SEVENTH ANNUAL CONFERENCE
April 4-6, 2018 | Washington, D.C.

Exploring the Intersections of Innovation

#NAI2018
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 inspiring inventors to realize they can make a difference, we empower the new generation of inventors to become agents of positive change.

To learn more about how we are improving lives through invention, go to www.lemelson.org
Distinguished Colleagues:

On behalf of the Board of Directors and staff, it is my distinct pleasure to welcome you to Washington, D.C. for the seventh annual meeting of the National Academy of Inventors. It is a privilege to be here with you as we celebrate another gathering of our network of innovative minds. On behalf of the NAI Board of Directors, I offer a most sincere thank you to our valued sponsors, hosting institutions, program committee and distinguished presenters, for making this year’s events possible.

This year the Academy has not only grown in membership, but also in new initiatives that cultivate a culture which encourages and recognizes the important role patents, licensing and commercialization plays in the betterment of society. This culture is apparent in the significant growth of local NAI chapters at our Member Institutions. For the first time, the NAI will host a Chapter Exhibition on Thursday, April 5th. This unique opportunity will allow NAI Member Institutions to share their experiences and the many benefits associated with honoring their inventors with a chapter, and creating a community which nurtures a spirit of innovation.

As with every conference, we look forward to the induction of the newest class of NAI Fellows. The NAI Fellows Program has grown to 912 prolific academic inventors worldwide who represent more than 250 prestigious institutions. Collectively, the Fellows hold more than 32,000 issued U.S. patents. These distinguished individuals have generated more than 9,400 licensed technologies and companies, and created more than 1.3 million jobs. In addition, over $137 billion in revenue has been generated based on these discoveries. The impact of these dynamic thought leaders is profound and far-reaching and the Academy applauds their contributions which move our world daily towards the next new technology, treatment, cure and solution.

The NAI strives to inspire present and future inventors by recognizing and honoring their discoveries and encouraging inventive activity. At last year’s annual meeting, the NAI launched the Student Innovation Showcase. The Showcase is designed to feature the inventions of outstanding student teams across all disciplines, and to recognize and strengthen the culture of inventorship for the next generation. I am eager to see this year’s cadre of amazing student innovators and proud that the NAI has created this stage to aid in their development as students, inventors and entrepreneurs.

The voice of the Academy is heard through our many publishing efforts. Alongside the Intellectual Property Owners Association we released the latest Top 100 Worldwide Universities Granted U.S. Utility Patents. Based on data obtained from the USPTO, this list continues to highlight the importance of patents in university research and economic development. Technology and Innovation, the open access NAI journal, has released multiple special issues this year, including issues on fostering innovation and entrepreneurship, and innovation curricula. A new journal feature was developed, the NAI Chapter Spotlight, joining our regular features, the NAI Fellow Profile, Innovation in Action, and a commentary by our partner organization, the United States Patent and Trademark Office.

Looking towards the future, we seek your guidance on ways the NAI can further promote our programs to enrich the visibility of academic invention and further our mission. We are committed to being an advocate for academic innovation and look forward to your guidance and leadership.

Thank you for the important roles you play in support of the continued success of the National Academy of Inventors. It is our engaged members, partners and friends who truly make our organization great. We celebrate your accomplishments today and every day and look forward to another exciting year. Have a great meeting.

Sincerely,

Paul R. Sanberg, Ph.D., D.Sc., FNAI
President
For the Seventh Annual Meeting of the National Academy of Inventors we will explore the fundamental intersections of innovation. These are the meeting points that will advance our world into the future.

The conference program cover artwork features the Washington, D.C. subway, which is a hub for transportation within our nation’s capital. In the same way, the NAI annual meeting unites innovators, students and leaders from all disciplines and geographic locations to a venue where knowledge is exchanged and collaborations can thrive through the combined efforts between academia, government and industry.

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Save the Date: 2019 Conference ................................................................. Back Cover
WEDNESDAY, APRIL 4, 2018
7:00 AM – 4:00 PM Conference Check-In and Information Table Open (Grand Ballroom Foyer)
7:30 – 8:45 AM Networking Breakfast featuring: Technology and Innovation, Journal of the National Academy of Inventors (Palm Court Ballroom)
9:00 AM – 12:00 PM Session A: Intersection of Innovation and the Future (Grand Ballroom)
9:45 – 10:45 AM Panel 1: Inventing Green: Making Environmental Responsibility More Accessible to Current and Future Inventors hosted by The Lemelson Foundation
11:15 AM – 12:00 PM Keynote Address by Ronald M. Evans, Salk Institute for Biological Studies
12:00 – 1:00 PM Networking Luncheon hosted by The Lemelson Foundation (State Room)
1:00 – 1:30 PM Coffee Break and Refreshments hosted by Plasma Igniter
1:30 – 4:00 PM Session B: Intersection of Ideas and Entrepreneurship (Grand Ballroom)
1:30 – 2:30 PM Panel 2: Ideas for Problem-Solving: From University to Invention to Entrepreneurship hosted by the AAAS-Lemelson Invention Ambassador Program
3:00 – 4:00 PM Panel 3: Making Sense of Venture Capital, Government and Other Funding Sources
4:00 – 5:30 PM Break Before Signature Gala
5:30 – 5:45 PM Buses depart Mayflower Hotel lobby
6:00 – 10:00 PM NAI Signature Gala: Art of Innovation and the American Patent System at the Smithsonian American Art Museum, G Street NW & 8th Street NW (Registration Required)
9:45 – 10:00 PM Buses depart Smithsonian American Art Museum

THURSDAY, APRIL 5, 2018
7:00 AM – 4:00 PM Conference Check-In and Information Table Open (Grand Ballroom Foyer)
7:30 – 8:30 AM Continental Networking Breakfast (Grand Ballroom – All Invited)
8:00 – 8:30 AM Continental Networking Breakfast (Palm Court Ballroom)
8:30 AM – 12:00 PM Session C: Intersection of Academia, Government and Industry (Grand Ballroom)
8:45 – 9:30 AM Keynote Address by Gilda A. Barabino, President, AIMBE and Dean of Engineering, The City College of New York
10:00 – 11:00 AM Panel 4: Navigating IP Policy and Patent Rights
11:00 AM – 12:00 PM Panel 5: Need for Collaboration: How Industry, Academia and Government Partnerships Will Transform the Future
12:00 – 1:00 PM Networking Luncheon hosted by The China Association of Inventions (State Room)
1:30 – 2:30 PM NAI Chapters Exhibition (Promenade)
2:30 – 3:00 PM Check-In for Fellows Induction Ceremony (Grand Ballroom Foyer)
3:00 – 5:00 PM Fellows Induction Ceremony (Grand Ballroom)
3:00 – 3:30 PM President’s Address: State of the Academy by NAI President, Paul R. Sanberg
3:30 – 4:00 PM Keynote Address by Andrew H. Hirshfeld, Commissioner for Patents, USPTO
4:00 – 5:00 PM Induction & Presentation of Awards
5:00 PM Inductee Group Photograph
5:00 – 7:00 PM Cocktail Reception hosted by The Corridor (East Room)

FRIDAY, APRIL 6, 2018
7:30 AM – 12:00 PM Conference Check-In and Information Table Open (Grand Ballroom Foyer)
8:00 – 8:30 AM Continental Networking Breakfast (Grand Ballroom)
8:30 AM – 12:00 PM NAI Student Innovation Showcase (Grand Ballroom)
8:50 – 9:20 AM Keynote Address by Arthur Daemmrich, Lemelson Center for the Study of Invention and Innovation at the Smithsonian Institution
9:20 – 11:30 AM Student Presentations
11:30 AM – 12:00 PM Student Exhibition & Meet and Greet
12:00 PM Judges Announcement and Meeting Conclusion
• About the National Academy of Inventors •

The National Academy of Inventors® is a member organization comprising U.S. and international universities, and governmental and non-profit research institutions, with over 4,000 individual inventor members and Fellows spanning more than 250 institutions. It was founded in 2010 to recognize and encourage inventors with patents issued from the U.S. Patent and Trademark Office, enhance the visibility of academic technology and innovation, encourage the disclosure of intellectual property, educate and mentor innovative students, and translate the inventions of its members to benefit society. The NAI publishes the multidisciplinary journal Technology and Innovation, Journal of the National Academy of Inventors.

• GOALS AND OBJECTIVES •

• To recognize publicly a cadre of investigators who are also inventors.
• To enhance the visibility of university and non-profit research institute technology development, promote entrepreneurship and be advocates for academic innovation in the local community.
• To be a resource for the local community to facilitate greater industry research contracts and interactions with companies and organizations in order to increase economic impact.
• To increase awareness of intellectual property by mentoring, fostering and encouraging faculty, staff and students to develop their intellectual property and inventions.
• To help shape society by being in a position to understand the translational use of inventions at the university or research institute and elsewhere; and to be a role model in such endeavors for students.
• To develop relevant invention-based activities in collaboration with the institution’s administration of patents and licensing.

As the Academy grows and develops, we will continue to seek new ways to recognize and honor academic invention, provide unique opportunities for our Member Institutions, and build strong relationships with innovative groups and companies. There is no doubt that translational technology is critically important; it is the engine that will drive the economies of the 21st century. Our research institutions are growing and through their capabilities, we see a limitless future for our nation and the world.

www.AcademyofInventors.org
Technology and Innovation (T&I) presents information encompassing the entire field of applied sciences, with a special focus on transformative technology and academic innovation.

Regular features of T&I include commentaries contributed by the United States Patent and Trademark Office and in-depth profiles of Fellows of the National Academy of Inventors®.

Editors-in-Chief:
Paul R. Sanberg
University of South Florida
Eric R. Fossum
Dartmouth College

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University of California, Irvine
Nasser Arshadi
University of Missouri, Saint Louis

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www.technologyandinnovation.org
SEVENTH ANNUAL MEETING
DETAILED AGENDA

WEDNESDAY, APRIL 4, 2018

7:00 AM – 4:00 PM  NAI Check-In and Information Table Open  
Location: Grand Ballroom Foyer, The Mayflower Hotel

7:30 – 8:45 AM  Welcome Breakfast featuring Technology & Innovation, Journal of the NAI  
Location: Palm Court Ballroom, The Mayflower Hotel  
A unique opportunity to meet the Editorial Board and Editors of T&I and learn how to get involved with future issues.

9:00 AM – 12:00 PM  Session A | Intersection of Innovation and the Future  
Location: Grand Ballroom, The Mayflower Hotel

Session Co-Chairs:  
Helen M. Blau, Stanford University  
Stephen D. Russell, Space and Naval Warfare Systems Command (SPAWAR)

9:00 AM  ▪ Opening Remarks | Paul R. Sanberg, President, National Academy of Inventors

9:15 AM  ▪ Individual 15-Minute Presentations:
  • How Artificial Intelligence Can Fundamentally Transform the Patent System and Accelerate Innovation, Dean P. Alderucci, The University of Chicago
  • Automated Vehicles: The Killer Opportunity for Interdisciplinary Innovation, Robert W. Heath, Jr., The University of Texas at Austin

9:45 AM  ▪ Panel | Inventing Green: Making Environmental Responsibility More Accessible to Current and Future Inventors
  • Hosted by The Lemelson Foundation
  • Moderator: Cindy Cooper, The Lemelson Foundation
  • Panelists: Eben Bayer, Ecovative Design; Janine Elliott, VentureWell; Jeremy Faludi, Dartmouth College; Marsha Willard, Presidio Graduate School

10:45 AM  ▪ Individual 15-Minute Presentations:
  • Innovation: Key to Future of Moore's Law, Tsu-Jae King Liu, University of California, Berkeley
  • Artificial Intelligence, Chaos and Cognition, William Ditto, North Carolina State University

11:15 AM  ▪ Keynote Address | The Dawn of Synthetic Physiology, Ronald M. Evans, Salk Institute for Biological Studies

12:00 – 1:00 PM  Networking Luncheon | Hosted by The Lemelson Foundation  
Location: State Room, The Mayflower Hotel

1:00 – 1:30 PM  Coffee Break and Afternoon Refreshments | Hosted by Plasma Igniter  
Location: Grand Ballroom, The Mayflower Hotel
## Session B | Intersection of Ideas and Entrepreneurship
Location: Grand Ballroom, The Mayflower Hotel

### Session Co-Chairs:
- Susmita Bose, Washington State University
- Nicolas Torno, Institut Pasteur

### 1:30 PM
- **Panel | Ideas for Problem-Solving: From University to Invention to Entrepreneurship**
  - Hosted by the AAAS-Lemelson Invention Ambassador Program
  - Moderator: Sorin Grama, Promethean Power Systems

### 2:30 PM
- **Individual 15-Minute Presentations**
  - Inventing a New Way to See Clearly: Noninvasive Vision Correction with Femtosecond Lasers, Wayne H. Knox, University of Rochester
  - Biophysics Meets Gene Therapy: How Exploring Supercoiling-Dependent Structural Changes in DNA Led to the Development of Minivector DNA, E. Lynn Zechiedrich, Baylor College of Medicine

### 3:00 PM
- **Panel | Making Sense of Venture Capital, Government and Other Funding Sources**
  - Moderator: Julie Lenzer, University of Maryland
  - Panelists: Ben Buettell, R7 Partners; Crystal R. Icenhour, Aperiomics; G. Nagesh Rao, U.S. Small Business Administration; Rick C. Schwerdtfeger, National Science Foundation

### 4:00 – 5:30 PM
- **Break Before Signature Gala**

### 5:30 – 5:45 PM
- **Buses Depart for Signature Gala**
  Location: Front Lobby, The Mayflower Hotel

### 6:00 – 10:00 PM
- **NAI Signature Gala | Art of Innovation and the American Patent System**
  Location: The Smithsonian American Art Museum, 8th & G Streets, NW, Washington DC 20004. Dress: Formal (black tie not required)

  Formal event held at the home of the original U.S. Patent and Trademark Office in celebration of NAI Fellows and our nation’s patent achievements from its earliest beginnings to today. Event will begin with a cocktail hour and a brief program followed by a seated dinner. After dinner, guests may view open exhibits.

### 6:15 PM
- **Welcome Remarks | Paul R. Sanberg**, President, National Academy of Inventors

### 6:20 PM
- **Remarks and Introduction of Keynote Speaker | Andrei Iancu**, Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office

### 6:30 PM
- **Keynote Speaker | David J. Skorton**, Secretary, Smithsonian Institution

### 9:30 – 10:00 PM
- **Buses Depart and Return to Hotel**
  Location: G Street Exit of Museum
  *Featuring a scenic drive past U.S. National Monuments*
7:00 AM – 4:00 PM  |  NAI Check-In and Information Table Open  
Location: Grand Ballroom Foyer, The Mayflower Hotel

7:30 – 8:30 AM  |  Private Fellow Inductees Breakfast and Information Session  
Location: Palm Court Ballroom, The Mayflower Hotel  
Hosted by the University of Delaware  
An opportunity for newly-elected NAI Fellows to network and learn about their role within the organization.

8:00 – 8:30 AM  |  Continental Networking Breakfast  
Location: Grand Ballroom, The Mayflower Hotel  
Continental breakfast available for all registered attendees.

8:30 AM – 12:00 PM  |  Session C | Intersection of Academia, Government and Industry  
Location: Grand Ballroom, The Mayflower Hotel

**Session Co-Chairs:**
Kurt H. Becker, New York University  
Amy E. Wright, Florida Atlantic University

8:30 AM  |  Opening Remarks  |  Paul R. Sanberg, President, National Academy of Inventors

8:45 AM  |  Keynote Address  |  Reframing Innovation, Gilda A. Barabino, President of AIMBE and Dean of Engineering, The City College of New York

9:30 AM  |  Individual 15-Minute Presentations:  
- The 90% Invention Commercialization Solution, John R. Nottingham, Cleveland Clinic and Case Western Reserve University  
- Accessible and Affordable Technologies for the Cancer Care Continuum in the 21st Century, Nimmi Ramanujam, Duke University

10:00 AM  |  Panel  |  Navigating IP Policy and Patent Rights  
- Moderator: Elizabeth Dougherty, U.S. Patent and Trademark Office (USPTO)  
- Panelists: Joseph Matal, USPTO; Thomas L. Stoll, Counsel, Committee on the Judiciary at U.S. House of Representatives; Herbert C. Wamsley, IP Writer; Chen Wang, American Intellectual Property Law Association

11:00 AM  |  Panel  |  Need for Collaboration: How Industry, Academia and Government Partnerships Will Transform the Future  
- Moderator: Eric D. Isaacs, The University of Chicago  
- Panelists: Timothy M. Block, Baruch S. Blumberg Institute; Judy L. Genshaft, University of South Florida; Vistasp M. Karbhari, The University of Texas at Arlington; C.D. Mote, Jr., National Academy of Engineering

12:00 – 1:30 PM  |  Networking Luncheon  |  Hosted by the China Association of Inventions  
Location: State Room, The Mayflower Hotel
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<td>7:30 AM – 12:00 PM</td>
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<td>Grand Ballroom Foyer, The Mayflower Hotel</td>
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<td>8:00 – 8:30 AM</td>
<td>Light Breakfast</td>
<td>Grand Ballroom, The Mayflower Hotel</td>
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<td>8:30 AM – 12:00 PM</td>
<td>NAI Student Innovation Showcase</td>
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*Featuring presentations of the inventions of outstanding student teams from NAI Member Institutions. Students will be judged by a panel of experts, to recognize and strengthen the culture of inventorship for the next generation.*

**Session Co-Chairs:**
- **Barbara D. Boyan,** Virginia Commonwealth University
- **Steven J. Kubisen,** The George Washington University

- **Judges Panel:** Stephen Key, InventRight; Andy Rathmann-Noonan, National Science and Technology Medals Foundation; Glenn Vonk, National Council of Entrepreneurial Tech Transfer; Helena S. Wisniewski, University of Alaska Anchorage

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<td>8:30 AM</td>
<td>Opening Remarks</td>
<td>Paul R. Sanberg, National Academy of Inventors</td>
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Keynote Address | Invention: A History of (Learning From) Failure
Arthur Daemmrich, Director, Lemelson Center for the Study of Invention and Innovation at the Smithsonian Institution

Student Presentations:

9:30 AM
- AssistENT
  Student Team: Clay Andrews, Melissa Austin, Talia Kirschbaum, Theodore Lee
  Advisor: Patrick Byrne
  Johns Hopkins University

Restricted nasal breathing is one of the most common complaints heard by ENT (ear, nose, and throat) specialists. This condition is a daily source of discomfort that reduces productivity and quality of life. Slight dilation of the nasal passages directly counteracts nasal obstruction and reverses symptoms in 89% of those afflicted. To this end, many patients undergo functional rhinoplasty procedures to surgically widen the nasal passages. However, up to 20% of patients experience unimproved or worsened symptoms postoperatively. We are developing Schnozzle, a comfortable and discreet nasal dilator that improves breathing instantly upon insertion. Schnozzle is also designed with form-fitting materials that enhance comfort and grip the nasal cavity to safely remain in position. The device’s use case is analogous to that of a contact lens; rather than undergoing invasive nasal reconstruction, users will simply deploy the device in the nose to breathe better instantly.

9:50 AM
- OptoDyCE: Optical Dynamic Cardiac Electrophysiology
  Student: Aleks Klimas
  Advisor: Emilia Entcheva
  The George Washington University

The OptoDyCE Platform will provide drug researchers and developers with a high-throughput (HT), high-content, low-cost solution to quantify cardiotoxicity to deliver cheaper, more effective, and safer drug treatments. OptoDyCE will improve cardiotoxicity prediction in early-phase drug development. It has been estimated that better preclinical study design propagates through the pipeline; improved prediction could reduce Phase II attrition by as much as 50%, lowering final costs by ~30%. With costs reduced, developers will have the freedom to tackle higher-risk projects, such as patient-specific and patient-population therapies, without increasing R&D budgets.

10:10 AM
- Powered Wrist-Hand Orthosis for Individuals with Spinal Cord Injury
  Student Team: Amber Gatto, Kalyn Kearney, Andrew Li, Kareika Wharton
  Advisor: Stephanie L. Carey
  University of South Florida

Between 45%-60% of all reported spinal cord injury (SCI) cases (in the US) are classified as incomplete quadriplegia, ranking it the most common SCI. The majority of cervical SCIs occur in the C5-C7 segments causing patients to lose upper and lower limb functionality. Patients with an incomplete C5-C7 SCI lose grasping abilities, but wrist function is almost universally retained. Most rehabilitation techniques, therefore, apply the tenodesis effect (wrist extension for grasping, wrist flexion for releasing). Current tenodesis wrist-hand orthoses (WHOs) engage only the thumb and index finger for gripping, not allowing for whole-handed gripping, meaning that only 20% of ADLs can be completed. Scion’s powered WHO began as a student project and utilizes a modified version of the tenodesis effect (wrist flexion for grasping, wrist extension for releasing) to help individuals with incomplete C6-C7 SCIs independently complete ADLs.
10:30 AM  •  **Brise-solette**  
Student Team: Joshnamaithili Seelam, Aniket Kulkarni, Kashyap Venuthurupalli, Chandana Mukipaty  
Advisor: Barbara D. Boyan, Rene Olivares-Navarrete  
Virginia Commonwealth University

*Studies have shown that a womb-like light environment can reduce the levels of cortisol and promote the release of growth hormones, while also extend sleep duration and help with adaptation to a circadian rhythm at an early stage. Currently the only solution for reducing light stimulus to the neo-natal infant is by using a blanket to cover the isolette and the use of films to control the amount of permitted light has not been done commercially. Brise-solette can quickly change its opacity and this would revolutionize the treatment of neonates as it would allow constant supervision of the babies during care, and also a method of notification in case of emergency. The future developments of this product would include modular advancement that make the films more reactive to different stimuli in the environment and the vitals of the baby.*

10:50 AM  •  **AMProtection, LLC - Surface-Tethered Antimicrobial Peptides**  
Student Team: Todd E. Alexander, Lindsay D. Lozeau  
Advisor: Yael Schwartz  
Worcester Polytechnic Institute

*AMPProtection is a startup in the medical device industry and first focuses on a product that will prevent catheter-associated urinary tract infections (CAUTI). Catheter-associated urinary tract infections create a broad and devastating impact throughout the U.S. healthcare value chain, from manufacturers to hospitals to patients. Patients endure decreased quality of life from treatments such as systemic antibiotics and implant removal, and co-morbidity can increase by 12%-25%. The AMProtection innovation is a patent-pending, novel therapeutic agent – a naturally derived antimicrobial peptide that is covalently bound ("tethered") onto surfaces. This AMP coating is biocompatible, is broad-spectrum, and kills bacteria directly, clearing infection through unique biophysical mechanisms.*

11:10 AM  •  **Senseer: Improving Hydrocephalus Treatment and Reducing Healthcare Costs Using Wireless Sensors**  
Student Team: Alex Baldwin, Trevor Hudson, Eugene Yoon  
Advisor: Ellis Meng  
University of Southern California

*Hydrocephalus is a chronic condition caused by accumulation of excess fluid in the brain leading to headaches, nausea, incontinence, and even cognitive decline in some cases. The standard clinical treatment is to surgically implant a shunt which diverts excess fluid from the brain to the abdomen, but 40-50% of shunts fail within the first year of use, and 80-90% fail within a decade. Repeated expensive imaging studies and invasive shunt taps are currently used to try to monitor shunt performance, but these methods are inadequate. Senseer is developing a multi-sensor module which can be implanted alongside hydrocephalus shunts. Patients will be able to query the status of their shunt in real time as often as desired in an outpatient setting. All sensor measurements will be uploaded to a secure database, allowing physicians to remotely monitor shunt status and giving them tools for diagnosing or predicting shunt failure.*
• 2017-2018 NAI Board of Directors and Officers •

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Lehigh University
NAI Fellow

Mark VanderZyl
FastForward Operations Manager, Johns Hopkins Technology Ventures
Johns Hopkins University

Bradley J. Yops
Director, Technology Transfer Center, Office of Economic Innovation and Partnerships
University of Delaware
FREQUENTLY ASKED QUESTIONS

What is a federally chartered organization?
Federally chartered organizations were designed to promote a public purpose by leveraging nonfederal partnerships and individuals. This honorific designation symbolizes a federal recognition of the significant national interests stemming from the mission, goals, and objectives of the organization.

Why should the NAI be granted a Federal Charter?
Currently, our nation’s universities perform more than half of our nation’s basic research and more than 60% of that research is federally funded. It is in our national best interest for that research to be translated for the betterment of society into innovative products, processes, cures, and treatments. Federally recognizing the importance of the NAI will bolster the innovations, technologies, and new businesses spurred as research develops at universities and nonprofit research institutes, elevating their already dynamic role in our national economic development and our global competitiveness.

What is the cost of this bill?
There is no cost associated with granting a Federal Charter to the National Academy of Inventors.

If the NAI is granted a Federal Charter, what oversight role will the federal government have in the future?
The National Academy of Inventors would be required to submit a report to Congress on the activities of the preceding fiscal year, but the federal government would not take regulatory or oversight roles.

“Let’s commit to further championing our nation’s researchers through the NAI and federal investments that will promote new discoveries, bolster our economy and create higher-paying jobs for our communities.”

“We are greatly indebted to innovators such as [NAI Fellows] for contributions to society through their inventions. I commend these individuals, and the organizations and taxpayers that support them, for the work they do to revolutionize the world we live in.”
—U.S. Rep. Lamar Smith (R-TX-21)
Collectively, the 2017 NAI Fellows hold nearly 6,000 patents and represent over 125 institutions.
Co-Chair
Helen M. Blau
Stanford University

Helen M. Blau, Ph.D., is Donald E. and Delia B. Baxter Foundation Professor and director of the Baxter laboratory for stem cell biology at Stanford University (SU). Blau’s world-renowned research in regenerative medicine includes nuclear reprogramming and demonstration of the plasticity of cell fate using cell fusion which provided the scientific underpinnings for mammalian cloning and induced pluripotent stem cells. She led with novel approaches to treating muscle damaged due to disease, injury, or aging and pioneered the design of biomaterials to mimic the in vivo microenvironment and direct stem cell fate. She has received the McKnight Technological Innovations for Neuroscience Award, SU Outstanding Inventor Award and induction into SU’s Office of Technology and Licensing Hall of Fame. Blau holds seven U.S. licensed patents and 23 patents worldwide. She founded Myoforte Therapeutics, Inc. to focus on novel molecules and therapeutic strategies for the treatment of muscle wasting in disease and aging, and her lab pioneered the use of beta-galactosidase complementation as a reporter of protein-protein interactions in live cells, which became a highly successful platform for drug discovery developed by DiscoveRx. She served as president of the American Society for Developmental Biology and of the International Society for Differentiation, on the Board of Overseers at Harvard University and on the Ellison Medical Scientific Advisory Board. Blau is a member of NAM, NAS, PAS, AIMBE, AAA&S and a Fellow of NAI and AAAS.

Co-Chair
Stephen D. Russell
Space and Naval Warfare Systems Command

Stephen D. Russell, Ph.D., is the Director of Science and Technology and Chief Technology Officer for the Space and Naval Warfare Systems Command (SPAWAR) and is Director of the Science and Technology Department at the SPAWAR Systems Center Pacific (SSC Pacific) in San Diego, California. He also serves as the SPAWAR National Competency Lead for both Science and Technology and Research and Applied Sciences across the SPAWAR Enterprise. He leads a highly technical team of over 800 civilian, military and contractor support personnel including scientists, engineers, technical specialists and administrative staff members, and five Flag-level Senior Scientist/Technologist direct reports, in executing an annual budget of over $350M, and influencing over $1.2B supporting research, development, acquisition, test and evaluation in the command, control, communications, computers, intelligence, surveillance and reconnaissance domains. He has authored or co-authored over 70 articles in peer-reviewed journals, conference proceedings, and technical reports and serves on the Editorial Board for Naval Science & Technology Future Force Magazine. He is a Fellow and board member of NAI.
Welcome Remarks

Paul R. Sanberg
National Academy of Inventors

Paul R. Sanberg, Ph.D., D.Sc., FNAI, is founder and president of the National Academy of Inventors, and senior vice president for research, innovation, and knowledge enterprise at the University of South Florida. He trained at York University, University of British Columbia, Australian National University and Johns Hopkins University School of Medicine, among others, and held academic positions at Ohio University, University of Cincinnati, and Brown University. He holds 48 U.S. and over 110 foreign patents and has served on numerous scientific advisory boards for health-related foundations and companies. He is author of more than 650 scientific articles and 14 books, with over 30,000 citations to his work, co-editor-in-chief of Technology and Innovation, and serves on editorial boards for more than 30 scientific journals. He is an NAI Charter Fellow, AAAS Fellow, AIMBE Fellow, AAAS-Lemelson Invention Ambassador, Florida Inventors Hall of Fame inductee, Florida Academy of Sciences Medalist, and Fulbright Specialist.

Presentation | How Artificial Intelligence Can Fundamentally Transform the Patent System and Accelerate Innovation

Dean P. Alderucci
The University of Chicago

Dean P. Alderucci, M.S., is adjunct professor of strategic management at The University of Chicago Booth School of Business. Alderucci's principal research interests include formal strategy frameworks for inventing, applying operations research tools to corporate patent processes, and the gaps between design thinking and competitive responses. He holds 185 U.S. patents that have been licensed to several companies, from startups to large corporations. In his previous work at a business incubator he helped launch over a dozen technology startups, including Priceline.com. He has published several articles and currently serves as an advisor to various startups and innovators. Alderucci holds master's degrees in computer science, applied mathematics, and operations research from Columbia University and a master's degree of law in innovation and information law from New York University. He also holds a bachelor's and master's in computer engineering from Boston University, where he graduated Summa Cum Laude and was inducted into the Tau Beta Pi Engineering Honor Society. Alderucci is a Fellow of NAI.

Presentation | Automated Vehicles: The Killer Opportunity for Interdisciplinary Innovation

Robert W. Heath, Jr.
The University of Texas at Austin

Robert W. Heath Jr., Ph.D., is Cullen Trust Endowed Professor at The University of Texas at Austin and director of the Situation-Aware Vehicular Engineering Systems Research Center. Heath is a pioneer in the area of multiple-input multiple-output wireless communication systems, which has been a primary means of increasing data rates and reliability in commercial wireless systems the past ten years. He is a recipient of the EURASIP Technical Achievement Award and more than 25 other awards. He holds 57 U.S. patents and a number of related foreign patents. Heath has published more than 550 peer-reviewed conference and journal articles, and three books. Heath is an elected member of the IEEE Signal Processing Society Board of Governors, on the editorial board for IEEE Access, and serves as editor-in-chief of IEEE Signal Processing Magazine. He is a Fellow of NAI and IEEE.
**Panel | Inventing Green: Making Environmental Responsibility More Accessible to Current and Future Inventors**

**Moderator**

Cindy Cooper  
*The Lemelson Foundation*

Cindy Cooper is Program Officer at The Lemelson Foundation. An experienced entrepreneur, nonprofit leader and university educator, Cindy oversees programs that enable higher education institutions in the U.S. and developing countries to inspire, educate and support impact-driven inventors and entrepreneurs. Cindy previously co-founded and served as the Executive Director of Portland State University’s Impact Entrepreneurs Program. There she led PSU’s bid for recognition as an Ashoka U Changemaker Campus, taught social innovation and entrepreneurship to hundreds of students, mentored entrepreneurs in the Social Innovation Incubator and oversaw the creation of the Business of Social Innovation Certificate, the nation’s first online academic and professional certificate in social innovation and entrepreneurship. Her publications include an award-winning case study, *Grameen Intel Social Business: Technology Solutions at the Base of the Pyramid*, and she co-founded Speak Shop, the world’s first online platform for learning Spanish through videoconferencing while empowering Guatemalan instructors as microentrepreneurs.

**Panelist**

Eben Bayer  
*Ecovative Design*

Eben Bayer is the CEO and Co-Founder of Ecovative, an off-grid living enthusiast, and a former farmer. Ecovative is a biomaterials company that grows high performance products for industries ranging from building materials to furniture to packaging to apparel. Ecovative uses mycelium, the root structure of fungi, as a molecular synthesis and assembly platform. By using biological technology Ecovative creates materials that are both safe and healthy as well economically attractive for large industrial sectors. Ecovative has been recognized as a Tech Pioneer by the World Economic Forum, for its impact on climate change by the Postcode Lottery Green Challenge, and the Buckminster Fuller Challenge for socially responsible design. Eben has been recognized worldwide as pioneer in using biological technology to address the big challenges facing our planet.

**Panelist**

Janine Elliott  
*VentureWell*

Janine Elliott is Program Officer at VentureWell. She designs and facilitates trainings that help young inventors and social entrepreneurs to vet their markets, build business models and prepare them to raise first equity investments. To inform on-going curriculum development for VentureWell’s portfolio of science and technology-based startups, she can often be spotted networking in the Boston cleantech and healthcare communities. Previously, Janine lived in the San Francisco Bay Area, where she was an environmental science and youth leadership educator for five years and co-founded a cleantech materials startup. She holds an Environmental Policy B.A. from Colby College and a Sustainable Enterprise MBA from Dominican University of California.
Panelist
**Jeremy Faludi**
*Dartmouth College*

Jeremy Faludi, Ph.D., LEED AP BD+C, is Assistant Professor at Dartmouth College and is a sustainable design strategist. He is an assistant professor at Dartmouth College and has taught green product design at Stanford, Minneapolis College of Art and Design, and elsewhere. He has contributed to six books on sustainable design, including *Worldchanging: A User's Guide for the 21st Century*, and co-authored the *Autodesk Sustainability Workshop*. He designed the first version of AskNature.org for the Biomimicry Institute, created the Whole System Mapping sustainable design method, and a bicycle he helped design appeared in the Smithsonian Cooper-Hewitt Design Museum's 2007 exhibit “Design for the Other 90%.”

Panelist
**Marsha Willard**
*Presidio Graduate School*

Marsha Willard, Ph.D., is core faculty at Presidio Graduate School's MBA in Sustainable Systems. Marsha has taught at PGS for over nine years and is one of the designers, and now lead faculty, of the integrated curriculum for the first year of the program. Additionally, Marsha consults with organizations across all sectors to help them implement sustainable business practices. She is the co-founder and former ED of the International Society of Sustainability Professionals and author of seven business books including *The Business Guide to Sustainability* and *A Step by Step Guide to Sustainability Planning*.

Presentation  |  **Innovation: Key to the Future of Moore's Law**
**Tsu-Jae King Liu**
*University of California, Berkeley*

Tsu-Jae King Liu, Ph.D., is TSMC Distinguished Professor of Microelectronics in the department of electrical engineering and computer sciences at the University of California, Berkeley. Liu is best known for the development of polycrystalline silicon-germanium thin film technology for applications in integrated circuits and microsystems, and for co-developing the three-dimensional “FinFET” transistor design that is used in all leading-edge microprocessor chips today. Her awards include the DARPA Significant Technical Achievement Award (2000) for development of the FinFET, IEEE Kiy0 Tomiyasu Award (2010) for contributions to nanoscale MOS transistors, memory devices, and MEMs devices, Semiconductor Industry Association Outstanding Research Award (2014), and Semiconductor Research Corporation Aristotle Award (2016). She has authored or co-authored over 500 publications and holds over 90 patents. Liu is a fellow of NAI and IEEE and member of NAE.
Presentation | Artificial Intelligence, Chaos and Cognition

William L. Ditto
North Carolina State University

William L. Ditto, Ph.D., is professor of physics and electrical engineering at North Carolina State University. A pioneer in controlling chaos in physical and biological systems and utilizing chaos for computation, Ditto has published over 200 articles and holds more than 25 U.S. and foreign patents including patents in antennas, neural control, cardiac rhythm management, synthetic biology and chaos computing. He founded ChaoLogix Inc., which develops novel computer chips based on chaotic elements and was recently acquired by ARM Ltd. Most recently, he started the Nonlinear Artificial Intelligence Laboratory with a focus on developing cognitive artificial Intelligence based on morphable chaos computing VLSI chip technologies. Ditto is a Fellow of NAI, AIMBE and APS.

Keynote Address | The Dawn of Synthetic Physiology

Ronald M. Evans
Salk Institute for Biological Studies

Ronald M. Evans, Ph.D. is a Professor at the Salk Institute for Biological Studies, a Howard Hughes Medical Institute Investigator, and holds the March of Dimes Chair in Developmental and Molecular Biology at the Salk Institute. Evans received his Ph.D. in Microbiology and Immunology and undergraduate degree from the University of California, Los Angeles, and conducted his post-doctoral research at Rockefeller University with Dr. James Darnell. He is an Investigator of the Howard Hughes Medical Institute and a Lustgarten Distinguished Scholar, Director of the Salk’s Gene Expression Laboratory and Metabolic Engineering Program and Co-Director of the Helmsley Center for Genomic Medicine. He is known for pioneering studies on hormones’ normal activities and their roles in disease. A major discovery was nuclear hormone receptors, which respond to steroid hormones, vitamin A, vitamin D, thyroid hormones and bile acids. By targeting genes these receptors help control sugar, salt, calcium, cholesterol and fat metabolism. They are primary targets in breast, prostate, and pancreatic cancers, and leukemia treatment. They have therapeutic roles in chronic inflammation, osteoporosis and Type 2 diabetes and asthma. His muscle metabolism studies led to the discovery of exercise mimetics, which promote the benefits of fitness without training. Exercise mimetics will help battle the obesity epidemic, diabetes, heart disease and frailty. Evans is a co-leader of four Stand Up to Cancer Dream Teams. He was awarded the Albert Lasker Basic Medical Research Award in 2004 and the Wolf Prize in Medicine in 2012. He is a member of the NAS, NAM and a Fellow of NAI.

SESSION B | INTERSECTION OF IDEAS AND ENTREPRENEURSHIP

Co-Chair

Susmita Bose
Washington State University

Susmita Bose, Ph.D., is Herman and Brita Lindholm Endowed Chair Professor at the School of Mechanical and Materials Engineering at Washington State University. Bose’s interdisciplinary research interest lies at the interface of chemistry, materials science, mechanical engineering, bioengineering and biology, focusing on 3D printed bone scaffolds (which has been featured on television, radio stations, magazines and news sites worldwide), implant materials and drug delivery vehicles. Bose received the CAREER award and PECASE from NSF. She has advised over 40 graduate students, published over 220 technical articles including over 180 journal articles, 10 book chapters, seven edited books, and eight patents. She was invited as Kavli Fellow by NAS, received the PACE and Fulbright Awards from ACerS and International Society for Ceramics in Medicine Research Excellence Award. Bose was named Life Science Innovation Northwest Women to Watch Honoree by Washington Biotechnology and Biomedical Association. Bose is a Fellow of NAI, AAAS, AIMBE and ACerS, and has been elected to Washington State Academy of Sciences.
Co-Chair

Nicolas Torno
Institut Pasteur

Nicolas Torno is a Biochemist, MBA, French and European Patent Attorney with 13 years of practice in a prestigious Firm. Nicolas was involved, for example, in the BRCA1 – Myriad board of appeal cases at EPO. Since 2010, Nicolas manages the Pasteur patent portfolio of Institut Pasteur (350 patent families) with a team of 12 colleagues including five patent attorneys and an accountant. He is the in-house general counsel for IP matters and he also defines general strategies and procedures. He worked on different broad international litigations and negotiations, such as in the field of HIV-1, HIV-2, HBV and HPV and co-chaired the AIPPI Biotech French Group. His role then extended throughout the Technology Transfer activities of Institut Pasteur comprising Business Development – Industrial and Institutional relations – contract review and amendments, negotiations, promotion of new economic models through the valo3.0 initiative, and managing the Technology Transfer Office and Compliance Office.

Moderator

Sorin Grama
Promethean Power Systems

Sorin Grama is Co-founder and CEO of Promethean Power Systems, a clean-energy start-up with offices in the US and India. Grama is also Guest Faculty at Indian Institute of Technology, Delhi. Sorin is the principal inventor of a thermal energy storage system used in refrigeration applications. Its first commercial application is for chilling milk in rural India where frequent power outages require back-up diesel generators. Sorin's thermal energy battery eliminates the diesel generator while preventing milk spoilage. In India, more than $10 billion worth of fresh produce and dairy goes to waste due to the lack of refrigeration and poor grid infrastructure. To date, Promethean has installed over 50 commercial milk chilling systems with a total energy storage capacity of over 1.5 MWh. Sorin developed the technology with funds from the National Science Foundation and is applying it for refrigeration applications in the U.S. Prior to launching Promethean, Sorin was part-owner of a systems integration business in California, managed regional sales for National Instruments and was the lead author of two landmark reports on solar industry dynamics published by Greentech Media. In 2010 Sorin's company co-founded Greentown Labs, a Boston incubator, to help start-up companies share prototyping space, tools and talent. Greentown Labs now houses over 50 cleantech start-ups at its new offices in Somerville, MA. Sorin holds a B.S. in Electrical Engineering from Ohio State University and an M.S. in Engineering and Management from Massachusetts Institute of Technology. Sorin lives and works in India where he leads Promethean's efforts to manufacture and commercialize the milk chilling systems for a world-wide market. He is originally from Romania.
Panelist  
Ellie Fini  
Bio-Adhesive Alliance Inc.

Ellie Fini is the Co-founder of Bio-Adhesive Alliance Inc., and director of the sustainable infrastructure materials lab, Associate Professor, J. W. Fulbright Scholar at North Carolina A&T State University. She received her Ph.D. at the University of Illinois at Urbana-Champaign in 2008 on characterizing interfacial properties of adhesives and sealants. She has been a research affiliate at MIT’s Center for Materials Science and Engineering since 2011, and is currently serving as the associate editor of ASCE Journal of Materials as well as the inventor and co-founder of a start-up company, Bio-Adhesive Alliance Inc. She has been collaborating with multiple professional and scientific societies, federal agencies, and congressional offices, mainly as an academician. She has been an invited speaker at Kavli Frontiers of Science at the National Academy of Science; she also served as a program director for the National Science Foundation. She has been actively fostering the culture of innovation and entrepreneurship within her campus and science community. Her achievements were recognized via multiple awards including NSF CAREER award, 2017 BEYA STEM Innovation award, and nomination for 2017 BioNight Entrepreneurial Excellence Award. One of her recently patented inventions is a unique process to break down pig manure and convert it into an asphalt-binding adhesive. The innovative bio-adhesive can be used as either a full or partial substitute to standard petroleum based adhesives.

Panelist  
Sanna Gaspard  
Rubitection, Inc.

Sanna Gaspard is Founder and CEO, Rubitection Inc., She has a passion for entrepreneurship, healthcare, medical devices, and innovation. She earned her bachelor’s degree in Biomedical Engineering (BME) at the University of Miami in Miami, FL (’04). She completed her Masters (’05) and PhD (’11) in BME at Carnegie Mellon University. While earning her graduate degree she received two patents for two medical technologies she invented. Her two inventions include an infant therapy device to support preterm infants’ health and an optical device for early bed sore detection. To support the commercialization of these technologies she founded two medical device companies, TLneoCare, LLC and Rubitection Inc. As CEO she developed the business strategy, IP strategy, and raised initial financing. She has received recognition and awards including being selected as a finalist for the UpPrize Competition (’17), regional winner for the Alpha Lab Gear Hardware Cup (’17), SPIE Startup Challenge Semifinalist (’16), 2nd place winner at the HitLab Healthcare Challenge (’15), a finalist for the Mass Challenge Business accelerator in Boston (’13), 1st place at the 3 Rivers Investment Venture Fair’s Technology showcase (’11), and IEEE New Face of Engineering (’10). Her passion for science, technology, inventorship, and entrepreneurship is only match by her desire to help students develop an interest in STEM fields and jobs.
Panelist

**Jason Kang**

*Kinnos Inc.*

Jason Kang is the CEO and Co-Founder of Kinnos Inc., a New York-based company that aims to raise the standard of infectious disease decontamination to protect healthcare workers, patients, and the general public. Their first product, Highlight®, is a patent-pending additive that greatly improves visibility, coverage, and end-user compliance of disinfectants. Highlight® is used by HazMat and biosafety units, was a grantee of the USAID Fighting Ebola Grand Challenge, and has been field-tested by NGOs and healthcare workers in Liberia, Guinea, and Haiti. Kinnos has additionally been recognized as winners of the Lemelson-MIT Student Prize, Collegiate Inventors Competition, and Columbia Venture Competition, and has been featured in the *Wall Street Journal*, and *Scientific American*, and appeared on NPR and the PBS NewsHour. Prior to Kinnos, Jason served as Vice President of Engineering at Jibon Health Technologies, where he invented a low-cost medical device to treat postpartum hemorrhage. The device was awarded a $250k Saving Lives at Birth Grand Challenge seed grant by USAID, Bill & Melinda Gates Foundation, Grand Challenges Canada, UKAID, and Norwegian Ministry of Foreign Affairs, and was brought to clinical trials in Bangladesh. For his innovative work in global health, Jason served as a U.S. Delegate at the Global Entrepreneurship Summit, was named to *Forbes 30 Under 30 in Healthcare*, and is a Fellow of the Kairos Society. In 2016, Jason received his B.S. in Biomedical Engineering from Columbia University, where he was an Egleston Scholar and graduated Tau Beta Pi.

Panelist

**Diana Yousef**

*change:W ATER Labs Inc.*

Diana is the Founder, CEO and principal inventor behind change:WATER Labs, Inc. and is a serial entrepreneur with 10+ years experience in innovating and commercializing technology and novel business models in the cleantech and biotech sectors, pioneering many approaches to translate science and technology into social and environmental impact for the developing world. Her professional career spans the arenas of academic life sciences research, international economic development, strategy consulting, finance and venture capital/private equity investing. She co-founded the Life Sciences Investment Group of the International Finance Corporation of the World Bank, investing in growth-stage biotech and agritech companies in India, China and other emerging markets. After spearheading the United Nation's Inclusive Markets incubator, she consultant with McKinsey & Company, and worked with clients across several sectors (life sciences, consumer good, private equity, logistics) around go-to-market, pricing and growth strategies; business development and technology commercialization; operations; and post-merger integration. She was a seed-stage venture investor with Battelle Ventures and Kidd & Company, investing in and catalyzing companies around emerging technologies in cleantech, biotechnology, and IT. As an entrepreneur, she spearheaded a number of cleantech and social ventures, including: WeCyclers (social venture to clean up urban slums and create recyclables supply chain linkages in Nigeria), Immerse Global (Stanford-spin out to develop atmospheric water capture technologies), SachSiSolar (MIT-spin out to develop revolutionary new materials to lower the cost of solar energy); and her current venture, change:WATER Labs (to commercialize frugal yet disruptive innovations to expand access to safe water and sanitation in the developing world). She is a former protein biochemist (A.B., Harvard; Ph.D., Cornell), and holds an MBA and an MA in International Affairs (Columbia). She was an original member of TED Fellows Advisory & Selection Committee and a Founding Council Member for NASA/USAID’s LAUNCH Accelerator. She has won a number of awards for the technologies and innovations that she has developed and is commercializing.
Wayne H. Knox
University of Rochester

Wayne H. Knox, Ph.D., is professor of optics, physics, materials science and visual science at the University of Rochester (UR). His previous academic positions at UR include associate dean of engineering and director of The Institute of Optics. He started at Bell Laboratories in 1984 as a postdoctoral researcher, advancing to director of the advanced photonics research department. He is a leading researcher in the field of ultrafast laser technology, science and applications, and has received numerous awards including the NAS W.O. Baker Award, AAPT Richtmyer Award, and R.B. Goergen Teaching Award. He has published over 150 publications and holds 50 U.S. patents and 153 foreign patents. Knox is chief science officer of Clerio Vision, Inc., a startup company that he co-founded, and is a Fellow of NAI, OSA and APS.

E. Lynn Zechiedrich
Baylor College of Medicine

E. Lynn Zechiedrich, Ph.D., is Kyle and Josephine Morrow Chair and Professor in Microbiology at Baylor College of Medicine. She developed minivectors to study DNA, the enzymes that act on DNA, and the drugs that inhibit these enzymes. Minivectors are also excellent gene therapy delivery vectors. Among other honors, she won the New Investigator Award from the Burroughs Wellcome Fund, Curtis Hankamer Research Award, and funding from the Human Frontier Science Program. She was Baylor College of Medicine’s BRASS Mentor of the Year in 2013. She holds two issued U.S. patents and three issued foreign patents that are licensed to Twister Biotech, Inc., a company she founded in 2011, and has multiple patents pending. She has published more than 60 articles and book chapters and given over 170 invited talks. She served on numerous grant review committees, reviews for 40 different peer-reviewed journals, and serves on three editorial boards. Zechiedrich is Fellow of NAI.
Moderator

Julie Lenzer
University of Maryland

As Associate Vice President of Innovation and Economic Development and Co-Director of University of Maryland Ventures, Julie Lenzer is charged with fostering and supporting the development that is currently underway in the UMD Research Park and Greater College Park. She will also promote and facilitate productive, university-wide collaboration to launch startup ventures based upon University intellectual property, as well as maximize synergies between UMD and the University of Maryland, Baltimore (UMD) to leverage strengths of each and encourage technology commercialization. Most recently, Julie was appointed to lead the Office of Innovation and Entrepreneurship (OIE) within the U.S. Department of Commerce’s Economic Development Administration (EDA). In her capacity as Director of the OIE, she drove programs and policies that support innovative economic development such as innovation-based entrepreneurship and regional innovation clusters.

Prior to her political appointment, Julie was the Executive Director of the Maryland Center for Entrepreneurship (MCE), an initiative of the Howard County Economic Development Authority focused on igniting the entrepreneurial culture and bringing together the entrepreneurial ecosystem across the state. During her short tenure, the MCE quadrupled its client base and saw the creation of new programs such as 3D Maryland, a leadership initiative connecting resources in additive manufacturing; the Conscious Venture Lab, an accelerator focused on Conscious Capitalism; and a technology transfer accelerator in partnership with Johns Hopkins Advanced Physics Lab and other leading research institutions. A serial entrepreneur, Ms. Lenzer was also the co-chair of Startup Maryland as well as co-founder and former CEO of the Path Forward Center for Innovation and Entrepreneurship, a nonprofit that helped women expand economic opportunity by starting and building growth-oriented businesses using technology transfer.

Panelist

Ben Buettell
R7 Partners

Ben Buettell is Co-founder and Partner of R7 Partners. Ben brings a wealth of strategic and transactional experience to the team, having spent 24 years with Houlihan Lokey, where he helped grow it from a boutique firm into a global investment bank that went public in 2015. While at HL, he led over 200 corporate engagements, including mergers, acquisitions, recapitalizations, equity reorganizations and strategic alternative assessments to startups, private and public companies. Ben serves on the boards of 6fusion, Airy3D and Tanvas, and as a board observer at AEye. His philanthropic activities include serving as Chairman-Elect of Sigma Nu Educational Foundation’s Board of Directors and President of the Gamma Beta Foundation. He was also a member of the Boys & Girls Clubs of Chicago Board of Directors from 1998-2016. Ben received a BA from Northwestern University and an MBA from Northwestern University’s Kellogg School of Management.
Panelist

**Crystal R. Icenhour**  
*Aperiomics*

Crystal R. Icenhour, Ph.D., is CEO and Co-Founder of Aperiomics. She received her PhD in Pathobiology and Molecular Medicine from the University of Cincinnati Medical School of Graduate Studies in 2002. She conducted postdoctoral research in the Thoracic Diseases Research Unit at the Mayo Clinic College of Medicine from 2002-2005 and in the Department of Infectious Diseases at Duke University Medical Center from 2005-2006. Dr. Icenhour has been involved in local and national postdoctoral associations including the Mayo Research Fellows Association Executive Committee (President), the Duke University Postdoctoral Association (chair of membership committee), and the National Postdoctoral Association (2008 Chair). Dr. Icenhour has participated in numerous events aimed at supporting and mentoring women in STEM. She has been recognized by Kauffman Foundation and Center for Innovative Technology as an outstanding entrepreneur. Dr. Icenhour was President & Chief Science Officer for Phthisis Diagnostics, a biotechnology company located in Charlottesville, Virginia from 2007-2013. In 2014 Dr. Icenhour was recruited as CEO of Aperiomics in Ashburn, Virginia. Aperiomics' focus is to harness the power of next-generation sequencing to improve world health.

Panelist

**G. Nagesh Rao**  
*U.S. Small Business Administration*

G. Nagesh Rao serves as Chief Technologist & Entrepreneur in Residence with the US Small Business Administration's Office of Investment & Innovation. His portfolio of work includes advising senior leadership around the SBIR/STTR programs, leading the SBA Growth Accelerator program and Co-Leading Coordination of the Fueling Small Business Innovation Interagency Policy Committee for the White House's Lab to Market Commercialization Agenda. As well handle all things “techie” and “nerd-related.” Over the last 15 years, Nagesh has been afforded the privilege to work and/or consult with numerous organizations in the public, private, and not for profit space, which culminated in his helping create programmatic endeavors such as i6 Green, FLoW, Patents for Humanity, VT-Arc Additive Manufacturing Prize Challenge, and SBA Growth Accelerator Competition. Nagesh's musings (written and oratorical) have been featured and/or quoted via TechCrunch, WAMC-NPR, *The Scientist*, The National Academies, MIT XPrize Lab, Stanford d-School, *The Hill, FedTech Magazine*, DC Inno, Technically DC, NextGov, *Daily Mirror* (Sri Lankan version), *Financial Times* (Sri Lankan version), and *The Courier-Journal*. His credentials include a MBA (Global Strategy and Entrepreneurship) from the University of Maryland-College Park, a MSc in Legal Studies-Intellectual Property Law from Albany Law School, a BSc dual-major in Materials Engineering and Philosophy from Rensselaer Polytechnic Institute, and a Patent Bar License from the USPTO. Nagesh is a former Mirzayan Fellow of The National Academies and a 2016 USA Eisenhower Fellow where he embarked on travels to Vietnam and Sri Lanka engaging in cutting edge endeavors with senior leaders from the private, public, and ngo sectors in those two countries. Among many accolades that Nagesh has received over the years, prominent ones include the Mahatma Gandhi Pravasi Samman & Hind Rattan awards from the NRI Welfare Society, and the Scott McKay Commencement Prize & Alumni Key Awards from his undergraduate alma mater.
Panelist

Rick Schwerdtfeger
National Science Foundation

Rick Schwerdtfeger joined the National Science Foundation in August 2016 as the SBIR/STTR Program Director for the Semiconductors and Photonics, and Internet of Things (IoT) portfolios. Prior to joining NSF, Rick was the CTO and Co-Founder of the Advanced Renewable Energy Company, a clean-tech and semiconductor equipment company, where he led the technology development and customer deployment of nearly $200MM of equipment in the first four years. Additionally he was the COO of Pica Solar, a DOE-funded solar cell technologies start-up. Rick is also an advisory board member of several start-up companies in the clean energy, water, and nano-materials sectors. In addition to these entrepreneurial ventures, Rick was a Senior Project Scientist at the non-profit Edison Materials Technology Center, a Senior R&D Scientist at Saint Gobain, and the Crystal Growth Group leader at Alpha Spectra. He started his career as a Staff Scientist doing solar energy materials and equipment research at the National Renewable Energy Laboratory. Rick as grown some of the largest sapphire, calcium fluoride, sodium iodide, and copper indium diselenide crystals in the world, which have been used to lower costs of technology for energy, lighting, radiation detection and other industrial and photonic applications. Rick has spent his career taking the “art” out of science, and replacing it with good engineering, experimentation and automation to solve challenging problems in the renewable energy, clean water, smart grid and high-tech world. Rick holds a Ph.D. in Materials Science from the Colorado School of Mines, an M.S. in Applied Physics from Pittsburg State University, and a B.S. in Physics and Science Education from the University of Dubuque.

Welcome Remarks

Paul R. Sanberg
National Academy of Inventors

See page 18
Remarks and Introduction to Keynote Speaker

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

In his role as the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (USPTO), Andrei Iancu provides leadership and oversight to one of the largest intellectual property offices in the world, with more than 12,000 employees and an annual budget of over $3 billion. He also serves as the principal advisor to the Secretary of Commerce on domestic and international intellectual property policy matters. Prior to joining the USPTO, Iancu was the Managing Partner at Irell & Manella LLP, where his practice focused on intellectual property litigation. Iancu appeared in a variety of high-profile matters in front of the USPTO, U.S. district courts, the Court of Appeals for the Federal Circuit, and the U.S. International Trade Commission. He has represented clients across the technical and scientific spectrums, including those associated with medical devices, genetic testing, therapeutics, the internet, telephony, TV broadcasting, video game systems, and computer peripherals. Iancu has also taught patent law at the UCLA School of Law, and has written and spoken publicly on a variety of intellectual property issues. Prior to his legal career, he was an engineer at Hughes Aircraft Company. Honors include recognition from the Daily Journal, California Lawyer magazine, Los Angeles Business Journal, Chambers USA, Best Lawyers in America, and many others have acknowledged his expertise in commercial litigation and intellectual property law. Iancu has also been the recipient of the Patent and Trademark Office Society 36th Annual Rossman Award, the Hughes Aircraft Malcolm R. Currie Innovation Award, and the Melville B. Nimmer Copyright Award. Iancu holds a Juris Doctor from the UCLA School of Law. He also has a Master of Science in mechanical engineering and a Bachelor of Science in aerospace engineering, both from UCLA. Iancu was born in Bucharest, Romania.

Keynote Address

David J. Skorton  
Secretary, Smithsonian Institution

David J. Skorton, Ph.D., is the 13th Secretary of the Smithsonian. He assumed his position July 1, 2015. As Secretary, Skorton oversees 19 museums and galleries, 21 libraries, the National Zoo and numerous education and research centers, including the Smithsonian Astrophysics Observatory, the Smithsonian Tropical Research Institute, the Smithsonian Environmental Research Center and the Smithsonian Science Education Center. He is responsible for an annual budget of $1.3 billion, 6,700 employees, 6,900 volunteers and 9,300 digital volunteers. Under Skorton’s leadership, a new strategic plan has been developed with a focus on convening critical conversations about topics of vital public interest. Since Skorton took the helm more than two years ago, the Smithsonian has exceeded its national campaign goal of $1.5 billion; opened the National Museum of African American History and Culture, a must-see destination for Washington visitors; and elevated the arts to a priority along with scientific, historical and cultural research and programs. Educational efforts, both onsite and through digital technology, have also accelerated. Skorton, a board-certified cardiologist, previously was the president of Cornell University, a position he held from July 2006 until 2015. He was also a professor in the Departments of Medicine and Pediatrics at Weill Cornell Medical College in New York City and in Cornell’s Department of Biomedical Engineering at the College of Engineering. His research focus is congenital heart disease and cardiac imaging and image processing. Skorton is the first physician to lead the Smithsonian. An ardent and nationally recognized supporter of the arts and humanities, Skorton has called for a national dialogue to emphasize the importance of funding for these disciplines. He asserts that supporting the arts and humanities is a wise investment in the future of the country.
**Co-Chair**

**Kurt H. Becker**  
*New York University*

Kurt Becker is known for his research into the properties of atmospheric-pressure microplasmas and their use in environmental, biological, and biomedical applications. He holds several US and international patents on stable atmospheric-pressure plasmas and their application and was involved in their commercialization. Kurt Becker earned a Diplom in Physik (MS) and Dr. rer. nat. (PhD) from the Universität des Saarlandes, Saarbrücken, Germany in 1978 and 1981, respectively. He is a Fellow of the American Physical Society, the National Academy of Inventors and he is the recipient of the Dr. Eduard-Martin Prize for Excellence in Research from the Freunde der Universität des Saarlandes, the Thomas Alva Edison Patent Award, and the SASP Erwin Schrödinger Medal and he holds an honorary professorship from the Leopold Franzens Universität Innsbruck, Austria. His is currently principal investigator of a NYSERDA-funded Cleantech Proof-of-Concept Center and a co-principal investigator of the NSF-funded NYC Regional I-Corps Node.

**Co-Chair**

**Amy E. Wright**  
*Florida Atlantic University*

Amy E. Wright, Ph.D., is research professor at the Harbor Branch Oceanographic Institute of Florida Atlantic University. Wright has contributed to innovations in the discovery of marine natural products with therapeutic activity and conducted pioneering work on the exploration of deep-water marine habitats using manned submersibles. She has contributed to the discovery and investigation of over 100 natural products with therapeutic potential including leiodermatolide and neopeltolide and defining the role of manzamine A as an autophagy inhibitor. She defined key structural features of ecteinascidins 729 and 743 solving a 20-year-old question and freeing these compounds to move forward into clinical approval for the treatment of cancer. She is an inventor on 33 U.S. patents and 17 foreign patents and is co-author of over 95 scientific articles and four book chapters. Wright serves on the editorial advisory boards of the *Journal of Natural Products* and *Molecular Cancer Therapeutics*. Wright is a Fellow of NAI.
Keynote Address | Reframing Innovation

Gilda A. Barabino  
AIMBE and The City College of New York

Gilda A. Barabino, Ph.D., is the Daniel and Frances Berg Professor and Dean of The Grove School of Engineering at The City College of New York (CCNY). She holds appointments in the Departments of Biomedical Engineering and Chemical Engineering and the CUNY School of Medicine. Prior to joining CCNY, she served as Associate Chair for Graduate Studies and Professor in the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory. At Georgia Tech she also served as the inaugural Vice Provost for Academic Diversity. Prior to her appointments at Georgia Tech and Emory, she rose to the rank of Full Professor of Chemical Engineering and served as Vice Provost for Undergraduate Education at Northeastern University. She is a noted investigator in the areas of sickle cell disease, cellular and tissue engineering, and race/ethnicity and gender in science and engineering. Dr. Barabino received her B.S. degree in Chemistry from Xavier University of Louisiana and her Ph.D. in Chemical Engineering from Rice University. She is a Fellow of the American Association for the Advancement of Science, the American Institute of Chemical Engineers, the American Institute for Medical and Biological Engineering (AIMBE) and the Biomedical Engineering Society (BMES). She was awarded an honorary doctorate by Xavier University of Louisiana in 2016. She is the President of AIMBE and a Past-President of BMES. Dr. Barabino is a member of the National Science Foundation's (NSF) Advisory Committee for Engineering and has served on the National Institutes of Health's (NIH) National Advisory Dental and Craniofacial Research Council. Dr. Barabino consults nationally and internationally on STEM education and research, diversity in higher education, policy, workforce development and faculty development. She directs the NSF Minority Faculty Development Workshop and is the founder and Executive Director of the National Institute for Faculty Equity.

Presentation | The 90% Invention Commercialization Solution

John R. Nottingham  
Cleveland Clinic and Case Western Reserve University

John R. Nottingham, Ph.D., is trustee of Cleveland Clinic, advisor to Case Western Reserve University, and co-president of Nottingham Spirk, a leading product innovation firm. Nottingham has co-invented and commercialized hundreds of products with combined sales of over $50 billion including Crest SpinBrush: the largest selling powered toothbrush line, Swiffer Sweep+Vac, Axe Bullet Body Spray, Dirt Devil, Dutchboy Twist & Pour, ViewRay MRI and Medtronic EC Vue. He is the recipient of numerous awards including Ohio Academy of Science Patent Impact Award, Edison Gold Award, DuPont Gold Award, IDSA Gold Award, World Presidents Organization Award, Inside Business Hall of Fame and EY Entrepreneur of the Year. He is a lead inventor on over 300 patents which have been licensed to 31 companies. Nottingham is co-founder of 42 venture companies, many of which have been acquired by major corporations. He is a Fellow of NAI.

Presentation | Accessible and Affordable Technologies for the Cancer Care Continuum in the 21st Century

Nirmala Ramanujam  
Duke University

Nirmala (Nimmi) Ramanujam, Ph.D., is professor of biomedical engineering and director of Center for Global Women’s Health Technologies at Duke University. Ramanujam leads a multi-disciplinary translational research program focused on the development of novel optical technologies for noninvasive or minimally invasive assessment of breast and cervical cancer. In October 2013, she founded the Global Women’s Health Technologies Center, a partnership between the Pratt School of Engineering and the Duke Global Health Institute. The center’s mission is to increase research, training and education in women’s diseases, with a focus on breast and cervical cancer. She holds 19 U.S. patents, seven of which have been licensed to Zenalux, a company which she founded. She has published 106 peer reviewed articles, 12 book chapters, and one edited book. Ramanujam is a Fellow of NAI, the Society of Photo-Optical Instrumentation Engineers, AIMBE, and OSA.
Panelist

**Joseph Matal**  
*U.S. Patent and Trademark Office (USPTO)*

Joseph Matal Formerly Performed the Functions and Duties of the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (USPTO). Matal provided leadership and oversight to one of the largest intellectual property offices in the world, with over 12,000 employees and an annual budget of over $3 billion. He also served as the principal advisor to the President, through the Secretary of Commerce, on domestic and international intellectual property policy matters. Prior to this, Matal served as acting Chief of Staff for the agency, and advised the director on legislative matters. Matal has also been an Associate Solicitor in the USPTO’s Office of Solicitor. In this role, he briefed and argued appeals of patent and trademark decisions before the U.S. Court of Appeals for the Federal Circuit and the U.S. District Court, and assisted in the development of legal positions taken by the U.S. Solicitor General in patent and copyright cases before the U.S. Supreme Court. Matal previously served as the General Counsel of the Judiciary Committee for former Senator Jeff Sessions (R-AL), and as a Judiciary Committee Counsel to former Senator Jon Kyl (R-AZ). He was the principal staff drafter and negotiator of legislation that became the Leahy-Smith America Invents Act, the first comprehensive patent law overhaul since 1952. Matal has a bachelor’s degree from Stanford University, and a law degree from the University of California at Berkeley.

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Moderator

**Elizabeth L. Dougherty**  
*U.S. Patent and Trademark Office (USPTO)*

Elizabeth L. Dougherty is Director of Inventor Education, Outreach, and Recognition in the Office of Innovation Development at the United States Patent and Trademark Office (USPTO). In this capacity, she develops, implements, and supervises programs that support the independent inventor community, small businesses, entrepreneurs, and the intellectual property interests of colleges and universities. She 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. She oversees a portfolio of ongoing and future initiatives designed to assist independent inventors, entrepreneurs, and underserved communities. Dougherty is currently on a special assignment to the USPTO’s Office of the Under Secretary and Director where she serves as a Senior Advisor. Directly prior to this special assignment, she was detailed to the USPTO’s Office of Government Affairs where she was and continues to assist in coordinating outreach to the Congressional Caucuses of the 115th Congress. Prior to her current assignment at the USPTO, she served in various executive service roles, most recently as Acting Deputy Director in the Office of Patent Legal Administration. In this capacity, she was responsible for the oversight and direction of a team of senior legal advisors and staff assisting the Patent Examining Corps in matters of legal policy. Having begun her career at the USPTO as a patent examiner, she examined patent applications filed in the area of Class 73, Electric Devices used for Measuring or Testing. She received a bachelor’s degree in physics from the Catholic University of America in 1991 and a juris doctorate from the Columbus School of Law at the Catholic University of America in 1996. She 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.
Panelist

Herbert C. Wamsley
Writer and Consultant

Herbert C. Wamsley served as Executive Director of Intellectual Property Owners Association (IPO) in Washington, DC for 32 years until his retirement in 2015. IPO is a trade association with more than 200 mainly larger corporate members in all major industries that own patents, trademarks, copyrights, and trade secrets. More than 12,000 individuals are involved in the association. He was also Executive Director of the IPO Education Foundation. Earlier in his career he was an attorney and executive at the U.S. Patent and Trademark Office, where he served chief of staff to the head of the agency and director of trademark examining. He returned to the USPTO for a temporary project in 2016 to write on the history of U.S. patent law. He is now a writer and consultant on intellectual property public policy issues. He is currently a member of boards of the Federal Circuit Historical Society, the Alexander and Mabel Bell Legacy Foundation, and Naples Intellectual Property Roundtable. He was elected to IAM Magazine’s IP Hall of Fame. He received his J.D. degree from Georgetown University, where he was an editor of the law review, an L.L.M. degree from George Washington University, and a B.S.E.E. degree from West Virginia University.

Panelist

Chen Wang
American Intellectual Property Law Association

Chen Wang is Deputy Executive Director for Regulatory Affairs of the American Intellectual Property Law Association (AIPLA), based in Arlington, Virginia. In this capacity, she is a senior adviser to the Executive Director, and has principle day-to-day responsibility for AIPLA’s domestic and international intellectual property policy work and regulatory issues of concern to the Association. AIPLA is a national bar association of approximately 13,500 members who are primarily lawyers engaged in private or corporate practice, in government service, and in the academic community. AIPLA members represent a wide and diverse spectrum of individuals, companies, and institutions involved directly or indirectly in the practice of all forms of intellectual property. AIPLA members represent both owners and users of intellectual property. Its mission includes helping to establish and maintain fair and effective laws and policies that stimulate and reward invention while balancing the public’s interest in healthy competition, reasonable costs, and basic fairness. Prior to joining AIPLA’s staff, Wang was Deputy Chief Intellectual Property Counsel at E.I. du Pont de Nemours and Company. Her legal practice encompassed corporate mergers and acquisitions, technology licensing, including university incubated technologies, world-wide patent procurement, freedom-to-operate analysis, counseling related to trade secret protection, IP strategy formulation and implementation as well the preparation, negotiation, implementation and interpretation of agreements with multinationals, universities, and various governmental entities. Wang has a B.S.E. in Chemical Engineering from the University of Michigan College of Engineering and a J.D. from Northwestern University School of Law. She is fluent in Chinese.
Panelist
Thomas L. Stoll
Committee on the Judiciary at U.S. House of Representatives

Thomas L. Stoll currently serves as Counsel to the House Judiciary Committee Subcommittee on Courts, Intellectual Property, and the Internet where he leverages decades of professional experience in government affairs, IP legislation and policy, and litigation, acquired while working on behalf of the ABA, The Boeing Company, the PTO, law firm clients, the White House's IPEC office, and the U.S. Court of Appeals of the Federal Circuit. Previously, Stoll worked on legislation, amicus briefs, and IP policy as the Legislative Consultant for the American Bar Association Intellectual Property Law Section, on external policy and legislative affairs within the Intellectual Property Management group of The Boeing Company, served in the United States Patent & Trademark Office (USPTO) Office of Governmental Affairs, and served as the first staff member in the White House's Office of the Intellectual Property Enforcement Coordinator. Stoll also has extensive intellectual property litigation experience, having served in the USPTO's Office of the Solicitor, as a law firm associate, as a law clerk to the Honorable Arthur J. Gajarsa, and as a staff attorney with the United States Court of Appeals for the Federal Circuit. He was also a primary examiner with the USPTO. Stoll earned his B.S. in Electrical Engineering from the University of Maryland, and his J.D. from the Catholic University of America Columbus School of Law in Washington, D.C. He is a member of the Virginia State Bar, the District of Columbia Bar, and is registered to practice before the USPTO.

SIGNATURE PANEL | NEED FOR COLLABORATION: HOW INDUSTRY, ACADEMIA AND GOVERNMENT PARTNERSHIPS WILL TRANSFORM THE FUTURE

Moderator
Eric D. Isaacs
The University of Chicago

Eric D. Isaacs, Ph.D., is executive vice president for research, innovation and national laboratories and Robert A. Millikan Distinguished Service Professor in the Department of Physics at The University of Chicago. He oversees a broad research portfolio, including Argonne and Fermilab, and an organization of diverse resources that enables faculty and students to tackle cutting-edge, sponsored research and to translate their discoveries for commercial impact. As Provost, he oversaw the growth of the faculty and educational programs at the intersection of many disciplines in the sciences, applied sciences, social science, humanities and professional schools. He served as director of Argonne, where he positioned the laboratory as a leader in addressing major scientific and technological challenges, including the next-generation coherent synchrotron source, exascale computing and energy storage. Isaacs holds three patents and is author or co-author of more than 150 scholarly publications, and is a Fellow of NAI and APS.
Panelist

**Vistasp M. Karbhari**  
*The University of Texas at Arlington*

Vistasp Karbhari, Ph.D., serves as the eighth president of The University of Texas at Arlington where he is committed to ensuring the success of the University’s more than 58,000 students in Texas and around the world. He is a professor in the Department of Mechanical and Aerospace Engineering, and the Department of Civil Engineering. A prolific researcher, President Karbhari is an expert in the processing and mechanics of composites, durability of materials, infrastructure rehabilitation and structural health monitoring, and multi-threat mitigation and has authored or co-authored more than 460 papers in journals and conference proceedings and edited or co-edited six books. He holds one patent and has served as principal investigator or co-principal investigator on more than $37 million in research projects. He is a Fellow of several pre-eminent research organizations, including the NAI; ASM International; the International Institute for Fiber-reinforced Polymers in Construction; the International Society for Structural Health Monitoring of Intelligent Infrastructure; the American Society of Civil Engineers; and the ASCE’s Structural Engineering Institute. During more than 20 years in higher education, he has received numerous awards for research, teaching, and innovation.

Panelist

**Judy L. Genshaft**  
*University of South Florida System*

Since becoming president in 2000, Judy Genshaft, Ph.D., has led USF to prominence as one of the nation’s fastest-growing research universities. With an annual economic impact of over $4.4 billion, USF is instrumental in the economic development of the Tampa Bay region and is a leader in higher education in Florida and nationally. During President Genshaft’s tenure, USF’s research enterprise has grown from $186 million to over $500 million. USF ranks No. 1 in Florida and fifth nationally among public universities, and 11th worldwide, for granted U.S. patents among all universities. Additionally, the National Science Foundation ranks USF among the top 30 universities in the nation for research expenditures, and it is the nation’s ninth largest public research university. President Genshaft has long been committed to economic development efforts in the Tampa Bay region, serving as chair of The Greater Tampa Chamber of Commerce, the Tampa Bay Partnership, and the Greater Tampa Chamber of Commerce Committee of 100. In 2018, she will chair the Tampa Hillsborough Economic Development Corp. She also is active in Florida’s Business/Higher Education Partnership Committee, and is a member of the Association of Public and Land-Grant Universities Board of Directors.

Panelist

**Timothy M. Block**  
*Baruch S. Blumberg Institute*

Timothy M. Block, Ph.D., is president and co-founder of the Hepatitis B Foundation, its research arm, the Baruch S. Blumberg Institute, and the Pennsylvania Biotechnology Center. Block’s most significant contributions to therapeutic drug and biomarker of disease screening and discovery include methods of DNA co-transfer to mammalian cells and discovery of antiviral drugs and biomarkers of liver cancer. He has received numerous honors, including an honorary medical degree from the Bulgarian National Academy, elected fellow of AAAS and Glycobiology Institute of the University of Oxford. He holds 20 issued patents and 23 patent applications, has co-authored more than 240 scholarly papers, and was named a “Visionary in Hepatitis” by the World Hepatitis Alliance in 2017. Block is also adjunct professor at Geisinger Commonwealth School of Medicine and University of Pennsylvania Perelman School of Medicine. Block is a Fellow of NAI.
Remarks and Introduction of Keynote Speaker

Randy E. Berridge
The Corridor

Randy E. Berridge held the position of president of the Florida High Tech Corridor Council since its inception in 1996. Berridge also serves as president of the Berridge Consulting Group, Inc. Previously he held management positions with AT&T including chair of its Central Florida Management Council, district manager of public relations for the Florida division and manager in the legal, HR and manufacturing divisions. Berridge currently serves on the board of governors of the Florida Chamber of Commerce. He is a past member of the Enterprise Florida Stakeholder Council, Florida Research Consortium, Foundation for Florida’s State Colleges and the National Center for Simulation. He is an Emeritus Board Member of the Astronauts Memorial Foundation.
Keynote Address
Andrew H. Hirshfeld
United States Patent and Trademark Office
U.S. Department of Commerce

Andrew H. Hirshfeld, Esq., is commissioner for patents for the United States Patent and Trademark Office (USPTO). He was appointed to the position in July 2015. Hirshfeld leads and manages more than 10,000 employees as the patent organization’s chief operating officer, and manages and directs all aspects of patent operations, examination policy, patent quality management, international patent cooperation, resources and planning, and budget administration. In his previous role as deputy commissioner for patent examination policy, he served as an authority on patent laws, rules, and examining practice and procedure, and provided oversight and direction for the Offices of Petitions, Patent Legal Administration, and the Manual of Patent Examining Procedure. Hirshfeld previously served as Chief of Staff to the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. He began his career at the USPTO in 1994 as a Patent Examiner, became a Supervisory Patent Examiner in 2001, and was promoted to the Senior Executive Service in 2008 as a Group Director in Technology Center 2100, Computer Architecture and Software. Hirshfeld holds a bachelor’s degree from the University of Vermont, and a juris doctorate degree from Western New England College School of Law. Hirshfeld served as a member of the 2017 NAI Fellows Selection Committee.

NAI STUDENT INNOVATION SHOWCASE & EXHIBITION

Co-Chair
Barbara D. Boyan
Virginia Commonwealth University

Barbara D. Boyan, Ph.D., holds the Alice T. and William H. Goodwin, Jr. Chair in Biomedical Engineering and is Dean, School of Engineering at Virginia Commonwealth University in Richmond. She is professor emerita at the Georgia Institute of Technology, where she served as Associate Dean for Research and Innovation in the College of Engineering. Dr. Boyan directs the Virginia branch of the FDA-sponsored Atlantic Pediatric Device Consortium. She is a Fellow in the American Association for the Advancement of Science, the American Institute of Mechanical and Biomedical Engineering, and the World Congress of Biomaterials and was elected to the National Academy of Engineering in 2012. In 2016, she was elected Fellow of the NAI. Boyan was appointed to the National Materials Advisory Board of the National Academies and chaired their Roundtable on Biomedical Engineering Materials and Applications. She has founded a number of biomedical technology companies and has served on the Boards of both public and private companies. The author of more than 480 peer-reviewed papers, reviews, and book chapters, Boyan holds 22 U.S. patents.
Judge

Stephen Key
InventRight

Stephen Key is co-founder of InventRight and an award-winning inventor, a renowned intellectual property strategist, and a lifelong entrepreneur. The dozens of concepts he has brought to market have retailed in Walmart, 7-Eleven, and Disney stores and parks worldwide and been endorsed by Michael Jordan, Alex Trebek, and Taylor Swift. In 1999, Key cofounded inventRight to teach others his unique process for harnessing the power of open innovation. Since then, he has helped people from more than 40 countries license their ideas for new products. His bestselling book about licensing inventions, One Simple Idea, has been translated into six languages. He writes about entrepreneurship and product development online for publications including Forbes, Inc., Entrepreneur, and the design website Core77. Universities and governmental organizations around the world invite him to teach them about product licensing. In 2017, he cofounded Inventor Groups of America, a non-profit dedicated to supporting the efforts of inventors associations across the United States.
Judge

Andy Rathmann-Noonan
National Science and Technology Medals Foundation

Andy Rathmann-Noonan is the Executive Director of the National Science and Technology Medals Foundation (NSTMF). The NSTMF is a D.C. based non-profit that focuses on inspiring the next generation of STEM professionals and the general public through the incredible stories and contributions of the National Medal of Science (NMS) and National Medal of Technology and Innovation (NMTI) Laureates. The Foundation works with the White House, USPTO, and NSF to support the NMS and NMTI programs while also independently creating programs that create environments where inspiration can occur. The NSTMF focuses on bringing the accomplishments of the Laureates into the public space through the celebration and acknowledgment of America’s best and brightest. Rathmann-Noonan believes that the individual narratives of each Laureate as well as their accomplishments can serve as powerful positive motivating forces for individuals both young and old.

Judge

Glenn Vonk
National Council of Entrepreneurial Tech Transfer

Glenn Vonk, Ph.D., is the director of business development and alliances of the National Council of Entrepreneurial Tech Transfer (NCET2). He has over 30 years’ experience leading technology developments in diagnostics, drug delivery, and medical devices including immunoassays, molecular diagnostics, detection systems, and new chemical entities. He established life sciences R&D at BD BioVenture Centre in Singapore leading to several commercialization programs in developing world diagnostics and biopharmaceutical manufacturing. Vonk is inventor of BD intellectual property used in drug delivery and diagnostics products. While in Singapore, he was responsible for infectious disease proof of concept clinical research in Thailand. While director of advanced technology Vonk coordinated innovation resources at corporate R&D and sourced key technologies for BD’s strategic business needs. Vonk rapidly connects new technology options to significant business needs and processes to accelerate their progress to market.

Judge

Helena S. Wisniewski
University of Alaska Anchorage

Helena S. Wisniewski, Ph.D., is vice provost for research and graduate studies at University of Alaska Anchorage (UAA). She has guided innovation from concept to market benefiting society in biometrics, medical devices, image compression, telecommunications, and steganography, and combined facial recognition and intelligent software agents to successfully find missing and exploited children. She served with DARPA and created the first mathematics program with the CIA. She is the founding director of the DHS Arctic Domain Awareness Center of Excellence. At UAA and Stevens Institute of Technology she established commercialization infrastructures and significantly increased the number of invention disclosures and patents. She received the Women in Technology Leadership Award for Entrepreneurship, Award for Extraordinary Leadership from Lockheed, awards for special achievement from DARPA and the CIA, and Distinguished Alumni of William Paterson University. She holds patents in steganography and facial recognition and founded 15 startup companies and serves on the board of directors of Greatbatch Inc., a publicly traded billion-dollar provider of medical devices. In 2007, the Secretary of the Navy appointed her to the Naval Research Advisory Committee. She is a NAI Fellow.
Arizona State University (ASU) is a top-ranked public metropolitan research university, with five academic campuses and four innovation campuses across greater Phoenix and four regional learning centers throughout Arizona. ASU is a comprehensive public research university, measured not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves. For three years in a row, *U.S. News & World Report* has ranked ASU as the #1 Most Innovative School in America.

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

Founded in 1831, NYU is one of the world’s foremost research universities and is a member of the selective Association of American Universities. NYU has degree-granting university campuses in New York, Abu Dhabi, and Shanghai; has eleven other global academic sites, including London, Paris, Florence, Tel Aviv, Buenos Aires, and Accra; and both sends more students to study abroad and educates more international students than any other U.S. college or university. Though its numerous schools and colleges, NYU is a leader in conducting research and providing education in the arts and sciences, engineering, law, medicine, business, dentistry, education, nursing, the cinematic and performing arts, music and studio arts, public administration, social work, and professional studies, among other areas.
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 Central Florida (UCF) and its 13 colleges provide opportunities to 66,000 students from all 50 states and 140 countries. Located in Orlando, Florida, UCF is the nation’s second-largest university with 210 degree programs to choose from. UCF is ranked as one of the “Most Innovative” universities by U.S. News & World Report, a best-value university by The Princeton Review and Kiplinger’s, and one of the nation’s most affordable colleges by Forbes.

The University of Florida’s mission is to prepare our students to lead and influence the next generation and beyond for economic, cultural and societal benefit. Recognized as among the top 10 public universities by U.S. News & World Report, UF is one of the nation’s largest public universities, and is the only member of the Association of American Universities in Florida. UF scientists and scholars conduct about $800 million in research annually and UF consistently ranks among the top universities at transferring its discoveries to the marketplace. Teaching, research and scholarship, and service span all of UF’s academic disciplines and represent its commitment to be a premier university that the state, nation and world look to for leadership. www.ufl.edu.
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, such as a new research campus. Nebraska is the state’s flagship and land-grant university and continues to grow in size and prominence. It welcomed its largest and most diverse incoming class in 2017 and ranked 9th on Springer Nature’s international list of Rising Stars. Nebraska now has more than 26,000 students and more than 180 undergraduate and 120 graduate degree programs, and is ranked as a best-value university by the Princeton Review.

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, separately accredited institutions: USF; USF St. Petersburg; and USF Sarasota-Manatee. Serving more than 49,000 students, the USF System has an annual budget of $1.6 billion and an annual economic impact of $4.4 billion. USF is ranked in the Top 30 nationally for research expenditures among public universities, according to the National Science Foundation. In 2016, the Florida Legislature designated USF as “Emerging Preeminent,” placing USF in an elite category among the state’s 12 public universities. USF is a member of the American Athletic Conference.
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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 over $200 million in support of its mission. For more information, visit: http://lemelson.org
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2016 Lemelson-MIT Prize Winner

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Angela Belcher
2013 Lemelson-MIT Prize Winner

Have a colleague in mind? Contact Betsy Boyle at betsyb@mit.edu.

For a complete list of competition rules and eligibility and to start your application, visit: lemelson.mit.edu/prize
The United States Patent and Trademark Office Congratulates NAI Fellows

The USPTO is proud to collaborate with the National Academy of Inventors and congratulates the new Inductees. Visit www.uspto.gov/inventors to learn more about how the USPTO supports academic and independent inventors.

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ACROSS THE GLOBE, THE ENVIRONMENT IS SAFER THANKS TO OUR DEAN

UVA ENGINEERING CONGRATULATES
DEAN CRAIG H. BENSON
ON HIS ELECTION TO THE NATIONAL ACADEMY OF INVENTORS
The University of South Florida salutes the National Academy of Inventors on its seventh anniversary conference and congratulates our distinguished USF 2017 NAI Fellows

Previous USF NAI Fellows

2012: Richard D. Gitlin, Yogi D. Goswami, Barbara C. Hansen, Shyam Mohapatra, Paul R. Sanberg
2013: Clifford M. Gross, Stephen B. Liggett, James J. Wynne
2014: Robert H. Byrne, Michael W. Fountain, Victor L. Poirier
2015: Selim A. Chacour, David M. Eddy, Dean F. Martin
2016: Israel J. Morejon, Sudeep Sarkar, Thomas W. Weller

Donald B. Keck  
Dennis K. Killinger

UNIVERSITY OF SOUTH FLORIDA.
Steven Stice, Georgia Research Alliance Eminent Scholar, D.W. Brooks Distinguished Professor and senior research scientist in the University of Georgia College of Agricultural and Environmental Sciences Department of Animal and Dairy Science, is a leading researcher in regenerative medicine and director of the UGA Regenerative Bioscience Center. He has led industry and academic research teams’ work on pluripotent stem cells. At UGA, he has conducted pioneering work in developmental biology and genetics to advance animal and human medicine. Currently, the Stice Lab is collaborating with ArunA Biomedical to develop proprietary exosomes for the treatment of central nervous system injuries and neurodegenerative disorders, with an initial focus on stroke.
The University of Miami
Diabetes Research Institute
congratulates

**Dr. Camillo Ricordi**

for his 2017 induction into the
*National Academy of Inventors*
CONGRATULATIONS

DENNIS S. CHARNEY, MD
2017 National Academy of Inventors Fellow Inductee

The Mount Sinai Health System celebrates Dr. Charney’s distinguished career as a world expert in the neurobiology and treatment of mood and anxiety disorders. He is making fundamental contributions to the understanding of the causes of human anxiety, fear, depression, and resilience, and the discovery of new treatments for these disorders.

icahn.mssm.edu/dean
Congratulations
2017 National Academy of Inventors Fellows

We are proud of our trailblazing academic inventors’ strong spirit of scientific innovation.

Amy Wright, Ph.D.
Research Professor
FAU Harbor Branch Oceanographic Institute
2017 NAI Fellow Inuctee

Cory Berkland
Solon E. Summerfield Distinguished Professor
Pharmaceutical Chemistry, Chemical & Petroleum Engineering
University of Kansas School of Pharmacy & School of Engineering

Congratulations
From your friends and colleagues at the University of Kansas
THE HEPATITIS B FOUNDATION,
BARUCH S. BLUMBERG INSTITUTE & PENNSYLVANIA BIOTECHNOLOGY CENTER

Congratulate their Founder and President,

Timothy M. Block, PhD
2017 Fellow of the National Academy of Inventors

www.hepb.org ▪ www.blumberginstitute.org ▪ www.pabiotechbc.org
The University of Massachusetts Medical School congratulates

Guangping Gao, PhD

The Penelope Booth Rockwell Chair in Biomedical Research, professor of microbiology & physiological systems, founding director of the Horae Gene Therapy Center & Vector Core and co-director of the Li Weibo Institute for Rare Diseases Research

2017 Fellow of the National Academy of Inventors

www.umassmed.edu
The University of Pennsylvania would like to congratulate Dr. Krishna P. Singh and Dr. Mark G. Allen on their induction into the 2017 Class of the National Academy of Inventors.

Dr. Krishna P. Singh
Senior Fellow of the Mechanical Engineering Department, an overseer of the School of Engineering and Applied Science and emeritus trustee of the University of Pennsylvania.

Dr. Mark G. Allen
Alfred Fitler Moore Professor of Electrical and Systems Engineering, and Director of the Krishna P. Singh Center for Nanotechnology at the University of Pennsylvania.
Congratulations to
Diran Apelian
on being named a
Fellow of the National Academy of Inventors

WPI is a nationally ranked research university where innovation is at the core of applied research. WPI’s approach to innovation and entrepreneurship covers everything from idea to execution.

Apelian is widely known for his leadership in molten metal processing, innovative casting techniques, and resource recovery and recycling. A member of the National Academy of Engineering and founder of WPI’s Metal Processing Institute, he is a prolific author and editor whose discoveries have helped lay the foundations for significant industrial developments. With his colleagues and students, he has also founded five companies.
The NJIT community congratulates

Dr. Yun-Qing Shi
Professor, Department of Electrical and Computer Engineering

for receiving the prestigious distinction of being named a National Academy of Inventors Fellow.
Y.T. CHENG
2017 National Academy of Inventors Fellow

The University of Kentucky College of Engineering and UK Office of Technology Commercialization celebrate Dr. Cheng’s contributions to materials research for electrochemical energy storage and automotive applications.

CREATE A WORLD THAT WORKS

Prof. Susmita Bose
2017 National Academy of Inventors Fellow

Washington State University celebrates Prof. Bose’s legacy of innovation in the areas of 3D printing of biomaterials, drug-delivery and tissue-materials interactions towards treating bone disorders.

research.wsu.edu
The University of Delaware congratulates Dennis Prather — an inventor who is changing the world for the better. His radiofrequency-photonics technologies save lives, from detecting improvised explosive devices (IEDs) to helping pilots land safely in low-visibility conditions.
The University of Maryland congratulates C.D. Mote, Jr., on his tangible contributions to the profession of engineering and our global society through his work as an inventor, educator and mentor, and as a leader who has advanced higher education, research, and innovation.

**OTHER UMD NAI FELLOWS**
- JOHN S. BARAS (2015)
- RITA R. COLWELL (2016)
- ROBERT E. FISCHELL (2015)
- BEN A. SHNEIDERMAN (2015)

The Office of the Vice President for Research

**Congratulates**

**Dr. Kishor Mehta**

2017 Fellow of the National Academy of Inventors
Drs. Sam Achilefu, David Holtzman, & Eric Leuthardt

Professor Furlani was cited for his “highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society.” A physicist, Furlani holds 152 U.S. patents and 40 foreign patents, and has joint appointments in the Departments of Chemical and Biological Engineering and Electrical Engineering.

Professor Furlani joins other University at Buffalo faculty who were elected NAI Fellows in recent years:

The University of California, Davis Department of Biomedical Engineering congratulates 2017 Fellow Inductee Dr. Laura Marcu

The Howard R. Hughes College of Engineering congratulates

Kwang J. Kim, Ph.D.
NV Energy Professor of Energy and Matter, ASME Fellow
2017 NAI Fellow Inductee
The University of Idaho College of Agricultural and Life Sciences and the Office of Research and Economic Development congratulate

Greg Möller
2017 Fellow of the National Academy of Inventors

Dr. Prabir Dutta
2017 National Academy of Inventors Fellow

Carnegie Mellon University
College of Engineering

CONGRATULATES
Vijayakumar Bhagavatula

2017 NAI Fellow Inductee
• Pioneering research in correlation filters
• Director of CMU-Africa

Your colleagues in technology commercialization at The Ohio State University salute you,

Leif B. Andersson, PhD
Professor, College of Veterinary Medicine & Biomedical Sciences
Professor, Uppsala University in Sweden

Carrie L. Byington, MD
Dean, College of Medicine
Senior Vice President, Health Science Center
Vice Chancellor for Health Services, A&M System
### COMMON ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>American Academy</td>
<td>American Academy of Arts and Sciences</td>
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<tr>
<td>AAAS</td>
<td>American Association for the Advancement of Science</td>
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<tr>
<td>AOCR</td>
<td>American Association for Cancer Research</td>
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<tr>
<td>AAM</td>
<td>American Academy of Microbiology</td>
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<td>AAP</td>
<td>Association of American Physicians</td>
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<td>ACF</td>
<td>American Ceramic Society</td>
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<tr>
<td>ACM</td>
<td>Association for Computing Machinery</td>
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<tr>
<td>ACS</td>
<td>American Chemical Society</td>
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<tr>
<td>AHA</td>
<td>American Heart Association</td>
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<tr>
<td>AIC</td>
<td>American Institute of Chemists</td>
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<tr>
<td>AIChe</td>
<td>American Institute of Chemical Engineers</td>
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<tr>
<td>AIMBE</td>
<td>American Institute for Medical and Biological Engineering</td>
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<tr>
<td>APA</td>
<td>American Psychological Association</td>
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<tr>
<td>APLU</td>
<td>Association of Public and Land-grant Universities</td>
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<tr>
<td>APMI</td>
<td>American Powder Metallurgy Institute</td>
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<tr>
<td>APS</td>
<td>American Physical Society</td>
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<tr>
<td>APhilS</td>
<td>American Philosophical Society</td>
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<tr>
<td>ASCE</td>
<td>American Society of Civil Engineers</td>
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<tr>
<td>ASCI</td>
<td>American Society for Clinical Investigation</td>
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<tr>
<td>ASE</td>
<td>American Society for Engineering Education</td>
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<tr>
<td>ASM</td>
<td>American Society for Microbiology</td>
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<td>ASM International</td>
<td>American Society for Metals International</td>
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<tr>
<td>ASME</td>
<td>American Society of Mechanical Engineers</td>
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<tr>
<td>AUTM</td>
<td>Association of University Technology Managers</td>
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<tr>
<td>BMES</td>
<td>Biomedical Engineering Society</td>
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<tr>
<td>DARPA</td>
<td>Defense Advanced Research Projects Agency</td>
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<tr>
<td>FDA</td>
<td>U.S. Food and Drug Administration</td>
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<tr>
<td>HHMI</td>
<td>Howard Hughes Medical Institute</td>
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<tr>
<td>IAPR</td>
<td>International Association of Pattern Recognition</td>
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<tr>
<td>IEEE</td>
<td>Institute of Electrical and Electronics Engineers</td>
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<tr>
<td>IET</td>
<td>Institution of Engineering and Technology</td>
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<tr>
<td>ISD</td>
<td>International Society for Differentiation</td>
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<tr>
<td>MRS</td>
<td>Materials Research Society</td>
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<tr>
<td>NAE</td>
<td>National Academy of Engineering</td>
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<td>NAEd</td>
<td>National Academy of Education</td>
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<td>NAM</td>
<td>National Academy of Medicine</td>
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<td>NAS</td>
<td>National Academy of Sciences</td>
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<td>NCI</td>
<td>National Cancer Institute</td>
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<td>NIH</td>
<td>National Institutes of Health</td>
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<td>NIHFC</td>
<td>National Inventors Hall of Fame</td>
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<td>NSF</td>
<td>National Science Foundation</td>
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<tr>
<td>OSA</td>
<td>Optical Society of America</td>
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<tr>
<td>PAS</td>
<td>Pontifical Academy of Sciences</td>
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<tr>
<td>PECASE</td>
<td>Presidential Early Career Award for Scientist and Engineers</td>
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<tr>
<td>RSC</td>
<td>Royal Society of Chemistry</td>
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<tr>
<td>SDB</td>
<td>Society for Developmental Biology</td>
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<tr>
<td>SFB</td>
<td>Society for Biomaterials</td>
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<tr>
<td>SPIE</td>
<td>International Society for Optics and Photonics</td>
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<tr>
<td>TMS</td>
<td>The Minerals, Metals and Materials Society</td>
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<tr>
<td>U.S. DoD</td>
<td>United States Department of Defense</td>
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<tr>
<td>U.S. DOE</td>
<td>United States Department of Energy</td>
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Randy Wadle runs NetWise Technology based in Bradenton, Florida. He’s grown his company since 1999 with the help of fellow entrepreneurs and small-business resources available throughout the state. One invaluable resource is the Florida Virtual Entrepreneur Center (FLVEC), which Randy says, “has opened doors to new business.”

FLVEC lists local and state resources so entrepreneurs like Randy can take the next step in business.

Check out FLVEC.com for more of Randy’s story and others across the state.
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