# DEFINING THE FUTURE: INVENTING FOR TOMORROW



11TH ANNUAL MEETING JUNE 14 - 15, 2022 PHOENIX, ARIZONA







**Distinguished Colleagues:** 

On behalf of the National Academy of Inventors (NAI) Board of Directors and staff, it is my pleasure to welcome you to Phoenix for the 11th Annual Meeting of the NAI. This year's theme of "Defining the Future: Inventing for Tomorrow" reflects the reason why we have come together for this conference.

The last two years have shown us the critical role we inventors play in solving the world's most complex challenges. 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. The program we have created for you is filled with dynamic speakers, engaging panels, and plenty of time for networking.

As with every annual meeting, we look forward to the induction of the newest class of NAI Fellows. Since 2012, the Fellows program has grown to 1,567 prolific academic inventors who represent more than 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.

We will also be inducting our latest class of elected Senior Members. Since this program was introduced in 2018, the Academy is now honored to have over 330 Senior Members, rising stars in their fields who foster a spirit of innovation at their institutions and educate the next generation of inventors.

We could not do this work without the support of our Institutional Members. NAI is proud to have more than 250 institutions of higher learning in our global network, representing 42 American states and 11 countries.

The Academy's Chapter network offers the unique benefit of local collaboration, support, and recognition for individual inventors. NAI Chapters are also essential vehicles to nurture and engage students, as well as institutional and community leaders who facilitate innovation. In the last year alone, five new NAI Chapters were launched.

We are especially grateful for our strong alliance with the United States Patent and Trademark Office (USPTO). They inaugurated us at our inception and have played an integral role in what the Academy is today. Their 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. We look forward to working with the new Under Secretary of Commerce for Intellectual Property and Director of the USPTO, Kathi Vidal.

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In addition to our expanding efforts with the USPTO, the Academy has developed new initiatives to fulfill our mission, both now, and in the future.

- We are enhancing our strategic partnerships to spearhead initiatives to break down barriers in the innovation ecosystem.
- We continue to advocate for diversity and inclusion as well as provide our Members valuable resources to aid them in their careers.
- Finally, we are calling on our increased influence and visibility to facilitate the speed of translating discovery to market and define the future of innovation.

Looking toward the future, we seek your participation in NAI programs and assistance in growing the visibility of academic invention. Thank you for the impactful roles you play in support of the continued success of the National Academy of Inventors.

Our engaged members, partners, and friends truly make our organization thrive. We celebrate your accomplishments of the past, today, and the future.

**Enjoy the Meeting!** 

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Paul R. Sanberg, FNAI President

# DEFINING THE FUTURE: Inventing for Tomorrow

or the Eleventh 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 and networking and culminates in the formal NAI Fellows Induction Ceremony.

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# **SUMMARYAGENDA**



# ELEVENTH ANNUAL MEETING SUMMARYAGENDA

# MONDAY, JUNE 13, 2022

3:00 PM - 6:00 PMRegistration & Information Desk Open (Akimel Foyer)4:00 PM - 6:00 PMBoard Meeting & Dinner (Horse)

## TUESDAY, JUNE 14, 2022

Registration & Information Desk Open (Akimel Foyer)
Welcome Remarks (Akimel Ballroom 3 & 4)
Welcome Blessing (Akimel Ballroom 3 & 4)
Arizona Welcome (Akimel Ballroom 3 & 4)
Keynote Speaker: Shyam Mohapatra, FNAI (Akimel Ballroom 3 & 4)
Keynote Speaker: Wei Chen (Akimel Ballroom 3 & 4)
Keynote Speaker: Mark Lundstrom (Akimel Ballroom 3 & 4)
Break (Akimel Foyer)
Keynote Speakers: Jesus Soriano, Don Millard Akimel Ballroom 3 & 4)
Keynote Speaker: Amy Beaird (Akimel Ballroom 3 & 4)
Keynote Speakers: Benjamin Hoggan, Steven Asiala (Akimel Ballroom 3 & 4)
Lunch (Akimel Ballroom 1 & 2)
Lunch Keynote Speakers: Jamie Renee, Paul Rosenthal (Akimel Ballroom 1 & 2)
Listening Session hosted by VentureWell (Akimel Ballroom 3 & 4)
Panel: Vice Presidents of Research (Akimel Ballroom 3 & 4)
Panel: The Future of Patents in a Conscious-Led Economy (Akimel Ballroom 3 & 4)
Keynote Speaker: Gary Michelson, FNAI (Akimel Ballroom 3 & 4)
Panel: Next Generation of Innovation (Akimel Ballroom 3 & 4)
Connection Space with Cocktail & Next Generation Student Showcase (Akimel Ballroom 3 & 4)
Senior Induction Ceremony (Akimel Ballroom 1 & 2)
Senior Member Reception (Akimel Foyer)

## WEDNESDAY, JUNE 15, 2022

7:30 AM – 6:00 PM	Registration & Information Desk Open (Akimel Foyer)
7:30 AM – 8:45 AM	Fellows Breakfast (Akimel Foyer)
9:00 AM – 9:05 AM	NAI Remarks (Akimel Ballroom 3 & 4)
9:05 AM – 9:50 AM	Panel: Funding for Innovation (Akimel Ballroom 3 & 4)
9:50 AM – 10:30 AM	Panel: Diversity, Equity, and Inclusion (Akimel Ballroom 3 & 4)
10:30 AM – 10:45 AM	Break (Akimel Ballroom 1 & 2)
10:45 AM - 11:15 AM	Panel: Regional Collaborations to Advance Innovation (Akimel Ballroom 3 & 4)
11:15 AM - 11:45 AM	Panel: Enabling and Sustaining Diverse Inventorship (Akimel Ballroom 3 & 4)
11:45 AM – 12:30 PM	Panel: President's Panel (Akimel Ballroom 3 & 4)
12:30 PM – 1:00 PM	Lunch (Akimel Ballroom 1 & 2)
1:00 PM – 1:30 PM	Keynote Speaker: State of the Academy (Akimel Ballroom 1 & 2)
1:30 PM – 2:20 PM	Panel: Tech Transfer (Akimel Ballroom 3 & 4)
2:20 PM - 2:30 PM	Break (Akimel Foyer)
2:30 PM – 3:25 PM	Panel: The Intersections of Innovation (Akimel Ballroom 3 & 4)
3:25 PM – 3:30 PM	NAI Closing Remarks (Akimel Ballroom 3 & 4)
3:30 PM – 6:00 PM	Break
5:30 PM - 6:00 PM	Fellows Rehearsal (Akimel Ballroom 3 & 4)
6:00 PM – 7:00 PM	Fellows Induction Ceremony (Akimel Ballroom 3 & 4)
7:00 PM – 8:00 PM	Cocktail Hour (Akimel Foyer)
8:00 PM – 9:00 PM	Signature Gala & Awards (Akimel 1 & 2)
9:00 PM – 10:00 PM	Dessert and Entertainment (Akimel Foyer)

## **ABOUT THE NAI**



The National Academy of Inventors (NAI) is a member organization comprising U.S. and international universities, and governmental and non- profit research institutes, with over 4,000 individual inventor members, Fellows and Senior Members spanning more than 300 institutions worldwide. It was founded in 2010 to recognize and encourage inventors with patents issued from the U.S. Patent and Trademark Office (USPTO), 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 NAI works collaboratively with the USPTO and publishes the multidisciplinary journal, *Technology and Innovation* and the annual *Top 100 Worldwide Universities Granted U.S. Utility Patents* report. www.academyofinventors.org



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**National Academy of Inventors** is excited for the 11th Annual Meeting to be hosted by Phoenix and the Arizona Commerce Authority. Surrounded by mountain ranges, the Greater Phoenix area encompasses more than 500 square miles of Sonoran Desert and is comprised of 24 total municipalities – each with a distinct set of characteristics, attractions and flavors that offer visitors a unique glimpse at the nation's fifth-largest city. Greater Phoenix is one of the largest metro areas in the United States, with roughly 5 million people who live here. Greater Phoenix is dotted with resorts and golf courses, it is bounded by national forests and American Indian communities and has trails that reveal mighty mountaintops with iconic landscapes beneath picture-perfect skies that allow for limitless adventure.

# ARIZONA COMMERCE AUTHORITY

# PHOENIX



MONDAY, JUNE 13, 2022		
3:00 PM-6:00 PM	Meeting Registration & Information Desk Open Location: Akimel Foyer	
4:00 PM-6:00 PM	Board Meeting & Dinner Location: Horse	
	TUESDAY, JUNE 14, 2022	
7:00 AM -7 :00 PM	Meeting Registration & Information Table Open Location: Akimel Foyer	
9:00 AM – 9:10 AM	Welcome Remarks   Paul R. Sanberg, FNAI, President, National Academy of Inventors	
	Welcome Video   Sethuraman Panchanathan, FNAI, Director, National Science Foundation Location: Akimel Ballroom 3 & 4	
9:10 AM – 9:15 AM	Welcome Blessing   Pima & Maricopa Community Location: Akimel Ballroom 3 & 4	
9:15 AM – 9:20 AM	Introduction   Master of Ceremonies, Elizabeth Dougherty, Eastern Regional Outreach Director, U.S. Patent and Trademark Office Location: Akimel Ballroom 3 & 4	
g:20 AM – g:30 AM	Welcome   Sandra Watson, President and CEO, Arizona Commerce Authority Sponsored by Arizona Commerce Authority Location: Akimel Ballroom 3 & 4	
9:20 AM – 9:40 AM	Keynote Speaker   Pharma-Academic Industry Network: An Organized Approach to Education and Mentoring Innovations   Shyam Mohapatra, FNAI, Distinguished Health Professor, Department of Internal Medicine, University of South Florida Location: Akimel Ballroom 3 & 4	
9:40 AM – 9:50 AM	Keynote Speaker   New Generation of Sensitizers for Photodynamic Therapy–Deeper and Better   Wei Chen, Professor, Department of Physics, University of Texas at Arlington Location: Akimel Ballroom 3 & 4	
9:50 AM – 10:30 AM	Keynote Speaker   Innovation in the Post Moore's Law Era   Mark Lundstrom, Don and Carol Scifres Distinguished Professor of Electrical and Computer Engineering, Purdue University Sponsored by Purdue University Location: Akimel Ballroom 3 & 4	
10:30 AM – 10:45 AM	<b>Break</b> Location: Akimel Foyer <b>Sponsored by UCONN Health</b>	
10:45 AM – 11:10 AM	Keynote Speakers   Funding Innovation   Jesus Soriano, Program Director, National Science Foundation	
	<b>Don L. Millard,</b> Acting Deputy Assistant Director, National Science Foundation Location: Akimel Ballroom 3 & 4	
11:10 AM – 11:30 AM	<b>Keynote Speaker   Fund Your Invention: Unlocking \$4 Billion in Federal Funding  </b> <b>Amy Beaird,</b> Program Director, Florida High Tech Corridor Location: Akimel Ballroom 3 & 4	



	TUESDAY, JUNE 14, 2022 (CONTINUED)
11:30 AM - 12:00 PM	Keynote Speakers   Notre Dame's Journey from Tech Transfer Office to University Startup
-	Studio   Steven Asiala, Faculty Engagement Associate, IDEA Center, Notre Dame University
	<b>Benjamin Hoggan,</b> Director of De-Risking and Commercialization, Notre Dame University Location: Akimel Ballroom 3 & 4
12:00 PM – 12:30 PM	Lunch Sponsored by North Carolina State University Location: Akimel Ballroom 1 & 2
12:30 PM – 12:45 PM	Lunch Keynote Speakers   NAI – USPTO Joint Partnership Agreement   Introduction by Wade Fulghum, Assistant Vice Chancellor for Research Commercialization, North Carolina State University
	Jamie Renee, Executive Director, National Academy of Inventors
	<b>Paul Rosenthal,</b> Deputy Chief Communications Officer, U.S. Patent and Trademark Office <b>Sponsored by North Carolina State University</b> Location: Akimel Ballroom 1 & 2
1:00 PM – 1:25 PM	Listening Session   Chithra Adams, Director of Learning & Evaluation, VentureWell
	<b>Demetria Gallagher, V</b> ice President, Knowledge, Innovation & Impact, VentureWell <b>Sponsored by VentureWell</b> Location: Akimel Ballroom 3 & 4
1:30 PM – 2:15 PM	Panel   Vice Presidents of Research   Moderated by Rodney J.Y. Ho, FNAI, Professor of Pharmaceutics & Bioengineering, University of Washington Sponsored by Texas Tech University Location: Akimel Ballroom 3 & 4
	<ul> <li>Introduction by Cameron Smith, Commercialization Director, Texas Tech University</li> </ul>
	<ul> <li>Elizabeth Cantwell, Senior Vice President for Research and Innovation, University of Arizona</li> </ul>
	<ul> <li>Walter Copan, FNAI, Vice President for Research and Technology Transfer, Colorado School of Mines</li> </ul>
	<ul> <li>Amr Elnashai, Vice Chancellor and Vice President for Research and Technology Transfer, University of Houston</li> </ul>
	Matthew Hulver, Vice President of Research, Arizona State University
2:15 PM – 3:10 PM	Panel   The Future of Patents in a Conscious-Led Economy   Moderated by Karen Burg, FNAI, Vice President for Research, University of Georgia Transfer, University of Houston Location: Akimel Ballroom 3 & 4
	<ul> <li>Andrei Iancu, Former Under Secretary of Commerce for Intellectual Property and Director, United States Patent &amp; Trademark Office; Partner, Irell &amp; Manella LLP</li> </ul>
	<ul> <li>George Smith, Nobel Laureate, Curators' Distinguished Professor Emeritus of Biological Sciences, University of Missouri</li> </ul>
	Adam Vasquez, Founder and CEO, Made with Merit
3:10 PM – 3:25 PM	Keynote Speaker   Innovating for Future Generations   Gary K. Michelson, FNAI, Founder and Co-Chair, The Michelson 20MM Foundation

# **11th ANNUAL MEETING - AGENDA**

	TUESDAY, JUNE 14, 2022 (CONTINUED)
3:25 PM – 4:15 PM	Panel   Next Generation of Innovation   Moderated by Paul Sohl, Chief Executive Officer, Florida High Tech Corridor Sponsored by the Florida High Tech Corridor Location: Akimel Ballroom 3 & 4
	Gary K. Michelson, FNAI, Founder and Co-Chair, The Michelson 20MM Foundation
	<ul> <li>Cengiz Ozkan, Professor of Mechanical Engineering, University of California, Riverside</li> </ul>
	<ul> <li>Karen Panetta, FNAI, Professor of Electrical and Computer Engineering and Dean of Graduate Education for the School of Engineering, Tufts University</li> </ul>
	<ul> <li>Helena Wisniewski, FNAI, Professor of Entrepreneurship, Department Chair, Management, Marketing, Logistics and Business Analytics Department, University of Alaska – Anchorage</li> </ul>
4:15 PM – 5:45 PM	Connection Space with Cocktail Reception   Next Generation Student Showcase Sponsored by the Florida High Tech Corridor and the University of Central Florida Location: Akimel Foyer
6:00 PM – 7:00 PM	<b>Senior Member Induction Ceremony   Welcome Remarks from Jennifer Cowley,</b> President, University of Texas at Arlington Location: Akimel Ballroom 1 & 2
	<b>Presented by Paul Rosenthal,</b> Deputy Chief Communications Officer, U.S. Patent and Trademark Office
7:00 PM – 7:45 PM	Senior Member Reception Sponsored by the University of Texas at Arlington Location: Akimel Foyer
	WEDNESDAY, JUNE 15, 2022
7:30 AM – 6:00 PM	Meeting Registration & Information Desk Open Location: Akimel Foyer
7:30 AM – 8:45 PM	<b>Breakfast</b> <b>Sponsored by The University of Houston</b> Location: Akimel Ballroom 1 & 2
9:00 AM – 9:05 AM	Welcome Remarks   Paul R. Sanberg, FNAI, President, National Academy of Inventors Location: Akimel Ballroom 3 & 4
	<b>Welcome Video   Laurie Locascio, FNAI,</b> Director, National Institute for Standards and Technology
9:05 AM – 9:50 AM	Panel   Funding for Innovation   Moderated by Phil Weilerstein, President and Chief Executive Officer, VentureWell

**Sponsored by Tech Launch Arizona, University of Arizona** Location: Akimel Ballroom 3 & 4

- Introduction by Douglas Hockstad, Assistant Vice President, Tech Launch Arizona, University of Arizona
- Kenneth Blank, FNAI, President, University Research Strategies
- Ming Hsieh, FNAI, Founder, Fulgent Genetics

	WEDNESDAY, JUNE 15, 2022 (CONTINUED)
9:50 AM – 10:30 AM	Panel   Diversity, Equity, and Inclusion in Innovation   Moderated by James Howard, Executive Director, Black Inventors Hall of Fame Location: Akimel Ballroom 3 & 4
	<ul> <li>Almesha Campbell, Assistant Vice President for Research and Economic Development, Jackson State University</li> </ul>
	Suzanne Harrison, Diversity & Inclusion Co-Lead, U.S. IP Alliance; Principal, Percipience LLC
	• Sylvia Thomas, Vice President for Research and Innovation, University of South Florida
10:30 AM – 10:45 AM	<b>Break</b> <b>Sponsored by UCONN Health</b> Location: Akimel Foyer
10:45 AM – 11:15 AM	Panel   Regional University Collaborations to Advance Innovation   Moderated by Rob Duncan, FNAI, Professor & President's Distinguished Chair in Physics, Department of Physics and Astronomy, Texas Tech University Location: Akimel Ballroom 3 & 4
	James Holloway, Provost, University of New Mexico
	Richard Lange, President, Texas Tech University Health Sciences Center El Paso
	Heather A. Wilson, President, University of Texas at El Paso
11:15 AM – 11:45 AM	Panel   Enabling and Sustaining Diverse Inventorship   Moderated by Annette Sobel Adjunct Professor, Department of Electrical & Computer Engineering, Texas Tech University Location: Akimel Ballroom 3 & 4
	Stephanie C. Bailes, President and CEO, Cade Museum for Creativity & Invention
	<ul> <li>Sheila Grant, FNAI, Associate Vice Chancellor of Research &amp; Strategic Initiatives, University of Missouri</li> </ul>
	Anna Leese de Escobar, FNAI, Distinguished Senior Scientist of Cryogenic Electronics, Naval Information Warfare Center Pacific
	Jesus Soriano, Program Director, National Science Foundation
11:45 AM – 12:30 PM	President's Panel   Moderated by James Conley, FNAI, Clinical Professor, Kellogg School of Management, Northwestern University Sponsored by Arizona State University Location: Akimel Ballroom 3 & 4
	<ul> <li>Introduction by Sally C. Morton, Executive Vice President of Knowledge Enterprise, Arizona State University</li> </ul>
	Alexander Cartwright, FNAI, President, University of Central Florida
	Gregory Crawford, FNAI, President, Miami University
	Teik Lim, FNAI, President, New Jersey Institute of Technology
12:30 PM – 1:00 PM	Lunch Location: Akimel Ballroom 1 & 2

# 11th ANNUAL MEETING - AGENDA

	WEDNESDAY, JUNE 15, 2022 (CONTINUED)
1:00 PM – 1:30 PM	Keynote Speaker   State of the Academy   Paul R. Sanberg, FNAI, President, National Academy of Inventors Location: Akimel Ballroom 1 & 2
1:30 PM – 2:20 PM	Panel   Technology Transfer   Moderated by Stephen Susalka, Chief Executive Officer, AUTM Sponsored by Florida International University Location: Akimel Ballroom 3 & 4
	<ul> <li>Introduction by Peter Hernandez, Director of Technology Management and Commercialization, Florida International University</li> </ul>
	<ul> <li>Frederic Farina, Chief Innovation and Corporate Partnerships Officer, California Institute of Technology</li> </ul>
	<ul> <li>Wade Fulghum, Assistant Vice Chancellor for Research Commercialization, North Carolina State University</li> </ul>
	Douglas Hockstad, Assistant Vice President, Tech Launch Arizona, University of Arizona
	<ul> <li>Taunya Phillips, Director of the Office of Technology Commercialization, University of Kentucky</li> </ul>
2:20 PM – 2:30 PM	Break Sponsored by UCONN Health Location: Akimel Foyer
2:30 PM – 3:25 PM	Panel   The Intersections of Innovation   Moderated by Rob Schneider, Executive Director, The Lemelson Foundation Location: Akimel Ballroom 3 & 4
	<ul> <li>Kiruba Krishnaswamy, Assistant Professor, Sustainable Food Systems Engineering, University of Missouri</li> </ul>
	<ul> <li>Mihri Ozkan, FNAI, Professor of Electrical and Computer Engineering, University of California, Riverside</li> </ul>
	<ul> <li>Jay Walsh, Vice President for Economic Development and Innovation, University of Illinois</li> </ul>
2:30 PM – 3:25 PM	NAI Closing Remarks Location: Akimel Ballroom 3 & 4
3:30 PM – 6:00 PM	Break Location: Akimel Foyer
5:30 PM – 6:00 PM	<b>Fellows Rehearsal</b> Location: Akimel Ballroom 3 & 4
6:00 PM – 7:00 PM	Fellows Induction Ceremony Location: Akimel Ballroom 3 & 4
	Welcome Video   Kathi VIdal, Director, U.S. Patent and Trademark Office
	<b>Presented by Elizabeth Dougherty,</b> Eastern Regional Outreach Director, U.S. Patent and Trademark Office
	Paul R. Sanberg, FNAI, President, National Academy of Inventors
7:00 PM – 8:00 PM	Cocktail Hour Location: Akimel Foyer

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# WEDNESDAY, JUNE 15, 2022 (CONTINUED)

8:00 PM – g:00 PM	Signature Gala Dinner and Awards Location: Akimel Ballroom 1 & 2
	• Introduction   Andrea Armani, FNAI, Vice Dean of New Initiatives and the Irani Chair in Chemical Engineering and Materials Science in the Viterbi School of Engineering, University of Southern California
	Paul R. Sanberg, FNAI, President, National Academy of Inventors
9:00 PM – 10:00 PM	Dessert and Entertainment Sponsored by Fulgent Genetics Location: Akimel Foyer



#### 2021-2022 BOARD OF DIRECTORS

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Department Chair, Management, Marketing, Logistics and Business Analytics Professor of Entrepreneurship University of Alaska Anchorage NAI Fellow



#### Andrea Armani

Vice Dean of New Initiatives and the Irani Chair in Chemical Engineering and Materials Science, Viterbi School of Engineering, University of Southern California; NAI Fellow

Andrea Armani is the Vice Dean of New Initiatives and the Irani Chair in Chemical Engineering and Materials Science in the Viterbi School of Engineering at the University of Southern California. Armani develops new nanomaterials and optical devices that have applications in portable disease diagnostics and telecommunications. Her impact extends beyond her patents into the larger innovation ecosystem through her role as a mentor and through her work with the World Economic Forum. Prof. Armani has trained over 100 researchers in her lab, and several have started companies. She is the recipient of the NIH New Innovator Award, the PECASE, and the ONR Young Investigator award. She holds eight U.S. patents that have been licensed, has published over 150 peer-reviewed journal articles, and serves as Associate Editor for ACS Photonics and for Optics Letters. Armani is a Fellow of SPIE, Optica, and AAAS.



#### Chithra Adams

Director of Learning and Evaluation, VentureWell

Chithra Adams brings to the Director of Learning and Evaluation role 15 years of experience in program evaluation, including successfully leading an evaluation team for the last nine years. She has worked across multiple disciplines evaluating programs of varying scale in: special education, employment, mental health and substance use, community integration, health and wellness, translation science, and assistive technology. Chithra has a masters degree in public administration and a doctoral degree in educational sciences from the University of Kentucky.



#### Steven Asiala

Faculty Engagement Associate with the IDEA Center, University of Notre Dame

Steven Asiala is the Faculty Engagement Associate with the IDEA Center at the University of Notre Dame. Steven partners with Notre Dame faculty to identify research discoveries and innovations which serve as the basis for Invention Disclosures and commercial opportunities. He is also the primary point of contact for faculty and is responsible for communicating the IDEA Center's roles to the academy. Steven gained experience working at the University-Industry interface as the Senior Business Development Coordinator at the Industrial Biotechnology Innovation Centre in Glasgow, Scotland. This role required him to manage, track, and drive Industrial Biotechnology sector engagement across Scotland by building meaningful relationships with stakeholders from industry groups, businesses, academic institutions, and the public sector. During Steven's academic research career, his work resulted in multiple publications as well as multiple invention disclosures. Steven earned a Ph.D. in Chemistry from the University of Notre Dame and a B.S. in Chemistry from Grand Valley State University.



#### **Stephanie C. Bailes**

President and CEO, CADE Museum

Stephanie Bailes joined the Cade Museum as its Executive Director in February 2017, and was appointed to the Board of Trustees in November 2020. Bailes was promoted to CEO in 2022. She has spent almost twenty years leading teams and initiatives in domestic and international private sector start-up, corporate, and nonprofit environments. Entities include; MCI, Bellsouth, Teligent, XO Communications, Special Olympics International, the American College of Cardiology, and Pennington & Bailes. She has management experience in marketing communications, product development & product marketing, and business planning. Stephanie has spent her career crafting organizational strategy, aligning organizational units around corporate strategy, and developing processes, budgets, and metrics to meet, fund, and measure those plans. Stephanie has a BA in Sociology from the University of Florida. Before her career in business management, she worked as a front-line provider in Children's Home Society foster care facilities and for the state of Florida's Child Protection Team, providing crisis intervention for sexually and physically abused children. Stephanie has served on local and national Boards of several organizations, most recently having served for six years on the University of Florida Alumni Association Board of Directors.



#### **Amy Beaird**

Program Director, Florida High Tech Corridor

Dr. Amy Beaird is the Program Director for Cenfluence, an industry diversification initiative launched by the Florida High Tech Corridor Council in partnership with Orange County Government to build internationally recognized industry clusters that are globally competitive resulting in significant contributions to Central Florida's economy. As a Program Director, Amy engages with Cenfluence Cluster Members providing business support services, assistance with research & innovation collaborations, help with funding pursuits and more. She also leads The Corridor's SBIR Catalyst prize from the US Small Business Administration to support women entrepreneurs applying to the Small Business Innovative Research grants program. Prior to joining Cenfluence, she was a Research Director at two advanced materials startups and a consultant on small business and innovation related projects. Amy holds a Ph.D. in Chemical Engineering from the University of South Carolina and B.Ss in Chemical Engineering from the University of Florida.



#### Ken Blank

President, University Research Strategies; NAI Fellow

Ken Blank is a demonstrated innovative and effective leader in building high impact, sustainable use-inspired research programs. He has a proven ability to engage industry, mission oriented government agencies, and universities in productive collaboration. These key alliances increase funded research to support the development of new emerging technologies and contribute to successful technology commercialization, technology park development and workforce-related programs. Blank has held senior research leadership positions at nationally recognized research institutions successfully increasing metrics in research revenue and technology commercialization. He serves on the Board of Directors of The University City Science Center and the New Jersey Innovation Institute and is a Fellow of The National Academy of Inventors and The College of Physicians of Philadelphia.



#### Karen Burg

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

Dr. Burg earned her B.S. degree in chemical engineering from North Carolina State University and M.Sc. and Ph.D. degrees in bioengineering from Clemson University. She subsequently completed a tissue engineering postdoctoral fellowship at Carolinas Medical Center, then joined the faculty at Clemson University, later also taking on administrative duties as vice provost and dean of the graduate school. Karen served as vice president for research and professor of chemical engineering at Kansas State University, before joining the University of Georgia. 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, a U.S. Department of Defense Era of Hope Scholar, and an American Association for the Advancement of Science-Lemelson Invention Ambassador. Karen has eight patents issued, and technologies from her team's research serve as the basis for a cancer diagnostics company that builds 3D tissue systems and leverages the technology to provide predictive data and insights to pharma and clinicians regarding cancer therapy and care. Karen served as the principal investigator for National Science Foundation Innovation-Corps teams in 2015 and 2021 and was a member of the 2016 NSF I-Corps L teaching team. Earlier this year, Karen was named by President Biden as one of twelve individual recipients of the 2021 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring.



#### Almesha L. Campbell

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. In this capacity, 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 (CIEED). She designs and manages programs around innovation, technology transfer, and commercialization in an effort to broaden the participation of underrepresented minorities in these areas. Dr. Campbell co-led the development of the JSU CIEED. She is the Principal Investigator for the NSF JSU I-Corps Site and has two NSF EAGER awards – "A Research-Driven Messaging Campaign to Transform Perceptions of URMs in STEM Innovation" and "Pathway to Commercialization at HBCUs". She also directs the EnRICH pre-accelerator program for HBCUs. She currently serves as chair-elect for the AUTM Board of Directors.



#### Elizabeth R. Cantwell (Betsy)

Senior Vice President for Research & Innovation, University of Arizona

Dr. Elizabeth R. Cantwell (Betsy) is the Senior Vice President for Research & Innovation at the University of Arizona (UA). Dr. Cantwell reports to the UA President and is responsible for a \$770M annual research portfolio, a department staff of 650, and an annual operating budget of \$60M. Her responsibilities include the 1,268-acre UA Tech Park, one of the nation's premier university research parks. She came to UA from Arizona State University (ASU) where she served as the VP for Research Development and the CEO of the ASU Research Enterprise, a 501(c)(3) dedicated to translating research to commercial outcomes. There she directed a \$45 million annual budget and an organization of 150. Dr. Cantwell is a graduate of the University of Pennsylvania, Wharton School (MBA, 2003); the University of California, Berkeley (PhD, Mechanical Engineering, 1992); and the University of Chicago (BA, Human Behavior 1976). She was a member of the 2020 National Academy of Sciences Engineering and Medicine Strategic Planning Committee and has served as the co-Chair of the Aeronautics and Space Engineering, National Laboratories operations and advanced manufacturing.



#### Alexander N. Cartwright

President, University of Central Florida; NAI Fellow

Alexander N. Cartwright, Ph.D., is UCF's sixth president and under his leadership the university is focused on expanding and elevating its prominence and impact as a public metropolitan research university, committed to unleashing the potential of its students, faculty, and staff to positively impact society through education, research, creative works, and engagement. As a first-generation college student — who went from a GED to Ph.D. via community college transfer to a research university — Cartwright understands and prioritizes the need to build successful outcomes for students from all backgrounds to contribute to upward mobility and broad-based prosperity. Cartwright is an internationally recognized researcher in optics and photonics and is an elected fellow of the American Association for the Advancement of Science, SPIE, and the National Academy of Inventors. During his twenty-seven-year career in higher education, he has served in numerous administrative roles of increasing responsibility in public research universities.



#### Wei Chen

Professor, Department of Physics, University of Texas at Arlington; NAI Senior Member

Dr. Wei Chen is a professor at the department of Physics, UT Arlington. Currently he has pub-lished more than 300 papers in famous academic journals such as PNAS, Nano Letters, Signal Transduction and Targeted Therapy(Nature), Advanced Materials, Advanced Functional Materials, Materials Today Physics, Bioactive Materials, etc. Wei Chen presided over the compilation of 1 monograph (three volumes), and participated in the compilation of 13 monographs. His papers have been cited more than 11,800 times, and his H index is 62, including one paper with 699 citations, 4 papers with more than 500 citations,13 papers with more than 200 times, 30 papers with more than 100 times. He has 20 U.S. patents granted. Dr. Chen's scientific research work has attracted wide attention and has been reported by the American TV program CBS. Dr. Chen received the University distinguished record of research and creative activity award in 2020. He is a senior member of the National Academy of Inventors, a Fellow of the International Association of Advanced Materials (Sweden) and a Vebleo Fellow, a Sigma Xi full member, Pencis fellow and a Fellow of Royal Society of Chemistry.



#### James Gerard Conley

Clinical Professor, Kellogg School of Management, Northwestern University; NAI Fellow

James Conley is an inventor who serves as a faculty member in the Kellogg Center for Research in Technology & Innovation. He also serves as a Faculty Fellow at the Northwestern University Segal Design Institute. He is a Charter Fellow of the National Academy of Inventors. In 2004, 2007, 2014, 2015 and 2016, he received the Professor of the Year award from the Master of Product Development program at Northwestern University. In 2011 and 2013 he received the Professor of the Year award from the Professor of the Year award from the Master of Science program at the WHU in Germany. Beyond Northwestern, he serves as an expert and author for the UN based World Intellectual Property Organization and has served as an appointed member on the United States Department of Commerce Trademark Public Advisory Committee to the Patent and Trademark Office. He also serves on the board of several companies and the US Intellectual Property Alliance and the Illinois Intellectual Property Alliance. He is serving as a special issue editor of Technology and Innovation and serves on the editorial boards of the California Management Review and The Journal of the National Academy of Inventors.



#### Walter G. Copan

Vice President for Research and Technology Transfer, Colorado School of Mines; NAI Fellow

Dr. Walter G. Copan is Vice President for Research and Technology Transfer at Colorado School of Mines, a leading U.S. research university. He also serves as Senior Advisor and co-founder of the Renewing American Innovation Project at the Center for Strategic and International Studies in Washington, D.C. He previously served as Under Secretary of Commerce for Standards and Technology and 16th Director of the National Institute of Standards and Technology (NIST), having been unanimously confirmed by the Senate. He was the U.S. principal presidential advisor on standards policy and technology, and provided high level oversight and strategic leadership for NIST. Dr. Copan is a distinguished leader with wide-ranging experience spanning large company, venture capital, entrepreneurial tech startup, U.S. government, non-profit and other public sector settings. He completed his undergraduate degrees in Chemistry and Music, as well as his PhD in Physical Chemistry at Case Western Reserve University.



#### Jennifer Cowley

President, The University of Texas at Arlington

Dr. Cowley has dedicated her career to public service. Before joining UT Arlington, she was the provost and vice president for academic affairs at the University of North Texas, where she led economic development partnerships, advanced diversity and inclusion initiatives, fostered student success, bolstered the research portfolio, and helped increase enrollment. She worked at Ohio State University for 16 years, serving as the vice provost for capital planning and regional campuses, associate dean of the College of Engineering, head of city and regional planning, and a professor during her time there. While at OSU, Cowley also led four regional campuses, helped develop the President's and Provost's Teaching Institute to aid faculty in improving teaching quality and advancing effectiveness, and created a capital plan that led to more than \$1 billion in development over a five-year period. She earned a Ph.D. in urban and regional science, master's degree in urban planning, and bachelor's degree in political science from Texas A&M University and master's degrees in interdisciplinary studies and public administration from UNT. She is a fellow of American Institute of Certified Planners and a member of the executive committee of the Council on Academic Affairs in the Association of Public and Land Grant Universities. An Arlington native, Cowley and her husband, Jon, have a high-school-age son, Nathan, and a pet chinchilla named Chinchi.



#### Gregory P. Crawford

President, Miami University; NAI Fellow

Gregory P. Crawford, Ph.D., is president of Miami University in Oxford, Ohio. Crawford began his research career at Xerox PARC and has launched two startup biotechnology companies based on his university research discoveries. He has leveraged his academic role to elevate entrepreneurship education, innovative research, and entrepreneurial startups at Brown University, the University of Notre Dame, and Miami University. Crawford has received numerous recognitions for his professional and community service, including Notre Dame's 2011 Rev. William A. Toohey, C.S.C. Award for promoting social justice, and Kent State's 2018 Distinguished Alumni Award. He holds 16 U.S. patents and is co-founder of Corum Medical and Myomics. In addition, he has published more than 350 articles, books, and book chapters and edited 7 books.



#### **Elizabeth Dougherty**

Eastern Regional Outreach Director, U.S. Patent and Trademark Office (USPTO)

As the Eastern Regional Outreach Director for the U.S. Patent and Trademark Office (USPTO), Elizabeth Dougherty carries out the strategic direction of the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, and is responsible for leading the USPTO's East Coast stakeholder engagement. Focusing on the region and actively engaging with the community, Ms. Dougherty ensures the USPTO's initiatives and programs are tailored to the region's unique ecosystem of industries and stakeholders.

Ms. Dougherty has more than 25 years of experience working at the USPTO. She served as the Senior Advisor to the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. In this role, she worked closely across the Agency's leadership to implement the policies and priorities for the USPTO. She began her career at the USPTO as a patent examiner after graduating from The Catholic University of America with a bachelor's degree in physics. While a patent examiner, Ms. Dougherty went on to obtain her J.D. from The Columbus School of Law at The Catholic University of America and served as a Senior Legal Advisor in the Office of Patent Legal Administration for a significant part of her career. Over the years, she has also served in the USPTO's Office of Petitions, the Office of Innovation Development, and the Office of Government Affairs. Ms. Dougherty has dedicated much of her career to the USPTO's outreach and education programs focusing on small businesses, startups and entrepreneurs. In this effort she has developed, implemented, and supervised programs that support the independent inventor community, small businesses, entrepreneurs, and the intellectual property interests of colleges and universities. Similarly Ms. Dougherty has spearheaded a number of special projects with federal, state and local governments, and private organizations to promote and support invention and innovation in the United States.

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



#### Robert Duncan

Professor & President's Distinguished Chair in Physics, Department of Physics and Astronomy, Texas Tech University; NAI Fellow

Prof. Duncan joined Sandia National Labs, and then the Physics and Astronomy Department at UNM, after earning his physics degrees at MIT and UC Santa Barbara. He became a Distinguished Member of the Technical Staff at Sandia in 1995, and then the first Associate Dean for Research within the College of Arts and Sciences at UNM in 1999. He served as the founding Director of the New Mexico Consortium at LANL in 2006, before going on to serve as the Vice Chancellor for Research at the University of Missouri (MU), and then as the Senior Vice President for Research at Texas Tech University. He currently serves as the President's Distinguished Chair in Physics at Texas Tech. His experimental research interests are in dynamic critical phenomena, quantum fluids, and in precision measurement and new quantum sensing instrumentation design.

Prof. Duncan has published seventy papers in refereed journals, and he has taught throughout the undergraduate and graduate curriculum in physics. He is a Fellow and a life member of the American Physical Society, and a Fellow and a Board Member of the National Academy of Inventors. He has served on the Scientific Advisory Board of the United States Air Force. Prof. Duncan was named the Gordon and Betty Moore Distinguished Scholar within the Division of Physics, Mathematics, and Astronomy at Caltech in 2004. He chaired the Instrumentation and Measurement Topical Group for the American Physical Society in 2002, and the International Symposium on Quantum Fluids and Solids in 2003. He has co-invented 12 U.S. patents and 31 international patents, and he has assisted in the formation of companies. Prof. Duncan chaired the Panel on Fundamental Physical Science in Space for the National Academy of Sciences (NAS) Decadal Survey on Biological and Physical Sciences in Space in 2010, and he currently serves on the Interface of Science and Engineering Panel of this 2022 Decadal Survey. He has also served on the NAS Panel to evaluate the effectiveness of the Experimental Program to Stimulate Competitive Research (EPSCoR). He is a frequent plenary speaker at the World Federation of Scientists in Erice, Sicily, and he has served on executive 'blue ribbon' review committees at the Naval Research Laboratory, the Jet Propulsion Laboratory, and at the United States Military Academy at West Point.





#### **Amr Elnashai**

Vice Chancellor and Vice President for Research and Technology Transfer, University of Houston; NAI Honorary Member

Fellow of the British Royal Academy of Engineering, Amr Elnashai is the Vice Chancellor/Vice President for Research and Technology Transfer at the University of Houston and University of Houston System. Previously, Amr served as Dean of Engineering at the Pennsylvania State University. He has been visiting professor at the University of Surrey, the University of Tokyo, the University of Southern California, and the European School for Advanced Studies in Reduction of Seismic Risk. Amr is founder and editor-in-chief of the Journal of Earthquake Engineering; member of the drafting panel of the European design codes; and member of the Council of the UK Institution of Structural Engineers. Amr's technical interests are multi-resolution distributed analytical simulations, network analysis, large-scale hybrid testing and field investigations of the response of complex networks and structures to earthquakes. Amr earned M.Sc. and Ph.D. degrees from Imperial College, University of London, and his Bachelor of Science degree from Cairo University.



#### Fred Farina

Chief Innovation and Corporate Partnerships Officer, California Institute of Technology

Fred Farina is Caltech's Chief Innovation and Corporate Partnerships Officer. His responsibilities include commercializing inventions made at Caltech and the Jet Propulsion Laboratory (JPL/NASA) through the creation of new startup ventures and partnerships with established companies. His office is responsible for evaluating inventions, supervising patent prosecution and portfolio management, negotiating licensing deals with industry, assisting Caltech/JPL entrepreneurs with the creation of new startup companies and establishing research collaborations with industry. Prior to joining the office, Frederic worked as a research engineer in the GPS field at JPL and the University of Miami. He subsequently joined a law firm where he prosecuted patent applications on various technologies before the U.S. and European patent offices. Fred holds a "Diplôme d'Ingénieur" in Electrical Engineering from the Institut National des Sciences Appliquees, Lyon, France, and is a graduate of Caltech from which he received a Master's degree in Electrical Engineering in 1992. He is a registered patent agent with the U.S. Patent and Trademark Office.



#### Wade Fulghum

Assistant Vice Chancellor for Research Commercialization, North Carolina State University

Wade Fulghum serves as the Assistant Vice Chancellor for Research Commercialization for NC State University. Wade served as the principal investigator and Managing Director for the National Science Foundations (NSF) I-Corps Site at NC State (2017-2021), and serves as the principal investigator for NC State as a Partner in the \$15M NSF Mid-Atlantic Hub in collaboration with 10 leading research institutions in the region. He is the co-founder of the Wolfpack Investor Network (WIN) and serves as the Chair of the WIN Steering Committee. Wade serves as the Chair of the North Carolina Small Business Technology Development Center (SBTDC) Research Triangle Advisory Board, and serves on the statewide Advisory Board. Prior to assuming the leadership role for the office Wade served as the Director of New Ventures and has been responsible for the support of over 100 researchbased startup companies and has launched many initiatives to support research-based startups.



#### **Demetria Gallagher**

Vice President of Knowledge, Innovation and Impact, VentureWell

Demetria is a tireless advocate for entrepreneurs, communities, businesses, and policies that positively impact the revitalization of American cities. For more than six years at the U.S. Department of Commerce in Washington, D.C., Demetria served as a policy analyst and White House Political Appointee in the Administration of President Barack Obama. In this role, Demetria built a new program designed to connect STEM-oriented minority-owned companies with the immense science and technology resources located in the federal government. She conceived, designed, and scaled up a revolutionary program that connected STEM-oriented businesses and young entrepreneurs to a vital, historic aspect of America's business development stream: high-quality scientific expertise and quantitative testing and research that aids the commercialization of technological discoveries born in the nation's 300+ federal laboratories. Demetria currently serves as the Vice President of Knowledge, Innovation and Impact at Venturewell. She is excited to support a national nonprofit that provides the training and resource needs of early-stage innovators as they aim to solve the world's most difficult problems. Demetria holds a Bachelor's Degree in Sociology from the University of Illinois at Urbana-Champaign. She also earned a Master's Degree in Sustainable Urban Planning, which she received from George Washington University. In 2016, she was selected to participate in the Social Impact Investing Program at University of Oxford and is continuing her education at Harvard University in Real Estate Development. Demetria currently resides in Chicago, IL.



#### **Sheila Grant**

Associate Vice Chancellor for Research and Strategic Initiative, University of Missouri, NAI Fellow

Dr. Sheila Grant received her Ph.D. in materials engineering from Iowa State University. After graduation, she worked four years at Lawrence Livermore National Laboratory in Livermore, CA. In 2001, Dr. Grant became a faculty member at the University of Missouri in Columbia, MO. Currently she serves as the Associate Vice Chancellor for Research and Strategic Initiative at the University of Missouri. Dr. Grant has created several high tech ventures including G5 Biological Innovations, LLC where she serves as President. Her research interests include the development of nanostructured biocomposites for enhanced tissue integration and utilizing new advances in nanotechnology to develop novel sensing mechanisms and sensing platforms. She has published over 100 papers and has numerous patents; she is a Fellow of the National Academy of Inventors, a Fellow of the Biomedical Engineering Society, and a Fellow of the American Institute for Medical and Biological Engineering.



#### Suzanne Harrison

Diversity & Inclusion Co-Lead, U.S. IP Alliance; Principal, Percipience LLC

Suzanne Harrison is an author, patent futurist, and economist. She works with companies to help them realize the true value of their intellectual property. For the past 30 years she has led an IP best practices group called The Gathering, an invitation only group of 20 companies that meet regularly to define, create, benchmark and test best practices in IP management. Her books draw on her work with the Gathering, and feature success stories of companies leading the way in innovative IP management. She is also the co-chair of the USIPA diversity and inclusion committee and is working with over 50 companies on implementing best practices to increase diversity in innovation with actionable and measurable results. She is a founder and principal of Percipience LLC, a board level advisory group focused on IP strategy, management, and quantifying and mitigating IP risk.



#### Pedro "Peter" Hernandez

Director, Technology Management and Commercialization, Florida International University

Peter Hernandez serves as the Director of Technology Management and Commercialization, and provides overall leadership and direction for patents and licensing. He plans, develops, directs, and assesses the University's Intellectual Property portfolio, including generation of licensing revenues. Mr. Hernandez also coordinates cooperative ventures with businesses and industries to promote FIU technology, facilitate industry-university collaboration and technology transfer, and advance the commercial use of FIU intellectual property. Peter earned a BSEE from the University of Miami, an MBA from Florida International University, and a JD from the University of Miami. He is a member of the Texas, Florida and District of Columbia bar associations, and is registered with the United States Patent and Trademark Office. Mr. Hernandez has over 20 years of experience in industry, engineering and intellectual property management, including transactional matters, business negotiations, patents, trademarks, trade secrets, and copyrights. He has negotiated agreements, licensing and technology transfers with universities, as well as provided numerous training sessions and presentations on all aspects of intellectual property. Prior to joining FIU, Peter worked as Senior Counsel for companies such as Eastman Kodak, Goodrich Corporation, Texas Instruments, EndoSonics Corporation, and Motorola.



#### Rodney J.Y. Ho

Professor of Pharmaceutics & Bioengineering, University of Washington, NAI Fellow

Dr. Ho is a professor and presidential entrepreneurial fellow of the University of Washington, and holds appointments at the Fred Hutchinson Cancer Research Center. He is also an expert on pharmacology and systems approaches to drug targeting and long-acting therapy. His research aims to improve the therapeutic efficacy and safety of viral and cancer drugs, medical diagnostic agents and vaccines. He is an elected fellow of the American Association for the Advancement of Science (AAAS) and the American Association of Pharmaceutical Scientists (AAPS). He studies the relationships between drug target distribution and disease development in cancer, AIDS, and neurological disorders. Building on this understanding, he has developed a systems approach to drug delivery and targeting. He is known for his expertise in bio-therapeutics, lipid-drug and -protein interactions, liposomes, drug-combination nanoparticles, pharmacokinetics, and the interplay between tissue targets and drug penetration. His research has led to enhanced HIV, cancer, and pain medication potency and safety.



#### Douglas Hockstad

Assistant Vice President, Tech Launch Arizona, University of Arizona

Douglas Hockstad serves as the Assistant Vice President of Tech Launch Arizona, University of Arizona's technology commercialization organization. Doug joined UArizona in 2013 with more than 25 years of experience in high tech markets, primarily in the software market, including both established company and startup experience, and moved on to tech transfer at the University of Michigan with a primary responsibility for managing software and other copyright-related intellectual property created across the entire U of M campus. Doug has also served on the Association of University Technology Managers (AUTM) Board of Directors, helping to set the strategic direction of the AUTM organization.



#### Ben Hoggan

Director of De-Risking and Commercialization, Notre Dame University

As the Director of Derisking and Commercialization, Ben works with the earliest stage companies and technologies to identify and mitigate risks that prevent startups from succeeding in the market. Derisking is the second phase of the Commercialization Engine where technologies are advanced through a stage-gated process to identify risks, mitigate market and technology risks, and create companies that are much more likely to succeed in the market. Ben has worked on over 150 different technologies and companies ranging from diagnostics, therapeutics and medical devices, to blockchain and cryptocurrency, to SaaS and CPG.



#### **James Holloway**

Provost and Executive Vice President for Academic Affairs, University of New Mexico

Dr. James Paul Holloway is a Professor of Nuclear Engineering and serves as the Provost and Executive Vice President for Academic Affairs at the University of New Mexico. After receiving the M.S. in Nuclear Engineering at the University of Illinois (1984), he completed a CAS in Mathematics at Cambridge University (1985) and a doctorate in Engineering Physics at the University of Virginia (1989). His professional pathway has balanced a commitment to research with a commitment to education, first at the University of Virginia and, for most of his career, at the University of Michigan where he was ultimately appointed Arthur F. Thurnau Professor and Professor of Nuclear Engineering and Radiological Sciences (now Emeritus) and also served in administrative roles, including as Associate Dean for Undergraduate Education in the College of Engineering and as the Vice Provost for Global Engagement & Interdisciplinary Academic Affairs.

Dr. Holloway's research focuses on computational and mathematical modeling with applications that span neutron and photon radiation transport theory, uncertainty quantification, nuclear reactor physics and control, nonlinear dynamics, inverse problems, and plasma kinetic theory. He has also taught appropriate technology development both in the US and abroad in both Ghana and Thailand. He has authored over fifty articles, over eighty refereed conference papers and summaries, a textbook, a biography, and a variety of publications on education and other matters. He has supervised over twenty dissertations. His induction into the Order of the Engineer in 2003 complements his other honor society inductions and both service and leadership in myriad professional societies. As Provost and EVP for Academic Affairs at UNM, he is focused on fostering the excellence of the educational and research environment of UNM, for the goal of positive impact on individuals and communities in New Mexico and across the globe.



#### James Howard

Executive Director, Black Inventors Hall of Fame

James Howard is a college professor, design historian, entrepreneur, industrial designer, inventor and restauranteur. He owns and operates one of the area's top niche food establishments, "Cozy Cupboard Tea Room". Howard also brings over 25 years of experience as a design professor and has authored a course on Design Thinking and Design History that explores the impact of design on society.

Accomplished Industrial Design educator and entrepreneur, Howard has lectured on the experience of the Black American inventors, often drawing a parallel with many of his own experiences as an AA innovator to those innovators of the past. Howard is an extraordinary inventor who has 15 patents. Many of these extraordinary innovations save people's lives every day. His latest venture is Entrepreneurial U, Morris County's first school of Design Thinking.



# Ming Hsieh

Founder, Fulgent Genetics; NAI Fellow

Ming Hsieh is Chairman, President, and Chief Executive Officer of Fulgent Genetics, Inc. Fulgent is a rapidly growing biotechnology company offering comprehensive genetic testing and oncology services, with the goal of improving patient care. One of Fulgent's most distinct features is its proprietary technology platform that integrates artificial intelligence, data mining and suppression algorithms, adaptive learning software, advanced genetic tools, and integrated laboratory management. Prior to founding Fulgent, Mr. Hsieh served as Founder, Chief Executive Officer, and Chairman of the board of directors of Cogent, Inc., a global leading biometric identification company since 1990, Cogent was acquired by 3M in 2010.

Mr. Hsieh received a B.S.E.E. from USC in 1983 and an M.S.E.E. from USC in 1984, as well as honorary doctoral degrees from USC in 2010 and the University of West Virginia in 2011. Mr. Hsieh has served as a trustee at USC since 2007 and at Fudan University in China since 2011. In 2015, Mr. Hsieh was elected to the National Academy of Engineering for development and commercialization of biometric identification systems. In 2017, Mr. Hsieh was named fellow of National Academy of Inventors for his innovations in cellular technology and fingerprint identification.



#### Matthew Hulver

Vice President of Research, Arizona State University

Matthew Hulver is vice president of research, responsible for identifying and deploying strategies to grow and diversify ASU's research enterprise. He holds a faculty position in the College of Health Solutions. Before joining ASU, Dr. Hulver was at Virginia Tech where he served as the executive director of the Fralin Life Sciences Institute and was a professor, department head, and director of graduate programs in the Department of Human Nutrition, Foods and Exercise. Hulver has held multiple leadership roles at Virginia Tech, including assistant dean in the College of Agriculture and Life Sciences, co-director of the Center for Transformative Research on Health Behaviors, and director of Metabolic Phenotyping Core. Hulver holds a bachelor's degree in fitness management from Marietta College, a master's degree in exercise science from McDaniel College, and a Ph.D. in exercise physiology from the University of Kansas.



#### Andrei Iancu

Former Under Secretary of Commerce for Intellectual Property and Director, United States Patent & Trademark Office; Partner, Irell & Manella LLP; NAI Honorary Member

Andrei lancu is an intellectual property partner at Irell & Manella LLP. Prior to rejoining the firm in 2021, he served as the Undersecretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office. As head of the USPTO, lancu oversaw one of the world's largest IP offices with approximately 13,000 employees and a \$3.5 billion annual budget. He previously spent two decades at Irell, serving as managing partner from 2012 to 2018. In 2021, lancu co-founded the Renewing American Innovation Project at the bipartisan Center for Strategic and International Studies. He earned his J.D. from UCLA School of Law and an M.S. and B.S. from UCLA. Before his legal career, lancu was an engineer at Hughes Aircraft Company.



#### Kiruba Krishnaswamy

Assistant Professor, Sustainable Food Systems Engineering, University of Missouri, Columbia

Dr. Kiruba Krishnaswamy has a unique skillset of integrating sustainable food systems engineering to address the interconnected challenges of food and nutrition security. She holds the MU Pillars of Pursuit – Food Sustainability joint position between the College of Engineering (CoE) and the College of Agriculture, Food and Natural Resources (CAFNR), to bridge connections between different disciplines. Dr. Krishnaswamy established the Food Engineering and Sustainable Technologies (FEAST) research program during Fall 2018 at MU. Three interconnected areas of research focus are: [a] Upcycling of food loss/waste to recover micronutrients; [b] Innovative technologies for designing (nano-micro-macro scale) encapsulation systems for micronutrients delivery; [c] Food fortification with multiple micronutrients to address hidden hunger (micronutrient deficiencies). The FEAST program develops innovative technologies geared towards maternal and child health, local and global development supporting UN Sustainable Development Goals (SDG 2 – Zero Hunger) and (SDG 17 – Partnerships for the Goals).



#### **Richard Lange**

President, Texas Tech University Health Sciences Center

Dr. Richard Lange, M.D., is president of Texas Tech University Health Sciences Center (TTUHSC) El Paso and dean of the Paul L. Foster School of Medicine.

Lange obtained his B.S. in biochemistry from the University of North Texas, and, his medical degree from the University of Texas Southwestern Medical School in Dallas. He completed his internship and residency training at Johns Hopkins Hospital and then returned to UT Southwestern for fellowship training in cardiology. He joined their faculty, where he became director of the Cardiac Catheterization Laboratory, served for many years as the Fellowship Program director and directed the Rapoport Center for Cardiovascular Research. In 2004, he returned to the Johns Hopkins Hospital to serve as Chief of Clinical Cardiology and, while there, obtained his M.B.A. from John Hopkins University. Before coming to TTUHSC El Paso in 2014, Dr. Lange served as Vice Chairman of Medicine and Director of Educational Programs at the University of Texas Health Sciences

Center at San Antonio.

He has been president of the American Heart Association Texas Affiliate and an active clinical investigator publishing more than 400 journal articles, book chapters and books dealing with heart disease. He serves on the editorial board of numerous journals and currently heads the FDA Circulatory System Devices Panel. He is credited with the first medical podcast worldwide (now TT Healthwacth) which has been produced weekly in collaboration with Johns Hopkins for the past nineteen years.



#### Anna Leese de Escobar

Distinguished Senior Scientist of Cryogenic Electronics, Naval Information Warfare Center Pacific; NAI Fellow

As the Cryogenic Electronics SSTM, Ms. Leese de Escobar serves as the leading technical expert on cryogenic electronics within NAVWAR and across the Department of Navy/ Department of Defense. She leads the Center's concerted efforts in expanding applications of cryogenic electronic technologies and advises on high and low-temperature superconducting materials and devices, associated cryogenic systems and fleet applications. She founded the Cryogenic Exploitation of Radio Frequency (CERF) laboratory at NIWC Pacific which has delivered cryogenic electronic solutions to the Warfighter and introduced game-changers in the field of superconducting sensors. Ms. Leese de Escobar is a nationally recognized expert in experimental physics research, development, and engineering in cryogenic and superconducting materials and devices for electromagnetic systems.

Ms. Leese de Escobar earned a B.S. in Physics from University of California, Los Angeles. She is certified Level III in Science and Technology Management by the Defense Acquisition University. She is a recipient of the Lauritsen-Bennett Award for Excellence in Science, and several others. She is author of many publications with over 255 citations, over 18 patents issued. She is a Senior Member of IEEE and a Fellow of the National Academy of Inventors and serves on their Board. She has Chaired the U.S. Committee for Superconducting Electronics and remains a Board member there and for the Applied Superconductivity Conference, representing Electronics.



#### Teik C. Lim

President, New Jersey Institute of Technology, NAI Fellow

Dr. Teik C. Lim will be the 9th President of the New Jersey Institute of Technology effective July 2022. He previously served as the Provost and later Interim President at UT Arlington. Dr. Lim worked as an engineer at SDRC before joining the OSU Center for Automotive Research as a research scientist. He taught at the University of Alabama beginning in 1998, as associate professor, before joining the University of Cincinnati in 2002, where he advanced from associate professor, professor and department head to associate dean and, ultimately, Dean of the College of Engineering and Applied Science. He was named Fellow of National Academy of Inventors in 2018. He is also Fellow of the American Society of Mechanical Engineers, and the Society of Automotive Engineers.



#### Mark Lundstrom

Don and Carol Scifres Distinguished Professor of Electrical and Computer Engineering, Purdue University

Mark Lundstrom is the Don and Carol Scifres Distinguished Professor of Electrical and Computer Engineering at Purdue University where he also serves as Principal Advisor on Microelectronics to the Executive Vice President for Strategic Initiatives. Lundstrom is also a Senior Research Fellow for the Krach Institute for Tech Diplomacy. During 2020, he served as Acting Dean for Purdue's College of Engineering. Lundstrom began his career as an integrated circuit process development and manufacturing engineer and has been at Purdue since 1980 where his research and teaching have focused on the physics, modeling, and simulation of semiconductor devices.

Among Lundstrom's recognitions for his career contributions to microelectronics research and education are the Semiconductor Industry Association's University Researcher Award, the Semiconductor Research Corporation's Aristotle Award, the IEEE's Cledo Brunetti Award, and the IEEE's Leon K. Kirchmayer Graduate Teaching Award. He is a Life Fellow of the IEEE and a Fellow of the APS and the AAAS and was elected to the U.S. National Academy of Engineering for "For leadership in microelectronics and nanoelectronics through research, innovative education, and unique applications of cyberinfrastructure".



#### **Gary K. Michelson**

Founder and Co-Chair, The Michelson 20MM Foundation; NAI Fellow

Dr. Gary K. Michelson, M.D., is a board certified orthopedic spinal surgeon, an inventor who holds nearly 1,000 patents throughout the world, and the founder and co-chair of Michelson Philanthropies. Dr. Michelson is one of the most prolific inventors in the history of medicine, and the sole named inventor of more than 950 issued patents throughout the world and is one of very few people ever inducted into both the National Inventors Hall of Fame as well as the National Academy of Inventors.

Included among Dr. Michelson's nearly 1,000 patents is a non-invasive surgical technique that revolutionized back surgery. In the wake of the commercial success of his inventions, Dr. Michelson has established several philanthropies. They include an Institute that promotes the intellectual property protection system and seeks to educate and encourage the next generation of innovators and inventors.

Dr. Michelson will discuss the work of his Institute and the IP curriculum it has developed, which has reached 20,000 students worldwide. The curriculum includes online courses on patents, trademarks, copyrights and trade secrets. In partnership with the National Academy of Inventors, the curriculum now includes an Innovation Development Certificate. This valuable credential for aspiring inventors is administered and issued by NAI. Those who complete the course and pass a final exam receive the certificate.



#### **Don Millard**

Acting Deputy Assistant Director of the Engineering Directorate, National Science Foundation

Dr. Millard is currently serving as the Acting Deputy Assistant Director of the Engineering Directorate (ENG) at the National Science Foundation (NSF). At NSF, he has served in a number of roles, as an acting Division Director, a Deputy Division Director and a Program Director -- involved with the Advanced Technology Education (ATE) program, the Math and Science Partnership (MSP) program, and the Transforming Undergraduate Education in Science, Technology, Engineering and Math (TUES) program (as the program lead). He also served as a founding team member of the EHR Core Research (ECR), the Innovation Corps (I-Corps) and the Convergence Accelerator programs.

Prior to joining NSF, Dr. Millard spent 27 years at Rensselaer Polytechnic Institute where he served as a faculty member of the Electrical, Computer, and Systems Department and directed a number of research centers; including the Center for Integrated Electronics and the Academy of Electronic Media. Dr. Millard's research interests include electronics design and manufacturing, electrical testing/evaluation methodologies, semiconductor fabrication, electronic media development, information technology, and engineering education. He is the creator of the Mobile Studio project, which enables students to perform experiments that use an oscilloscope, function generator, digital control, and some form of power supply (in a portable package) - and learn at anytime, anyplace. He holds a patent for the development of a laser-induced, plasma-based Non-Contact Electrical Pathway.

#### **PRESENTER/SPEAKER BIOS**



#### Shyam (Sam) S. Mohapatra

Distinguished Health Professor, Department of Internal Medicine, University of South Florida; Director, USF Center for Research & Education in Nano-bioengineering; Associate Dean, Taneja College of Pharmacy Graduate Programs; Senior Research Career Scientist, James A. Haley VA Hospital; NAI Fellow

Shyam (Sam) S. Mohapatra, has had a distinguished career in academia in research, teaching, and service at USF since 1996. His research in USF has been extramurally funded by the NIH, NSF, Veteran Affairs, DoD, ONR, and the Florida Dept of Health. He has published over 235 papers and holds over 40 U.S. and foreign patents. He is recognized for his many inventions in the field of nanoscale biomedical diagnostics and therapeutics in cancers, asthma, viral infections, and traumatic brain injury. In cancers, his inventions and co-inventions have led to several technology platforms and products for innovative anti-cancer drug discovery, drug development, and personalized cancer treatment. His research inventions has spawned a nanotech and a biotech company in nanobiotechnology. He is one of the 2014 inaugural inductees of the Florida Inventors Hall of Fame and has been elected to a Fellow by NAI, AAAAI, AIMBE, AAAS, and FASEMFL.



#### Sally Morton

Professor of Mechanical Engineering and Materials Science, University of California Riverside

Sally C. Morton is executive vice president of Arizona State University's Knowledge Enterprise. She advances the university's research priorities and drives corporate engagement, economic development, global initiatives, strategic partnerships, and technology transfer.

Dr. Morton is a professor in the College of Health Solutions and the School of Mathematical and Statistical Sciences and holds the Florence Ely Nelson Chair.

Dr. Morton's career has spanned academia and industry. She was dean of the Virginia Tech College of Science and interim director of the Fralin Life Sciences Institute. She held leadership roles at the University of Pittsburgh as chair of the Biostatistics Department and founding director of the Comparative Effectiveness Research Center; at RTI International as vice president for statistics and epidemiology; and at the RAND Corporation as head of the Statistics Group.

Morton is internationally recognized in the use of data science in health care. She has a particular focus on patientcentered comparative effectiveness research: solving problems that patients themselves identify to improve health care and allow patients, their families, and providers to make better health care decisions.

Dr. Morton was the 2009 president of the American Statistical Association and received the Norwood Award for Outstanding Achievement by a Woman in the Statistical Sciences. Dr. Morton received a PhD in statistics from Stanford University, where she also earned master's and bachelor's degrees, and she holds an MSc in statistics from the London School of Economics.



#### **Cengiz Ozkan**

Professor of Mechanical Engineering and Materials Science, University of California Riverside; NAI Senior Member

Cengiz Ozkan is a Professor of Mechanical Engineering and Materials Science at the University of California, Riverside (UCR). He received his Ph.D. degree in Materials Science and Engineering from Stanford University in 1997. Before joining UCR in 2001, Ozkan was employed in the semiconductor industry. He was a member of the SRC STARNet Center for Spintronic Materials, Interfaces and Novel Architectures; and the SRC FCRP Center on Functional Engineered Nano-Architectonics. Ozkan made pioneering contributions in energy storage technologies; two-dimensional nanomaterials and bio-nano architectures for nanoelectronics; and sustainable materials for mitigating environmental pollution. Ozkan has been elected a Fellow of the Materials Research Society, and received the Presidential Science Award in Turkey. He has over 700 technical publications including journal articles, proceedings, abstracts, and edited books; delivered over 150 invited presentations; graduated over 70 PhD and MS students, organized over 40 scientific conferences worldwide, and has 43 U.S. and foreign patents granted.



#### Mihri Ozkan

Professor of Electrical and Computer Engineering, University of California, Riverside; NAI Fellow

Mihri Ozkan is a professor of ECE Department at UCR. She is a Fellow of NAI and Frontier NAE, and UCR's the first and only female engineering faculty receiving these honors. She is the Climate Action Champion and Change Maker Professor of University of California. Mihri completed her graduate studies at Stanford and UC-San Diego. Mihri's research group developed unconventional Li-ion battery technologies using sustainable raw materials, green chemistry processing with low energy requirements. Transforming waste-glass and plastic bottles, biomass (mushrooms, sugar) and natural sources i.e. sand into high-grade battery electrodes are among her group's achievements. Mihri has 33 granted and 15 active patents. She is named by the UC Regents as the most remarkable women of UCR. Her innovative research brought her 56 scientific national/international honors/ awards. Mihri published 180 journal papers and 155 conference proceedings. Her Google scholar citations is 10616, h-Index is 54 and i10-Index is 136.



#### Karen Panetta

Professor of Electrical and Computer Engineering and Dean of Graduate Education for the School of Engineering, Tufts University; NAI Fellow

Dr. Karen Panetta is a Fellow of IEEE,NAI, AAS, NASA JOVE, and AAIA. She is an electrical and computer engineer, inventor, and Dean of Graduate Education for the School of Engineering at Tufts University. Her research areas include Artificial Intelligence, Machine Learning, automated systems, simulation and visual sensing systems. Karen develops signal and imaging processing algorithms, simulation tools and embedded systems for applications for robot vision and biomedical imaging applications. She has won a number of awards for excellence in research, social impact, teaching and mentoring, ethics, and engineering education. She is the recipient of the Presidential Award for Excellence in Science, Math and Engineering Mentoring from U.S. President Barack Obama. She founded the "Nerd Girls" program, which encourages young women to pursue engineering and science. Karen is the editor-in-chief of IEEE WIE Magazine and co-author of the book, "Count Girls In." She is the Co-Founder and CEO of Tessera Intelligence and Co-Founder of SeaDeep. Her passion is utilizing her engineering knowledge for the benefit of humanity. Karen has advised world leaders and led humanitarian projects around the globe to change lives and help communities.


#### Taunya Phillips

Director of the Office of Technology Commercialization, University of Kentucky

Taunya is the director of the Office of Technology Commercialization at the University of Kentucky where she oversees a team of 14 staff managing the University's intellectual property, licensing and startup portfolios. Previously, she was the senior associate director of New Ventures & Alliances, where she was focused on overseeing key alliances for OTC and managing support and services for UK and Lexington entrepreneurs and startups. She has worked at UK since 1999, where her previous positions have been assistant vice president for Commercialization & Economic Development, chief financial officer for Kentucky Technology, Incorporated, College of Engineering lecturer, and Minority Engineering program director. Taunya is a member of the College of Engineering Dean's Advisory Council, a Midwest University Research Network (MRUN) board member, and past president of the UK Alumni Association board of directors. She was the 2014-2015 board chair for Opportunity for Work and Learning Incorporated and is a past president of the UK College of Engineering Alumni Association Board. Taunya has a Bachelor of Science in chemical engineering and a Master of Business Administration, both from the University of Kentucky.



#### 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 Havard.



#### Paul Rosenthal

Deputy Chief Communications Officer, U.S. Patent and Trademark Office

Paul Rosenthal is the Deputy Chief Communications Officer of the United States Patent and Trademark Office (USPTO). He manages the development and implementation of strategic communications for the USPTO in coordination with the U.S. Department of Commerce and the White House, and he supports the Chief Communications Officer in advising the Under Secretary of Commerce for Intellectual Property. Mr. Rosenthal directs a team of media relations, speechwriting, social media, public affairs, and audio-visual design professionals focused on promoting the agency's goals and objectives. He also oversees the USPTO's partnership with the National Inventors Hall of Fame and management of the National Medal of Technology and Innovation, which is issued annually by the White House.

With more than 30 years of experience in the communications field, Mr. Rosenthal joined the USPTO in 2010 and was charged with developing and growing the agency's social media presence and improving agency outreach through online means. He was promoted to the Deputy Chief Communications Officer role in 2013. Prior to joining the USPTO, Mr. Rosenthal worked for the Smithsonian Institution, as a Public Affairs Specialist for the Lemelson Center for the Study of Invention and Innovation at the National Museum of American History and as Web Content Manager at the National Museum of African American History and Culture. He has additional related experience from the United States Postal Service and from nonprofit organizations. He is a former broadcast news journalist.



#### Paul R. Sanberg

President, National Academy of Inventors; Distinguished University Professor and Executive Director, Center of Excellence for Aging & Brain Repair, University of South Florida; NAI Fellow

Dr. Paul R. Sanberg is president and founder of NAI. He 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 editorin-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. He was the first in his family to graduate college, and has been a master flight instructor and airplane enthusiast most of his adult life. He was recently elected a Fellow of the Royal Aeronautical Society. He is a Charter Fellow of NAI.



#### **Rob Schneider**

**Executive Director, The Lemelson Foundation** 

Rob Schneider is the Executive Director of The Lemelson Foundation. Schneider joined the Foundation in 2018 as its Senior Director of Strategy and previously served at the U.S. Agency for International Development (USAID) as the Division Chief for Global Partnerships. Schneider also worked with the Overseas Private Investment Corporation (now the U.S. Development Finance Corporation), providing loans to spur economic growth and development in countries receiving U.S. Foreign Assistance and with the U.S. Dept. of Commerce Economic Development Administration, focusing on underserved communities domestically. Prior to government service, Schneider worked for ten years in the manufacturing and telecommunications sectors, where he led engineering and product development teams, and managed nation-wide infrastructure procurement programs. Schneider has an MBA and Master of Urban Planning from the University of Michigan, and a B.S. in Industrial Engineering from the University of Illinois at Urbana-Champaign.



#### Cameron Smith

Commercialization Director, Texas Tech University

Cameron Smith is the Commercialization Director for the TTU System, leading the Office of Research Commercialization, which serves Texas Tech University, Angelo State University, Texas Tech University Health Sciences Centers, the TTUHSC Paul L. Foster School of Medicine, and Midwestern State University.

With a background as a practicing patent attorney with technical degrees in both the life sciences and engineering, Cameron oversees the TTU System intellectual property portfolio, actively managing the filing and prosecution of 150+ annual patent applications ranging across all technical disciplines. He is also a Certified Licensing Professional and directs the negotiation and execution of 25+ annual license agreements.

Cameron has grown the commercialization bandwidth and deal flow across the TTU System, leading to a 61% increase in new licenses executed and a 221% in licensing revenue received the past year.



#### **George Smith**

Curators' Distinguished Professor Emeritus of Biological Sciences, University of Missouri; NAI Honorary Member

George P. Smith received his Bachelor of Arts degree in biology from Haverford College in 1963 and his Ph.D. in bacteriology and immunology from Harvard University in 1970. From 1970 to 1975 he was a postdoctoral fellow at the University of Wisconsin in the laboratory of Oliver Smithies, who shared the 2007 Nobel Prize in Physiology or Medicine. Smith joined the Division of Biological Sciences at the University of Missouri in Columbia as Assistant Professor in 1975, and continued there as Associate Professor and Professor until his retirement in 2015. Smith's training was in molecular immunology, and that continued to be a focus of his research throughout his career. That was the context of his work developing phage display technology, for which he shared half of the 2018 Nobel Prize in Chemistry with Greg Winter.



#### Annie Sobel

Adjunct Professor, Department of Electrical & Computer Engineering, Texas Tech University

Dr. Annette Sobel, M.D., is a former Major General in the Arizona Air National Guard, and an Associate Professor in the Department of Medical Education, and Graduate School of Biomedical Sciences at Texas Tech University Health Sciences Center in Lubbock. Currently, she is the Director of Global Laboratory for Energy Asset Management and Manufacturing (GLEAMM), at Texas Tech University. She is also an Adjunct Professor of Electrical and Computer Engineering, and the Executive for Critical Infrastructure Protection and Health Security Initiatives, at TTU. She is residency trained in Family and Community Medicine and Aerospace Medicine and is a Hyperbaric Medicine Specialist, certified by the U.S. Navy. As a physician-human factors engineer, she worked at Sandia National Laboratory. She was a senior advisor to the Defense Advanced Research Projects Agency (DARPA), the Defense Threat Reduction Agency (DTRA). Dr. Sobel also served as Senior Advisor for Biosecurity Engagement in the Office of the Assistant Secretary of Defense/Nuclear, Chemical, and Biological Defense Program. Presently, she is Chair of the Permanent Monitoring Panel for mitigation of acts of terrorism of the World Federation of Scientists, and is a Commissioner on the Governor Greg Abbott's Texas Military Preparedness Commission.

Dr. Sobel served as a Major General in the Arizona Air National Guard, retiring in 2008 after twenty years of military service and serving as the first Director of Intelligence for the National Guard Bureau, immediately post 9/11 and during the Hurricane Katrina response. Trained as a military and civilian flight surgeon, she was an Army Astronaut Candidate in 1989. Dr. Sobel served in combat in Operation Just Cause and supported Space Shuttle Operations at NASA-Dryden Test Flight Facility during Operation Desert Storm. While Senior Flight Surgeon for the 57th MEDEVAC Detachment, Fort Bragg, N.C., Dr. Sobel was responsible for all pre-hospital medical care and training. She also served as the Assistant to the Chief, National Guard Bureau, as well as the Chief's Advisor for Civil-Military Support during 9/11. Dr. Sobel served as Homeland Security Director and Deputy Secretary of the Department of Public Safety for the State of New Mexico from 2003-2005.



#### Paul Sohl

CEO, Florida High Tech Corridor; NAI Honorary Member

Paul Sohl is CEO of the Florida High Tech Corridor, an economic development initiative of the University of Central Florida, the University of South Florida and the University of Florida, to attract, retain and grow high tech industry and innovation – and the workforce to support it – in a 23-county region. As CEO, Sohl facilitates collaboration between the three universities and their partners in economic development, including more than 25 local and regional economic development organizations, 14 state colleges and 12 workforce development boards. He also oversees The Corridor's portfolio of programs supporting research, marketing, workforce and entrepreneurship. This includes its cornerstone Matching Grants Research Program, which since inception in 1996 has generated over \$1 billion in verified downstream impacts; stemCONNECT, a program that inspires thousands of K-12 students annually to pursue high tech, high-wage careers, and the most recent addition, Cenfluence—a clustering initiative in partnership with Orange County Government.

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, and reported directly to the vice chief of naval operations. In 2019, Sohl founded the BackFin Partners consultancy to support leadership and innovation at defense firms contracted by the U.S. government. He has also guest lectured at UCF on the topic of industrial engineering and on engineering leadership and innovation. Sohl holds a bachelor's degree in aeronautical engineering from the Massachusetts Institute of Technology and a master's degree in aeronautical and astronautical engineering from Stanford University. Additionally, he is a graduate and former Commanding Officer of the U.S. Naval Test Pilot School, Patuxent River, Maryland.



#### Jesús Soriano Molla

Program Director, National Science Foundation

Jesús Soriano Molla is Program Director of the NSF Partnerships for Innovation program. Previously, Jesus served as SBIR/STTR Program Director for Biomedical and Smart Health Technologies since 2012, when he joined NSF after 20 years of international experience in executive leadership in the biopharmaceutical and non-profit sectors, start-up formation and funding, technology commercialization, and academic teaching and research. Prior to NSF, he was the Senior Advisor to the Puerto Rico Trust for Science, Technology and Research, a technology-based development organization. Previously, he was Executive Vice President at QRxPharma, Ltd., a clinical-stage specialty pharmaceutical company focused in pain management and central nervous system disorders. Before, he was Senior Director of Business Development at Osiris Therapeutics, Inc. Previously, he held several executive leadership positions at the global bioresource center ATCC, including Vice President for IP, Licensing and International Business Development, and was Associate Director for R&D Operations and Business Development at Entremed, Inc, a clinical-stage pharmaceutical company developing therapeutics for the treatment of cancer. Jesus began his career as a family doctor in Spain; he then worked at the University of Geneva Medical School, Switzerland initially as Research Scientist and then as Assistant Professor. He initially came to the US as a visiting scientist to the National Cancer Institute (NIH) under an advanced researcher fellowship from the Swiss National Science Foundation. He holds a MBA in Corporate Finance from the Johns Hopkins Carey Business School; a Ph.D. in Medical Sciences from the University of Geneva, Switzerland; and a M.D. from the University of Alicante, Spain.



#### Stephen Susalka

Chief Executive Officer, AUTM

Steve works to ensure that AUTM serves the needs and interests of its members through strategic planning, outreach and advocacy, while empowering Association members and promoting the profession.

A regular speaker on technology transfer issues, Steve has presented on Capitol Hill and internationally on topics ranging from the evolution of the technology transfer profession to start-up formation.

Before joining AUTM, Steve served as Associate Director for Commercialization at Wake Forest Innovations where he was responsible for commercializing high-impact inventions, and drafting, negotiating and executing a wide variety of licensing and start-up transactions.

Steve is a registered U.S. Patent Agent and a past Board member of multiple Wake Forest-affiliated start-ups. Steve has also led the Winston-Salem Technology Council to retain and grow local technology businesses to strengthen the economy.



#### Sylvia Wilson Thomas

Interim Vice President for Research & Innovation, University of South Florida

Sylvia Wilson Thomas, Ph.D., is interim Vice President for Research & Innovation at the University of South Florida and President & CEO of the USF Research Foundation, Inc. Dr. Thomas directs aspects of USF's research enterprise as a member of USF's presidential cabinet. She has contributed to USF's efforts for research innovation, strategic planning and renewal, faculty success, consolidation, justice-equity-diversity-and-inclusion (JEDI), community engagement, and student recruitment/workforce development. Having over 25 years of global experience in academia and industry, Dr. Thomas has authored numerous peer-reviewed journal articles, proceedings, presentations, and six book chapters, and her creative, current affairs-driven projects have been supported by a wide-range of funders, from USF seed grants to the National Science Foundation. As an advocate for innovation and collaborative engagement, she has produced 12 patents/patent disclosures, and assisted in the success of such companies as Agere Systems, Lucent, Bell Labs, Kimberly Clark Corporation, IBM, and Procter & Gamble. She is a Fellow of the American Institute for Medical and Biological Engineering (AIMBE), a Senior Member of the National Academy of Inventors (NAI) and Senior Member of the Institute of Electrical and Electronics Engineers (IEEE).



#### Adam Vasquez

Founder and CEO, Made with Merit

Adam Vasquez is the first economist to fully identify and describe the process of Market Invention in actionable marketing terms. He is the founder of Merit, the world's leading Market Invention company, where he currently serves as the company's CEO. He has leveraged Market Invention's potential to generate billions in market value for organizations in North America, Europe, and Asia. A highly sought-after consultant, business speaker, and executive coach, Adam has 20 years of experience in business management, sales, marketing, digital transformation, and strategy. He's worked as an executive and consultant to giants including General Motors, The Hershey Company, Bank of America, Altria, Avaya, Tyco, the U.S. Department of Defense, the U.S. Department of Homeland Security, and the U.S. Patent & Trademark Office.

Adam wants to see more organizations win against big companies and the industries they control. His mission is to bring the powerful paradigm of Market Invention to entrepreneurs and challenger organizations who also are motivated to change the world. He wants to see more change at the top, widespread wealth and genuine value-added to society. Market Invention is the bridge between large enterprise control and an inclusive and sustainable economy for all. Adam is a member of several non-profit boards and regularly donates his time and money to startups and challenger organizations focused on changing humanity for the better.



#### Jay Walsh

Vice President for Economic Development and Innovation, University of Illinois

Jay Walsh became the University of Illinois' Vice President for Economic Development and Innovation in May 2020, after more than 30 years as a faculty member and administrator at Northwestern University. Dr. Walsh leads the Illinois Innovation Network, a collaboration among the 12 public universities in Illinois, driving inclusive and integrated research, innovation, and economic development across Illinois. Dr. Walsh currently serves on the Boards for MxD, Argonne National Laboratory, Vanderbilt University's Engineering School, and the Chicago Council on Science and Technology. Previously, he served on the Board of Directors at Fermi National Laboratory and on the U.S. Secretary of Navy Advisory Panel. Dr. Walsh earned his Bachelor's and Master's degrees in Electrical Engineering at MIT and his Ph.D. in Medical Engineering from a joint Harvard Medical School – MIT program.



#### Sandra Watson

President & CEO, Arizona Commerce Authority

Sandra Watson is an economic development professional with 28 years of leadership experience in business attraction and expansion, innovation, entrepreneurship, economic policy and workforce development. She and her teams have worked with more than 1,000 companies that have committed to creating more than 205,000 quality jobs and investing more than \$58 billion in capital in the state.

Currently, Ms. Watson serves as the President & CEO of the Arizona Commerce Authority (ACA), a public-private partnership that leads statewide economic development. The unique structure of the ACA brings together leaders from private industry, academia and all three branches of state government. She also oversees the Workforce Arizona Council and Arizona Office of Economic Opportunity, a data-driven team focused on economic and labor market analysis. In addition to leading the ACA and serving on its Board of Directors, Ms. Watson serves on Arizona Governor Doug Ducey's leadership team as his Senior Economic Policy Advisor.

Ms. Watson is a founding partner on the Institute for Automated Mobility Board of Directors, a current member of the National State Science and Technology Institute Board of Trustees and a member of the Make-A-Wish Foundation Arizona Board of Directors.



#### Phil Weilerstein

President & CEO, VentureWell

Phil has led VentureWell since its founding in 1996 and today serves as President and CEO. By developing and expanding VentureWell's programs on a national and global scale, he has guided VentureWell in its mission to solve global challenges through science- and technology-driven innovation and entrepreneurship. He accomplished this goal by designing and overseeing a suite of programs that encourage and support the deeper engagement of higher education and research institutions in curricular innovation, developing and strengthening innovation communities and supporting emerging science and technology innovators. Phil is committed to sharing VentureWell's learnings and resources to support the creation of inclusive and more equitable pathways for innovators to succeed in venture creation. Under his leadership, VentureWell has partnered with key science funding agencies, major philanthropies, and hundreds of universities to train and support thousands of emerging students, researchers and faculty innovators. After celebrating VentureWell's milestone 25-year anniversary in 2021, he has accelerated work to fortify the broader innovation ecosystem and the launch of groundbreaking innovations.

Phil attended the University of Massachusetts where he was a co-founder of a biotechnology company developing naturally occurring pest control products. He is a Founder and Past Chair of the ASEE Entrepreneurship Division, and a recipient of the 2008 Price Foundation Innovative Entrepreneurship Educators Award, the 2014 Engineering Entrepreneurship Pioneers Award from ASEE, and the 2016 Deshpande Symposium Award for Outstanding Contributions to Advancing Innovation and Entrepreneurship in Higher Education.



#### Heather Wilson

President, University of Texas at El Paso

Dr. Heather Wilson became the 11th President of The University of Texas at El Paso in 2019 after serving as Secretary of the United States Air Force. She is the former president of the South Dakota School of Mines & Technology, and she represented New Mexico in the United States Congress for 10 years. Dr. Wilson has also worked in the private sector, serving as a senior adviser to defense and scientific industry.

Active in community and national affairs, Dr. Wilson is a member of the National Science Board, which oversees the National Science Foundation, and she chairs the Women in Aviation Advisory Board of the Federal Aviation Administration (FAA).

Dr. Wilson is the granddaughter of immigrants and was the first person in her family to go to college. She graduated from the U.S. Air Force Academy in the third class to admit women and earned her master's and doctoral degrees from Oxford University in England as a Rhodes Scholar.

UTEP is located on the U.S.-Mexico border – in the fifth largest manufacturing region in North America – and serves more than 24,000 students with 169 bachelor's, master's and doctoral degree programs in nine colleges and schools. In the top 5% of public universities in the United States for research and designated a community-engaged university by the Carnegie Foundation, UTEP is America's leading Hispanic-serving university. It is the 4th largest research university in Texas and serves a student body that is 84% Hispanic.

President Wilson is an instrument rated private pilot. She and her husband, Jay Hone, have three adult children and one granddaughter.



#### Helena Wisniewski

Department Chair, Management, Marketing, Logistics, and Business Analytics; Professor of Entrepreneurship, College of Business & Public Policy, University of Alaska Anchorage; NAI Fellow

Dr. Helena Wisniewski, a Fellow of the National Academy of Inventors, has leadership experience in industry, federal government, and academia and served on boards. She was an executive at Lockheed, vice president of the Titan Corporation and ANSER, and founder/CEO of Aurora Biometrics. At DARPA, she initiated and directed scientific breakthroughs and pioneered advances in AI as Program Manager, ACMP. Before DARPA, served at the CIA. As University of Alaska Anchorage's Vice Provost for Research and Dean of the Graduate School and Stevens Institute's Vice President for University Research and Enterprise Development she developed cultures of innovation and commercialization, and launched and sold multiple startups across diverse areas. At UAA created the Arctic Domain Awareness Center to improve maritime crisis response capabilities. Currently, Department Chair, Management, Marketing, Logistics, and Business Analytics and Professor of Entrepreneurship. She established the Alaska Data Science and AI Lab, is a Special Editor of the NAI journal AI Education, and co-authored the book Academic Entrepreneurship. She received awards for outstanding leadership, entrepreneurship, and teaching. Her Ph.D. is in mathematics from the Graduate Center, CUNY.





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 landgrant, 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, Ohiowith 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.

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 degreegranting 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

NEW YORK 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.



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.



UCRIVERSITY OF CALIFORNIA

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.



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.

## UF FLORIDA

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 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.

#### NAI MEMBER INSTITUTIONS SINCE 2010

#### Acacia Research

Academia Sinica Albany College of Pharmacy and Health Sciences Amrita University Arizona State University Auburn University Australian National University **Baylor College of Medicine** Ben-Gurion University of the Negev Binghamton University, State University of New York **Boise State University Boston University Brandeis University** BRIDG **Brown University** California Institute of Technology California State University, Long Beach Carnegie Mellon University Case Western Reserve University **Chapman University** China Medical University City University of Hong Kong Clark Atlanta University Clemson University **Cleveland Clinic** Cold Spring Harbor Laboratory Colorado State University **Columbia University Cornell University Coventry University** Dartmouth College **Draper Laboratory Drexel University Dublin City University Duke University** East Carolina University Embry-Riddle Aeronautical University **Emory University** Florida A&M University Florida Atlantic University Florida Gulf Coast University Florida Institute of Technology Florida International University Florida Polytechnic University

Florida State University Georgetown University Georgia State University H. Lee Moffitt Cancer Center & Research Institute Hamad Bin Khalifa University Harvard University Hualien Tzu Chi Hospital Idaho State University Illinois Institute of Technology Indiana University Institut Pasteur Institute for Human & Machine Cognition Iowa State University Jackson State University James Madison University Johns Hopkins University Kansas State University King Abdullah University of Science and Technology Lehigh University Louisiana State University Louisiana Tech University Marguette University Massachusetts General Hospital Research Institute Massachusetts Institute of Technology Mayo Clinic Medical University of South Carolina Miami University Michigan State University Missouri University of Science and Technology Monash University Montana State University Morehouse School of Medicine Mote Marine Laboratory & Aquarium Mount Sinai Health System Nanyang Technological University, Singapore National Institutes of Health National Taiwan University Naval Information Warfare Center - NIWC Pacific New College of Florida New Jersey Institute of Technology New Mexico State University New York University North Carolina State University North Dakota State University

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#### NAI MEMBER INSTITUTIONS SINCE 2010

Northeastern University Northern Arizona University Northern Illinois University Northwestern University Nova Southeastern University Oak Ridge Associated Universities **Ohio University Oklahoma State University** Olin College of Engineering Oregon Health and Science University **Oregon State University** Pharmaceutical Research Institute Pontificia Universidade Catolica Do Rio Grande Do Sul Prince Mohammad Bin Fahd University **Princeton University Purdue University** RadTech International Rensselaer Polytechnic Institute **Rice University RMIT University** Rochester Institute of Technology **Rowan University** Rutgers, The State University of New Jersey Saint Louis University Shanghai Jiao Tong University Smithsonian Lemelson Center for the Study of Invention & Innovation Southern Illinois University Southern Methodist University Southern Research Institute Stevens Institute of Technology Stony Brook University Sungkyunkwan University Taipei Medical University Tel Aviv University **Temple University** Terasaki Institute for Biomedical Innovation Texas A&M University Texas Heart Institute Texas Tech Health Sciences Center **Texas Tech University** 

The Chinese University of Hong Kong The George Washington University The Ohio State University The Pennsylvania State University The Rockefeller University The University of Akron The University of Alabama The University of Alabama at Birmingham The University of Alabama in Huntsville The University of Arizona The University of British Columbia The University of Hawai'i The University of Melbourne The University of Memphis The University of New Mexico The University of North Carolina at Chapel Hill The University of Oklahoma The University of Southern Mississippi The University of Tennessee Health Science Center The University of Tennessee, Chattanooga The University of Tennessee, Knoxville The University of Tennessee, Martin The University of Texas at Arlington The University of Texas at Austin The University of Texas at Dallas The University of Texas at El Paso The University of Texas at San Antonio The University of Texas Health San Antonio The University of Toledo The University of Utah Thomas Jefferson University **Tufts University** University at Buffalo, The State University of New York University College Cork University of Alaska Anchorage University of Alaska Fairbanks University of Alberta University of Arkansas University of California - San Francisco University of California, Berkeley University of California, Davis

University of California, Irvine University of California, Los Angeles University of California, Riverside University of California, San Diego University of California, Santa Barbara University of California, Santa Cruz University of Central Florida University of Cincinnati University of Colorado Boulder University of Colorado Denver University of Connecticut University of Dayton University of Delaware University of Evansville University of Florida University of Georgia University of Houston University of Idaho University of Illinois at Urbana-Champaign University of Iowa University of Kansas University of Kentucky University of Limerick University of Louisiana Lafayette University of Louisville University of Maryland University of Massachusetts Amherst University of Massachusetts Boston University of Massachusetts Lowell University of Massachusetts Medical School University of Miami University of Michigan University of Minnesota University of Missouri-Columbia University of Missouri-Kansas City University of Missouri-St. Louis University of Nebraska-Lincoln University of Nevada, Las Vegas University of Nevada, Reno University of New Hampshire University of North Dakota

University of North Florida University of North Texas University of Oregon University of Pennsylvania University of Pittsburgh University of Queensland University of Rhode Island University of Rochester University of South Alabama University of South Carolina University of South Florida University of Southern California University of Virginia University of Washington University of West Florida University of Wisconsin-Madison University of Wisconsin-Milwaukee University of Wollongong, Australia **Utah State University** Vanderbilt University Virginia Commonwealth University Virginia Polytechnic Institute and State University Wake Forest University Washington State University Washington State University Tri-Cities Washington University in St. Louis Wayne State University West Virginia University Wichita State University Worcester Polytechnic Institute Wright State University Yale University

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#### **LEADING SPONSORS**





The Florida High Tech Corridor Council (The Corridor Council) is an economic development initiative of three of the country's largest research institutions: University of Central Florida, University of South Florida and University of Florida. Chaired by presidents of the three universities, its mission is to grow high tech industry and innovation – and the workforce to support it – in a 23-county region known as The Florida High Tech Corridor (The Corridor). By facilitating collaborations between partners in academia, industry and economic development, The Corridor Council creates communities with unlimited potential. Learn more at www.floridahightech.com and search "Florida High Tech" to connect on Twitter, LinkedIn and Facebook.

Based in Portland, The Lemelson Foundation uses the power of invention to improve lives. Inspired by the belief that invention can solve many of the biggest economic and social challenges of our time, the Foundation helps the next generation of inventors and invention-based businesses to flourish. The Lemelson Foundation was established in the early 1990s by prolific inventor Jerome Lemelson and his wife Dorothy. To date the Foundation has made grants totaling more than \$290 million in support of its mission. For more information, visit http://www.lemelson.org.



See Sustaining Members page

#### **HOSTING INSTITUTIONS**





#### **HOSTING SPONSORS**



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#### UNIVERSITY OF CENTRAL FLORIDA

See Sustaining Members page



#### جامعة الملك عبدالله للعلوم والتقنية King Abdullah University of Science and Technology

Established in 2009, King Abdullah University of Science and Technology (KAUST) is a graduate research university devoted to finding solutions for some of the world's most pressing scientific and technological challenges in the areas of food, water, energy and the environment. With 19 research areas related to these themes and state of the art labs, KAUST has created a collaborative and interdisciplinary problem-solving environment, which has resulted in over 11,000 published papers to date. With over 100 different nationalities living, working and studying on campus, KAUST has brought together the best minds and ideas from around the world with the goal of advancing science and technology through distinctive and collaborative research. KAUST is a catalyst for innovation, economic development and social prosperity in Saudi Arabia and the world.

## NC STATE UNIVERSITY

See Sustaining Members page

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USC University of Southern California





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Johnson Johnson innovation JLABS















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## AUBURN DISCOVERS INNOVATES SOLVES

Auburn University, a founding NAI member, congratulates Dr. Fa Foster Dai upon being named a 2021 National Academy of Inventors Fellow.

#### Fa Foster Dai, Ph.D.

Fa Foster Dai, the Godbold Endowed Chair Professor in Auburn's Department of Electrical and Computer Engineering, is known for his expertise in radiofrequency-integrated-circuit designs and other wireless communications innovations. He has conducted pioneering work in high-performance frequency synthesis and direct modulations and holds 14 U.S. patents, including eight for commercially licensed technologies.

#### Additional Auburn NAI Fellows:

**2013 Fellow, Vitaly Vodyanoy** Professor of Physiology College of Veterinary Medicine

**2014 Fellow, Bruce Tatarchuk** Professor of Chemical Engineering Samuel Ginn College of Engineering

**2014 Fellow, S.D. "Dave" Worley** Professor Emeritus of Chemistry and Biochemistry College of Sciences and Mathematics

**2016 Fellow, John Weete** Professor Emeritus of Biological Sciences College of Sciences and Mathematics

**2018 Fellow, Joseph W. Kloepper** Professor Emeritus of Plant Pathology College of Agriculture

**2019 Fellow, J. David Irwin** Professor and Department Head Emeritus of Electrical and Computer Engineering Samuel Ginn College of Engineering

research.auburn.edu



RESEARCH

## Using Invention to Address Problems Worth Solving

The challenges we are confronting worldwide are both complex and daunting. In the next 20 years, the most important inventions will be those that address critical social and environmental issues, reaching and serving communities with the greatest needs, and creating sustainable economic value for all. **The Lemelson Foundation** enables inventors to tackle problems that have a positive impact on lives in our local and global communities. By supporting programs that educate inventors to make a difference and foster entrepreneurship, we can empower a new generation of inventors to become agents of positive change.

Learn more about how we are improving lives through invention at www.lemelson.org

The Kernelson Foundation

## THE UNIVERSITY OF NEBRASKA-LINCOLN CONGRATULATES

#### Carl Nelson

Professor of Mechanical and Materials Engineering 2022 Senior Member of the National Academy of Inventors

NAI Fellows 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), Lyle R. Middendorf (2018), Robert "Bob" Wilhelm (2018), Carrick Detweiler (senior member, 2021)

#### FLORIDA ATLANTIC UNIVERSITY



Dr. **Hari Kalva** is an Associate Chair and Professor in FAU's College of Engineering and Computer Science and a world renowned expert in the field of video compression and communication.

onc

He is a named inventor on over 15 standard essential patents that are used in virtually all modern video distribution and streaming products and services. Through a research partnership with Boston-based company OP Solutions, Dr. Kalva's inventions contributed to the novel technology that comprises the latest Versatile Video Coding (VVC) standard alongside some of the biggest companies in the world like Qualcomm, Apple, Tencent, Ericsson and ByteDance.

To view all of the FAU chapter members, scan the QR code.



#### Arizona State University congratulates 2021 Fellow and Senior Members of the National Academy of Inventors



Associate Professor, College of Health Solutions Adjunct Associate Professor, Mayo Clinic

Jianming Liang's research on lung cancer and colon cancer has led to two FDA-approved products, which are being sold worldwide. The products help radiologists diagnose lung cancer and colon cancer more efficiently and more accurately. Millions of patients have benefited from these products.



Professor, School of Life Sciences and Biodesign Center for Immunotherapy, Vaccines and Virotherapy

Bertram Jacobs is one of the world's foremost experts on a poxvirus called vaccinia, a cousin of the smallpox virus. He has genetically engineered vaccinia as a vehicle against a number of infectious agents, bioterrorism threats, cancer and other viruses, including HIV and SARS-CoV-2.

#### Arizona State University

#### research.asu.edu



Deputy Director, Biodesign Institute and Professor of Practice

Stephen Munk was on the team of inventors for the manufacturing process for Velcade, the first FDA-approved proteasome inhibitor. The work was conducted under contract for Millennium Pharmaceuticals, now part of Takeda. Velcade is used to treat multiple myeloma and has helped more than 1 million people suffering from the disease. Peak sales of the drug were over \$2 billion.



## We congratulate our colleagues on being elected as fellows of the National Academy of Inventors.

Larry Pileggi | Coraluppi Head and the Tanoto Professor of Electrical and Computer Engineering

Marcel Bruchez

Professor, Biological Sciences and Chemistry Director, Molecular Biosensor and Imaging Center

#### **Carnegie Mellon University**

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THE MICHELSON INSTITUTE FOR

## Intellectual Property Education For All.





#### FLORIDA INVENTORS HALL OF FAME-

Florida Inventors Hall of Fame congratulates our Inductees who are Fellows of the National Academy of Inventors!

Norma Alcantar 2021 Michael Bass 2013 Issa Batarseh 2015 Emery Brown 2015 William Dalton 2013 Mark Dean 2014 Kenneth Ford 2012 Richard Gitlin 2012 D. Yogi Goswami 2012 Robert Howard Grubbs 2013 Christine Schmidt 2018 Robert Holton 2018 Richard Houghten 2012 Thomas Lipo 2012 Alan List 2012 Alan Marshall 2016

Mary Helen McCay 2017 T. Dwayne McCay 2016 Shyam Mohapatra 2012 Israel Morejon 2016 Nicholas Muzyczka 2016 Ioshua Rokach 2018 Jean-François Rossignol 2020 Paul R. Sanberg 2012 Andrew Schally 2015 Sudipta Seal 2013 Marion J. Soileau 2012 Nan-Yao Su 2012 Shin-Tson Wu 2012 Janet Yamamoto 2014



## **REAL** SUCCESS LEADS TO REAL IMPACT

Congratulations to our inductees, who join their colleagues in a legacy of excellence that will be felt for generations.

WE'RE YOUNG. WE'RE INSPIRED. AND TOGETHER WE'RE SEIZING THE FUTURE.



#17 Most Innovative among U.S. public universities

17 **NAI Fellows** and Senior Members

**TOP 20** Patent producer among U.S. public universities

Learn more about FIU's impact at fiu.edu



## HONORING HOSE WHO MAKE IT HAPPEN

#### **Congratulations** to all of the University of Arizona **inventors being** recognized by the National **Academy of Inventors** this year.

Thank you for your passion, your drive, and your commitment to helping make a better world for all.

#### **Senior Members:**

Steven Goldman Stanley Pau Robin Polt Judith Su Fellows: Mark Van Dyke Liest Folks

THE UNIVERSITY OF ARIZONA

ARIZONA

LAUNCH

Terry Matsunaga

**MAKING A BETTER WORLD** by moving inventions stemming from university research and technological innovation into the marketplace.

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## UCONN HEALTH

CONNECTICUT CONVERGENCE INSTITUTE FOR TRANSLATION IN REGENERATIVE ENGINEERING

We are proud to sponsor this event!

Congratulations from Dr. Cato Laurencin, Chief Executive Officer of the Connecticut Convergence Institute for Translation in Regenerative Engineering





## Miami University

is proud to recognize our newly elected fellow to the

## National Academy of Inventors

### Where Opportunity Meets Possibility

The **innovation ecosystem is exploding** across ECU's campus, embracing faculty, staff and student inventors, innovators and aspiring entrepreneurs.

Whether an accomplished scientist performing cutting edge research, an educator preparing the next generation of thought leaders, or a business looking for new talent, ECU resources are available to turn **opportunity into possibility**.





### Congratulations, Dr. Watkins!

National Academy of Inventors Senior Member

A **global leader in digital content**, Dr. Watkins has translated his research of assessment technologies into an engine for predicting and improving institutional and student outcomes through digital innovation.



## Transforming Patient Care Together

Infused into Fulgent's culture is the core belief that we can, and should, make a difference in the medical space – improving patient care by providing comprehensive clinical laboratory services.

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**North Carolina State University** is a research powerhouse and a strong economic engine for the state of North Carolina and beyond.



**190+ startups launched** based on NC State Research, attracting a total of **\$1.7 billion** in venture capital.

**#2 nationwide** for startups launched among universities without a medical school, **#1 nationwide** in active licenses and options





**1500+ patents issued** in the US, and nearly **2000 patents issued** worldwide, yielding **600+ consumer products** 

#### **NC State Inducted NAI Fellows**

- 2019 Rodolphe Barrangou, Ph.D. Food, Bioprocessing & Nutrition Sciences
  - Kenneth R. Swartzel, Ph.D. Food, Bioprocessing & Nutrition Sciences

Carlos Pignataro, M.S. Electrical & Computer Engineering

- **2020** Behnam Pourdeyhimi, Ph.D. College of Textiles, NonWovens Institute
  - Tom Ranney, Ph.D. Horticultural Science
- 2021 Fred A. Kish, Ph.D. Electrical & Computer Engineering





College of Engineering



## Congratulations to

**Nien-Hwa Linda Wang** Maxine Spencer Nichols Professor of Chemical Engineering

> *Ajay Malshe* R. Eugene and Susie E. Goodson Distinguished Professor of Mechanical Engineering

**Santokh Badesha** Adjunct Professor for Innovation, Elmore Family School of Electrical and Computer Engineering



For 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.

## the florida high tech corridor —

Through a constellation of industries, tech's potential drives the future of Florida beyond its borders and around the globe.

#### How can we help you?



### **Congratulations to all of our NAI Fellows!**

Texas Tech University System (TTUS) is proud to have nine of its faculty researchers recognized as NAI Fellows over the past ten years, with its most recent honoree, Dr. Samuel Prien, being named to the 2021 class of fellows. Congratulations Dr. Prien!

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 new license agreements up 61%, issued patents up 29%, and licensing revenue up 221%, the ORC is poised to continue facilitating the impact faculty technologies have on society.

COLLEGE OF ENGINEERING

## CONGRATULATIONS BRUCE GATE

Distinguished Professor of Chemical Engineering 2022 National Academy of Inventors Fellow

Creating a sustainable world through socially responsible engineering.

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## THE UNIVERSITY OF GEORGIA

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



**Anumantha Kanthasamy** is the first John H. "Johnny" Isakson Chair and Georgia Research Alliance Eminent Scholar in Parkinson's Research. An internationally renowned researcher of neurodegenerative disorders, his work ranges from neurological science to identifying biomarkers for early detection of Parkinson's disease.

**S. Edward Law** is D.W. Brooks Distinguished Professor Emeritus in UGA's College of Engineering. He developed an electrostatic spraying technology, intended to make pesticide applications more environmentally friendly, that has been applied in a wide range of functions—from sprayable paints and spray tan machines to disinfecting sprayers used in fighting the COVID-19 pandemic.



**Scott NeSmith** is a horticulture professor on the UGA Griffin Campus and has been the head of the UGA blueberry breeding program since 1998. With NeSmith at the helm, the program has released 31 commercial varieties and nine ornamental varieties. Today Georgia farmers raise 18,000 acres and 39 million pounds of blueberries annually, for a value of more than \$120 million.



**Vladimir Popik** Professor Franklin College of Arts & Sciences

#### **2022 SENIOR MEMBERS**



**Michael Adang** Professor Franklin College of Arts & Sciences



**K.C. Das** Professor College of Engineering



Moving technologies to the marketplace research.uga.edu/gateway

# A CULTURE OF DISCOVERY

The University of Texas at Arlington celebrates the innovative spirit, intellectual curiosity, and entrepreneurial ambition that drive the newest class of inductees to the National Academy of Inventors. We're proud to be home to 19 NAI fellows, the most of any university in Texas.



#### CONGRATULATIONS

to the 2021 class of fellows and senior members.

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THE UNIVERSITY OF TEXAS


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
АНА	American Heart Association
AIC	American Institute of Chemists
AIChE	. American Institute of Chemical Engineers
AIMBE	. American Institute for Medical and Biological Engineering
АРА	.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
BMFS	Biomedical Engineering Society
DARPA	Defense Advanced Research Projects Agency
FDA	US Food and Drug Administration
ННМІ	Howard Hughes Medical Institute
IAPR	International Association of Pattern Recognition
IFFF	Institute of Electrical and Electronics Engineers
IFT	Institution of Engineering and Technology
ISD	International Society for Differentiation
MRS	Materials Research Society
NAF	National Academy of Engineering
NAFd	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	Ontical Society of America
ΡΑς	Pontifical Academy of Sciences
PECASE	Presidential Farly Career Award for Scientist and Engineers
RSC	Royal Society of Chemistry
SDB	Society for Developmental Riology
SEB	Society for Biomaterials
SDIE	International Society for Ontice and Photonice
TMS	The Minerale Metals and Materials Society
	United States Department of Defense
	United States Department of Energy
U.S. DOE	United States Patent and Trademark Office
	. Onney States I atent any fragellats Office

## SAVe The Date \* \* Washington, D.C. \* \* \*



12TH ANNUAL MEETING JUNE 26-27, 2023 WASHINGTON, D.C.