Florida Inventors Hall of Fame Celebrates 2024 Inductees: Ushering in a New Era of Innovation

TAMPA, Fla (May 30, 2024) – The Florida Inventors Hall of Fame proudly announces its esteemed 2024 Inductees: nine visionaries whose groundbreaking inventions have propelled technological advancement and reshaped the landscape of American innovation. These inventors exemplify Florida's rich tradition of ingenuity.

Paul R. Sanberg, Chair of the Florida Inventors Hall of Fame Advisory Board and President of the National Academy of Inventors, lauded the new inductees, "The Class of 2024 represents the best of innovation in Florida, and their achievements underscore the critical role that innovation plays in driving progress and improving the quality of life for people in our state, our nation and around the world. Their groundbreaking work not only advances scientific discovery but also strengthens the economy and enhances our global competitiveness."

The 2024 Class includes: Barry Byrne, who founded the field of muscle gene therapy; Patricia Davis-Lemessy, whose novel advances in polymer chemistry significantly improved outcomes for cardiac and orthopedic surgery; Peter Delfyett, who was the first to develop and commercialize low-noise, high-power, ultrafast semiconductor lasers; Hariklia “Lili” Deligianni, whose breakthrough technologies in electrochemical processes revolutionized the capability of microelectronic devices; Greg Mesaros, whose innovations led to industry-disrupting advances in digital tools for business operations; Sylvia Wilson Thomas, whose transformational innovations opened the field of miniaturized electronic circuitry and advanced materials; Anthony “Tony” Van Heugten, who created cutting-edge, liquid crystal technology to restore clear vision; Rachana Vidhi, who pioneered new applications for energy integration and battery technology; and Daniel Yeh, whose revolutionary NEWgenerator technology has transformed wastewater recycling for our planet as well as in space.

“The life of the inventor comes with a unique set of challenges and obstacles. In our drive to solve some of the nation’s, and in fact the world’s, greatest problems, as inventors, we are met with doubt, fear, uncertainty, and any number of seen and unforeseen tests. However, as the 2024 Inductees demonstrate, courageous and creative problem solving comes from embracing adversity and cultivating resilience and agility,” said Sanberg, who is also a 2015 Florida Inventors Hall of Fame Inductee and holds 57 patents.

The 2024 Inductees are the tenth class inducted into the Florida Inventors Hall of Fame. They collectively hold more than 350 U.S. patents and come from across industry and academia. Since its founding in 2013, the Florida Inventors Hall of Fame has inducted 77 inventors, who collectively hold over 5,200 U.S. patents.

Elizabeth Dougherty, Eastern Regional Outreach Director for the United States Patent and Trademark Office and member of the Florida Inventors Hall of Fame Selection Committee and Advisory Board, applauded the inductees for their remarkable contributions, saying, “Innovation is the lifeblood of progress, and the Class of 2024 has shown us what is possible when creativity meets determination. Their inventions not only drive progress and economic growth, but also address pressing societal challenges, making our world a better place for all.”

The Florida Inventors Hall of Fame is dedicated to honoring and preserving the legacy of Florida’s most accomplished inventors. Through its annual induction ceremony and IGNITE education and outreach program, the Hall of Fame seeks to inspire future generations of inventors and foster a culture of innovation across the state.

Inductees are selected annually through a nomination process open to all inventors (living or deceased) with a connection to the state of Florida. The nominations are reviewed by a Selection Committee made up of prominent experts in relevant fields of innovation.

The 2024 class of distinguished inventors will be formally inducted into the Florida Inventors Hall of Fame at the Induction Ceremony and Gala on Friday, Oct. 25, 2024, at the Tampa Marriott Water Street. Details about the Ceremony and Gala are available here.

The 2024 Inductees of the Florida Inventors Hall of Fame are:

BARRY BYRNE
Professor and Associate Chair of the University of Florida Department of Pediatrics and the Director of the Powell Gene Therapy Center at UF, Barry J. Byrne, M.D., Ph.D. pioneered a new field of gene therapy through his groundbreaking research that identified novel methods to deliver DNA to muscle cells using recombinant adeno-associated virus vectors. A clinical scientist and pediatric cardiologist, Byrne

invented several AAV gene therapies to cure rare genetic diseases with a focus on conditions that lead to skeletal muscle weakness and abnormalities in heart and respiratory function. Additionally, he has founded four startup companies in Florida, including AGTC, Florida Biologics (now ThermoFisher), Lacerta Therapeutics, and AavantiBio. Byrne holds 23 U.S. Patents and received the See the Light Award from the Mathew Forbes Romer Foundation. He is a member of the Board of Directors for AavantiBio, Inc. and serves on the MDA Venture Philanthropy Advisory Committee, and is a Chief Medical Advisor for the Muscular Dystrophy Association.

PATRICIA DAVIS-LEMESSY

An Engineering Fellow at Cordis Corporation, Patricia Davis-Lemessy, Ph.D. is a global leader in cardiovascular devices. She developed novel polymers that address the characteristics required to conduct coronary angioplasty on blocked coronary arteries. Prior to this, Davis-Lemessy made groundbreaking contributions to the medical device design and manufacturing industry at W.L. Gore & Associates, Boston Scientific Corporation, Guidant Corporation, ACS, Merit Medical Systems, and the Bascom Palmer Eye Institute. With over 34 years of experience in the biomedical engineering field, a strong background in polymer science, and technical leadership experience in the medical implant field, Davis-Lemessy's vast work experience spans angioplasty catheters, ocular implants, tendon implants, hip prostheses, and controlled drug delivery. She holds four U.S. patents which have been leveraged by global companies (including ACS, Cordis Corp., and Cardinal Health) with global distribution networks. Additionally, Davis-Lemessy is the author of several children's books, including *Positive Affirmations for the Black Child*, under the pen name of Patsy Clarke.

PETER J. DELFYETT

Peter J. Delfyett, Ph.D. is the Director of the Townes Laser Institute, a Pegasus Professor and Distinguished Professor of Optics & Photonics, Electrical & Computer Engineering and Physics at the University of Central Florida. Delfyett has made significant discoveries in the areas of ultrafast optical device physics, semiconductor diode based ultrafast lasers and their application to optical communication and signal processing, including the development of the world's fastest, most powerful mode-locked semiconductor laser diode. He also founded the spin-off company, Raydiance, Inc. Delfyett holds 37 U.S. patents. He is an elected member of the National Academy of Engineering; and received the APS Arthur L. Schawlow Prize in Laser Science, IEEE Photonics Society William Streifer Scientific Achievement Award, The Townsend Harris Award, and APS Edward Bouchet Award. He is also a Fellow the American Physical Society, American Association Advancement of Science, Institute of Electrical and Electronics Engineers, National Academy of Inventors, Optica, and SPIE-The International Society for Optics & Photonics.

HARIKLIA "LILI" DELIGIANNI

For over three decades, Hariklia "Lili" Deligianni, Ph.D. was with IBM's Thomas J. Watson Research Center where she played a leading role in the groundbreaking introduction of electrochemical technology in semiconductor chips. She also co-invented and developed the copper electrodeposition process for on-chip interconnects. The introduction of electroplated copper interconnects has revolutionized the performance of computer chips which was a major disruptor to the industry and led to world-wide commercialization of electronic components for the semiconductor and telecommunications industries. After retiring from IBM, Deligianni founded Sense4Me, Inc., a digital healthcare and data provider. She also serves as an Adjunct Professor at Columbia University. Deligianni holds 167 U.S. patents and is an elected member of the National Academy of Engineering. In 2004, along with her IBM research team, Deligianni was awarded the National Medal of Technology & Innovation. She is a Fellow of the Electrochemical Society and the first female recipient of the Vittorio de Nora Award of the Electrochemical Society. She also received the E.V. Murphree Award in Industrial and Engineering Chemistry from the American Chemical Society.

GREG MESAROS
Greg Mesaros is the Chief Executive Officer and Chair of Triadex Services, an award-winning, data-driven marketing firm he founded over 20 years ago that leverages proprietary data analytics and AI to unlock key growth drivers for businesses. Mesaros successfully commercialized the first seller-initiated social buying platform via an ASP model. As a sole inventor, Mesaros' first patent application yielded 45 patents across 10 patent families in such diverse categories as search, e-commerce, mobile devices, predictive analytics, social networks, and location-based marketing. He has also licensed his inventions to over 70 companies, including Fortune 500 organizations, across a multitude of industries. Mesaros holds 45 U.S. patents and has been recognized with the TechKnow and Manny Awards. He was also recognized by the State of Ohio with the E-Commerce Pioneer Award. Additionally, Mesaros was named as a Top 50 Tampa Business Leader and *Purchasing Magazine* identified him one of the top 40 e-procurement visionaries in the country.

SYLVIA WILSON THOMAS
The Vice President for Research & Innovation and President & CEO of the Research Foundation at the University of South Florida, Sylvia Wilson Thomas, Ph.D. directs all aspects of USF's research enterprise. Thomas also serves as a Professor of Electrical Engineering at USF's College of Engineering where she leads the Advanced Membrane and Materials Bio and Integration Research Laboratory. Thomas' pioneering research is on the leading edge of miniaturized devices and nanotechnologies for sensing applications and has opened new pathways for bio and nano electronic device integration using advanced membrane/material systems to meet global technological challenges. Prior to joining USF, Thomas was a research scientist at leading industry companies such as Bell Labs/Agere Systems/Lucent Technologies, Kimberly Clark Corp, IBM, and Procter & Gamble. Thomas holds 13 U.S. Patents. She is a Fellow of the American Institute for Medical and Biological Engineering and the National Academy of Inventors, and a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE). She is also the recipient of the 2020 Black Engineer of the Year (BEYA) STEM Educational Leadership Award.

ANTHONY "TONY" VAN HEUGTEN
Anthony "Tony" Van Heugten is the Chief Technology Officer at e-Vision Smart Optics, Inc. where he pioneered the development of liquid crystal tunable lens technology for intra-ocular lenses, contact lenses, eyewear, and virtual and augmented reality devices. His innovations at e-Vision range from resistive bridges for practical electro-active contact lenses to dynamic focusing elements for augmented reality headsets to electro-optic phoropters for performing vision examinations. Van Heugten's work on liquid-crystal-based lenses is being commercialized in Japan by Mitsui Chemicals as the TouchFocus™ instantaneously adjustable eyewear for near- and far-sighted vision. Prior to joining e-Vision, Van Heugten co-founded and served as the Chief Technology Officer of WaveTec Vision Systems, Inc. where he co-invented a wavefront sensor that provides key intra-operative measurements for refractive cataract surgery. Additionally, Van Heugten has commercialized or licensed a number of his innovations including products for interventional cardiology, vascular access, and laser-vision-correction lasers. Van Heugten holds 49 U.S. patents.

RACHANA VIDHI
The Director of Technical Sales at NextEra Analytics, Rachana Vidhi, Ph.D. leads the technical sales team for NextEra 360™, a cutting-edge software platform addressing end-to-end energy management and decarbonization needs. In this role, she is responsible for identifying and implementing software solutions to assist customers across various stages of the energy ecosystem, driving efficiency and sustainability. Prior to her current position, Vidhi held several key roles at NextEra Energy Resources, where she played a pivotal role in developing and integrating renewable energy projects across the United States, led the development of energy storage projects, and negotiated purchase contracts for solar and storage projects totaling over 700 MW. Vidhi holds nine U.S. patents. She has received a number of awards including the

Outstanding Young Alumni Award from the University of South Florida College of Engineering and inclusion in the GreenBiz 30 Under 30 list.

DANIEL YEH
Daniel H. Yeh, Ph.D. is a professor in the Department of Civil and Environmental Engineering at the University of South Florida, where he leads the Membrane Biotechnology Lab. Yeh also serves as a visiting professor at the NASA Kennedy Space Center. Yeh is an international leader in the areas of wastewater recycling, sustainable and resilient infrastructure, renewable bioenergy, and global WaSH (water, sanitation, and hygiene). Most notably, Yeh pioneered the NEWgenerator, a portable and self-contained solar-powered toilet system which converts collected human waste into fertilizer nutrients, renewable energy, and clean water that can be used for crop irrigation and toilet flushing. The NEWgenerator operates completely off-grid, making it especially effective in areas where clean water and access to consistent power are scarce or unavailable. Yeh holds nine U.S. patents and is a Senior Member of the National Academy of Inventors. Yeh's innovations have been recognized by the Bill & Melinda Gates Foundation and NASA. He was awarded the 2024 AUTM Better World Project Award, the 2020 Patents for Humanity Award from the US Patent and Trademark Office, and the 2014 Cade Prize.

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About the Florida Inventors Hall of Fame

The Florida Inventors Hall of Fame (FIHF) recognizes and commends Florida inventors whose achievements have advanced the quality of life for Floridians, the state, and the nation. Founded in 2013 and located at the University of South Florida Research Park in Tampa, FIHF was recognized by Florida Senate Resolution 1756 in April of 2014. FIHF encourages individuals of all ages and backgrounds to strive toward the betterment of Florida and society through continuous, groundbreaking innovation, and, by commending the incredible scientific work being accomplished in the state, to further the growth of Florida's innovation sector. FIHF is supported, in part, by the Florida High Tech Corridor.

More information is available at www.FloridaInvents.org or contact info@FloridaInvents.org.

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