei Qiao (senior member, 2023)





## Congratulations to our Washington University Faculty!

### 2022 NAI Fellows

Guy Genin, PhD and Farshid Guilak, PhD

### 2023 NAI Senior Member

Lan Yang, PhD



(L to R Genin, Guilak and Yang)

 **Washington University in St. Louis**  
OFFICE OF TECHNOLOGY MANAGEMENT

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**School of Engineering**

## Congratulations Georgia Tech Fellows

The Georgia Institute of Technology proudly celebrates the 2022 NAI Fellows and their remarkable achievements in innovation, paving the way for a new future full of possibilities. We are honored to recognize these exceptional individuals who are leading with unparalleled research excellence and groundbreaking initiatives across Georgia and beyond!



### 2022 Georgia Tech NAI Fellows



Adegboyega K. Oyeler, Ph.D.



Zhong Lin Wang, Ph.D.

**GT** Georgia Tech  
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American Academy.....	American Academy of Arts and Sciences
AAAS .....	American Association for the Advancement of Science
AACR.....	American Association for Cancer Research
AAM.....	American Academy of Microbiology
AAP .....	Association of American Physicians
AAU.....	American Association of Universities
ACerS.....	American Ceramic Society
ACM.....	Association for Computing Machinery
ACNP .....	American College of Neuropsychopharmacology
ACS.....	American Chemical Society
AHA .....	American Heart Association
AIC .....	American Institute of Chemists
AIChE .....	American Institute of Chemical Engineers
AIMBE.....	American Institute for Medical and Biological Engineering
APA .....	American Psychological Association
APLU.....	Association of Public and Land-grant Universities
APMI.....	American Powder Metallurgy Institute
APS.....	American Physical Society
APhilS .....	American Philosophical Society
ASCE.....	American Society of Civil Engineers
ASCI.....	American Society for Clinical Investigation
ASEE.....	American Society for Engineering Education
ASM.....	American Society for Microbiology
ASM International.....	American Society for Metals International
ASME .....	American Society of Mechanical Engineers
AUTM.....	Association of University Technology Managers
BMES .....	Biomedical Engineering Society
DARPA.....	Defense Advanced Research Projects Agency
FDA .....	U.S. Food and Drug Administration
HHMI .....	Howard Hughes Medical Institute
IAPR.....	International Association of Pattern Recognition
IEEE.....	Institute of Electrical and Electronics Engineers
IET .....	Institution of Engineering and Technology
ISD .....	International Society for Differentiation
MRS.....	Materials Research Society
NAE.....	National Academy of Engineering
NAEd.....	National Academy of Education
NAI.....	National Academy of Inventors
NAM.....	National Academy of Medicine
NAS .....	National Academy of Sciences
NCI .....	National Cancer Institute
NIH .....	National Institutes of Health
NIHF.....	National Inventors Hall of Fame
NIST .....	National Institute of Standards and Technology
NSF.....	National Science Foundation
OSA .....	Optical Society of America
PAS .....	Pontifical Academy of Sciences
PECASE .....	Presidential Early Career Award for Scientist and Engineers
RSC.....	Royal Society of Chemistry
SDB.....	Society for Developmental Biology
SFB.....	Society for Biomaterials
SPIE .....	International Society for Optics and Photonics
TMS.....	The Minerals, Metals and Materials Society
U.S. DoD.....	United States Department of Defense
U.S. DOE.....	United States Department of Energy
USPTO.....	United States Patent and Trademark Office



# Recognize, Support and Empower Innovation at Your Institution with these NAI Programs

## ► Publish your research in our journal, *Technology & Innovation*

*Technology and Innovation* is NAI's multidisciplinary journal dedicated to providing a forum for innovative discourse.

To learn more or submit an article, visit:

[academyofinventors.org/about-ti/](https://academyofinventors.org/about-ti/)

or contact [kmanzi@academyofinventors.org](mailto:kmanzi@academyofinventors.org)



## Give invention advice with our mentor program, **GAIN!**

The Global Academic Inventors Network (GAIN) program pairs academic inventors with collegiate innovators for the purpose of mentorship. NAI Fellows, Senior Members, and members of our Member Institutions with a US Patent are eligible to be mentors, while students and faculty from our Member Institutions are eligible to be mentees. To become a mentor, visit: [academyofinventors.org/gain-mentorship-program/](https://academyofinventors.org/gain-mentorship-program/)

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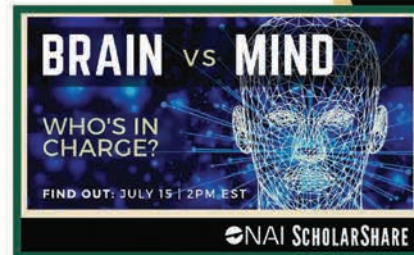




## ► Share your research and invention journey with our ScholarShare webinar series!

Our ScholarShare webinar series is a collaboration tool for NAI Members to share their research or host discussions on important topics in the innovation ecosystem and related fields.

Contact [kmanzi@academyofinventors.org](mailto:kmanzi@academyofinventors.org) to book yours today!



## ► Showcase your marketed discovery in our From Campus to Commerce video series

Our From Campus to Commerce series is a video collaboration between NAI and our Members highlighting invention journeys from campus into the marketplace! NAI Fellows, Senior Members, and members of our Member Institutions can collaborate with NAI to be featured. To learn more about featuring an invention, contact: [rmaulsby@academyofinventors.org](mailto:rmaulsby@academyofinventors.org)



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# SAVE THE DATE

## NAI 13TH ANNUAL MEETING

JUNE 16TH-18TH | RALEIGH, NORTH CAROLINA

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UNIVERSITY