



Florida Inventors

HALL OF FAME

SIXTH ANNUAL INDUCTION
CEREMONY & GALA

FRIDAY, SEPTEMBER 20, 2019

A decorative footer consisting of a pattern of overlapping green triangles in various shades, creating a modern, abstract geometric design.

Welcome



Welcome to the 6th Annual Induction Ceremony and Gala of the Florida Inventors Hall of Fame. We are honored to have you with us this evening. It is a privilege to be recognizing, for the sixth year in a row, the inventive spirit that is helping Florida stand out as a leader in innovation and economic development.

The Florida Inventors Hall of Fame was founded at the University of South Florida in 2013, which houses its Walk of Fame and museum exhibit. Tonight we are honored to have the University of South Florida's president, Dr. Steven Currall, here with us to celebrate this year's inductees.

On April 30, 2014, the Florida Inventors Hall of Fame was recognized by Florida Senate Resolution 1756 to honor outstanding Florida inventors. The resolution, accepted at the request of Senator Jeff Brandes, recognizes the Florida Inventors Hall of Fame "for its commitment to honoring inventors and celebrating innovation, discovery, and excellence in this state." With valued support from the United States Patent and Trademark Office and the U.S. Commissioners for Patents, as of 2019, we will have inducted a total of 43 inventors from throughout Florida.

Nomination to the Florida Inventors Hall of Fame is open to all Florida inventors (living or dead) who are or have been residents of Florida and whose connection to Florida has informed their inventive work. The nominee must be a named inventor on a patent issued by the United States Patent and Trademark Office. The impact of the inventor and his or her invention(s) should be significant to society as a whole and should have been commercialized, utilized, or have led to important innovations.

Each year inductees are nominated by their peers through an open and highly competitive nomination process. The nominations are reviewed by our Selection Committee, comprising distinguished experts in relevant fields of innovation throughout the state. Nominees elected to the Hall of Fame are inducted at our annual gala, where we honor their achievements and acknowledge and celebrate their influence on society.

On behalf of the Florida Inventors Hall of Fame Advisory Board, we thank our Corporate Partner, the Florida High Tech Corridor Council, and the Corridor universities—University of Central Florida, University of Florida, and University of South Florida—whose continued and generous support has been instrumental in the success of the Florida Inventors Hall of Fame.

And, finally, we are incredibly grateful to all of our valued sponsors, new and returning, for helping make this possible.

Paul R. Sanberg

Chair, Advisory Board

Florida Inventors Hall of Fame

Florida Senate Resolution

By Senator Brandes

A resolution recognizing the inaugural year of the Florida Inventors Hall of Fame,
located at the University of South Florida in Tampa.

WHEREAS, Florida is a state where innovation, research, and discovery thrive and where great American inventors, such as Thomas Edison, have lived and worked, and

WHEREAS, the Florida Inventors Hall of Fame endeavors to encourage individuals of all ages and backgrounds to strive toward the betterment of Florida and society through continuous, groundbreaking innovation, and

WHEREAS, the Florida Inventors Hall of Fame is located at the University of South Florida in order to honor and celebrate the inventors from this state whose achievements have advanced the quality of life of all Americans, and

WHEREAS, the Florida Inventors Hall of Fame will be one of only seven state inventors halls of fame in the nation which will recognize the best and brightest inventors from their respective states, and

WHEREAS, the Florida Inventors Hall of Fame is led by an advisory board consisting of exceptional individuals from the private and public sectors and academia, and

WHEREAS, the inductees to the Florida Inventors Hall of Fame will be chosen by a selection committee composed of equally distinguished members, and

WHEREAS, the inaugural class of inventors inducted to the Florida Inventors Hall of Fame will be recognized in September 2014. NOW, THEREFORE

Be It Resolved by the Senate of the State of Florida:

That the Florida Inventors Hall of Fame is recognized on the occasion of its inaugural year for its commitment to honoring inventors and celebrating innovation, discovery, and excellence in this state and that the University of South Florida is commended for founding this institution.

BE IT FURTHER RESOLVED that a copy of this resolution be provided to the Florida Inventors Hall of Fame for display as recognition of the Senate's support of innovation in Florida.



This is a true and correct copy
of Senate Resolution No. 1750,
adopted by the Florida Senate
on April 30, 2014.


Dan Gaetz
President of the Senate

ATTEST:


Debbie Brown
Secretary of the Senate



Congressional Record

PROCEEDINGS AND DEBATES OF THE 116th CONGRESS, FIRST SESSION

Vol. 165

WASHINGTON, WEDNESDAY, JULY 24, 2019

No. 125

House of Representatives

HON. GUS M. BILIRAKIS OF FLORIDA

Extension of Remarks

Florida Inventors Hall of Fame 2019

Wednesday, July 24, 2019

Mr. BILIRAKIS. Madam Speaker, I rise today to honor the eight inventors who have been recognized as the 2019 Inductees of the Florida Inventors Hall of Fame. To be named as an Inductee, these inventors were nominated by their peers nationwide and have undergone the scrutiny of the Florida Inventors Hall of Fame Selection Committee. As a result, their innovations have been identified as significantly impacting the quality of life, economic development, and welfare of their communities, the residents of Florida, and the United States.

The Florida Inventors Hall of Fame was founded in 2013 by Paul R. Sanberg, Senior Vice President for Research, Innovation and Knowledge Enterprise, and Judy Genshaft, former President, at the University of South Florida. It was recognized by the Florida Senate with Senate Resolution 1756, adopted on April 30, 2014. Its mission is to encourage individuals of all backgrounds to strive toward the betterment of Florida and society through continuous, groundbreaking innovation by celebrating the incredible scientific work that has been or is being accomplished in Florida and by its citizens.

Nomination to the Florida Inventors Hall of Fame is open to all Florida inventors (living or dead) who are or have been residents of Florida. The nominee must be a named inventor on a patent issued by the United States Patent and Trademark Office. The impact of the inventor and his or her invention should be significant to society, and the invention should have been commercialized, utilized, or led to important innovations.

The 2019 Inductees of the Florida Inventors Hall of Fame are:

Michael Bass: Professor Emeritus at the University of Central Florida selected for his significant inventions in optics and spectroscopy that have optimized the use of lasers and optical systems, aiding in the treatment of major diseases and improving the design of the world's fiber optic communication system.

Joanna S. Fowler: Native Floridian, University of South Florida alumni, and 2008 National Medal of Science recipient selected for her transformative research that enabled the use of molecular imaging to more accurately identify and treat illnesses ranging from drug addiction to cancer.

Hedy Lamarr (1914–2000): Former Florida resident for nearly two decades, Oscar-nominated actress, and 2014 National Inventors Hall of Fame inductee selected for her ground breaking invention of the Secret Communication System, which led to the creation of various technologies used today to support Wi-Fi, GPS, and Bluetooth.

Thomas A. Lipo: Research Professor at the Florida State University Center for Advanced Power Systems selected for his pioneering innovations in the field of electrical machinery and power electronics that improved the technology that runs subway cars as well as paved the way for hybrid and electric vehicles.

Alan F. List: CEO and president of Moffitt Cancer Center selected for his dedication to understanding cancer biology and developing novel therapeutic strategies for treating hematologic malignancies such as myelodysplastic syndrome (MDS) and acute myelocytic leukemia (AML).

Chris A. Malachowsky: University of Florida alum selected for inventing the Graphics Processing Unit (GPU) that transformed the visual computing industry, revolutionized high performance computing, and opened the door to modern artificial intelligence.

Luther George Simjian (1905–1997): prolific inventor and founder of Tampa based Reflectone, Inc, who developed the Optical Range Estimation Trainer used during WWII, which became the standard for simulation defense training, and for his many other inventions including his ATM concept that revolutionized the banking system.

Richard A. Yost: University of Florida professor of chemistry selected for his invention of the triple quadrupole mass spectrometer, a ground breaking analytical instrument that is used daily in drug development, disease testing, food safety, and environmental studies.

Innovation and invention are the building blocks of our nation. I applaud these highly accomplished individuals and the organizations that support them in their quest to change the world in ways that truly benefit humanity. It is because of the perseverance of these inventors that future generations are encouraged to reach beyond their limits and push the boundaries of innovation.



Program

MASTER OF CEREMONIES

Don Germaise

*Award-Winning Television Journalist,
ABC Action News*

OPENING REMARKS

Paul R. Sanberg

*Chair, Florida Inventors Hall of Fame
Advisory Board*

Andrew Hirshfeld

*Commissioner for Patents,
United States Patent and Trademark Office*

Steven Currall

USF President

INDUCTION CEREMONY

Commissioner Hirshfeld

Dr. Sanberg

INDUCTEES

Joanna S. Fowler, Ph.D.

Miami native, University of South Florida graduate, and 2008 National Medal of Science Laureate for her transformative research that enabled the use of imaging technology to identify and treat illnesses from drug addiction to cancer.

Tampa

Michael Bass, Ph.D.

University of Central Florida professor for his significant inventions in optics and spectroscopy that optimized the use of lasers and optical systems, aiding in the treatment of disease and improving the world's fiber optic communication system.

Orlando

Hedy Lamarr (1914-2000)

Hollywood icon and Florida resident for her groundbreaking invention of the Secret Communication System, which led to the creation of various technologies used to support Wi-Fi, GPS, and Bluetooth, spawning the advancement of cybersecurity.

Casselberry

Thomas A. Lipo, Ph.D.

Research Professor at Florida State University for his pioneering innovations in the field of electrical machinery and power electronics that improved the technology that runs subway cars and paved the way for hybrid and electric vehicles.

Tallahassee

Alan F. List, M.D.

President and CEO of Moffitt Cancer Center for his dedication to understanding cancer biology and developing novel therapeutic strategies for treating hematologic malignancies.

Tampa

Chris Malachowsky

University of Florida graduate and NVIDIA co-founder for inventing the Graphics Processing Unit (GPU), which transformed the computer graphics industry, revolutionized high performance computing, and opened the door to modern artificial intelligence.

Gainesville

Luther G. Simjian (1905-1997)

Prolific inventor and founder of Reflectone, Inc., who developed the Optical Range Estimation Trainer, which became the standard for simulation defense training and for his many other inventions including his ATM concept that revolutionized banking.

Tampa

Richard Yost, Ph.D.

University of Florida professor for his invention of the triple quadrupole mass spectrometer, a groundbreaking analytical instrument that is used daily in drug development, disease testing, food safety, and environmental studies.

Gainesville

Speakers



Don Germaise

Don Germaise was an award winning television journalist for ABC Action News, in Tampa, for nearly 20 years before retiring to devote his life to volunteering. He became most well-known for his hurricane coverage, coining the phrase “hunker down” while standing in the storms. In 2019 Tampa Bay Times readers voted Don one of the top three weather personalities in Tampa Bay history. Since retiring, Don has criss-crossed the globe volunteering in places like Vietnam, Romania, Haiti, Colombia, Peru and Guatemala. Closer to home Don helps out at Feeding Tampa Bay, Ronald McDonald House, Hillsborough County Schools, Keep Tampa Bay Beautiful, Crime Stoppers of West Central Florida, Metropolitan Ministries and Quantum Leap Horse Farm.



Paul R. Sanberg

*Chair, Florida Inventors Hall of Fame
Advisory Board*

2015 Inductee, Florida Inventors Hall of Fame

Dr. Paul R. Sanberg is Senior Vice President for Research, Innovation & Knowledge Enterprise; Distinguished University Professor; and Executive Director, Center of Excellence for Aging and Brain Repair at the University of South Florida. His research involves discovering innovative ways to repair the damaged brain, and he helped lead the team that demonstrated umbilical cord blood derived cells may be useful in treating stroke, spinal cord injury, ALS and Alzheimer’s. He holds 163 U.S. and foreign patents and is the author of over 676 articles and 14 books, with more than 33,000 citations. His industry experience includes being a founder of Saneron CCEL Therapeutics, Inc. and Scientific Director for CytoTherapeutics, Inc. (Stem Cells Inc.), both of which were involved in cell therapy for degenerative disorders. He is also President of the National Academy of Inventors.



Andrew H. Hirshfeld, Esq.

*Commissioner for Patents, U.S. Patent and Trademark Office (USPTO)
Florida Inventors Hall of Fame Advisory Board*

As Commissioner for Patents, Andrew Hirshfeld manages and leads the patent organization as its chief operating officer. He is responsible for managing and directing all aspects of this organization, which affect administration of

patent operations, examination policy, patent quality management, international patent cooperation, resources and planning, and budget administration. Hirshfeld has led the Patent business unit emphasizing both transparency and collaboration. He has managed efforts to ensure the consistency and reliability of patent grants and played a lead role in ensuring that the examining corps is provided with updated examination guidance and training. Hirshfeld has held numerous leadership roles since he began his career at the USPTO in 1994 as a Patent Examiner.



Steven Currall

System President, University of South Florida

Steven C. Currall became the seventh president of the University of South Florida on July 1, 2019. He also is a tenured professor at USF. Dr. Currall joined USF from Southern Methodist University in Dallas, Texas, where he served as provost and vice president for academic affairs from 2016 to 2019. While working at Rice

University in Houston, Texas, he founded the Rice Alliance for Technology and Entrepreneurship, which assisted in the launch of more than 160 new technology start-up companies. Those firms raised in excess of \$300 million in equity capital. He has conducted research and taught for three decades on organizational psychology topics such as innovation, emerging technologies, negotiation and corporate governance. Dr. Currall was also lead author of a book on university-business-government collaboration entitled, *Organized Innovation: A Blueprint for Renewing America's Prosperity* (Oxford University Press). The book, which is based on a study funded by the NSF, was the culmination of a 10-year research project on interdisciplinary research involving science, engineering and medicine. Dr. Currall is a Fellow of the American Association for the Advancement of Science.

Thank you to our Corporate Sponsor

CHANGE
is on the horizon.

Insiders know what is happening in the Florida High Tech Corridor and they are excited – excited for emerging new industries, recognition from around the world, a friendly business climate and more.

The Corridor is an agent for change.

THE FLORIDA HIGH TECH
CORRIDOR

A regional economic development initiative of:



UNIVERSITY OF
CENTRAL FLORIDA



UNIVERSITY OF
SOUTH FLORIDA



UNIVERSITY OF
FLORIDA

To learn more and see how you fit into a changing landscape, visit FloridaHighTech.com.



2019

*Florida Inventors Hall of Fame
Inductees*

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Joanna S. Fowler, Ph.D.

*Senior Chemist Emeritus
Former Director, PET Program
Brookhaven National Laboratory
Graduate, University of South Florida
Tampa*

8 U.S. PATENTS

Joanna S. Fowler is a world leader in positron emission tomography (PET) chemistry, a groundbreaking imaging technology that is used worldwide to more accurately identify and treat illnesses ranging from drug addiction to cancer. Fowler is a senior chemist emeritus and former director of the PET program at Brookhaven National Laboratory as well as an adjunct professor at SUNY at Stony Brook and the Mount Sinai School of Medicine in New York. In 1976, she and her colleagues synthesized ¹⁸F-fluorodeoxyglucose (FDG), the most commonly used PET radiotracer today.

Today, FDG is widely used in hospitals and research centers throughout the world, significantly impacting human health. Additionally, Fowler has been a major contributor in the field of brain research, particularly in regard to substance abuse and addiction. Using PET, Fowler has been able to provide a better understanding of the characteristics and cerebral process behind addictive behaviors. Her research has focused on developing radiotracers to measure changes in the brain circuits that are disrupted during drug addiction, helping to address the current-day opioid epidemic.

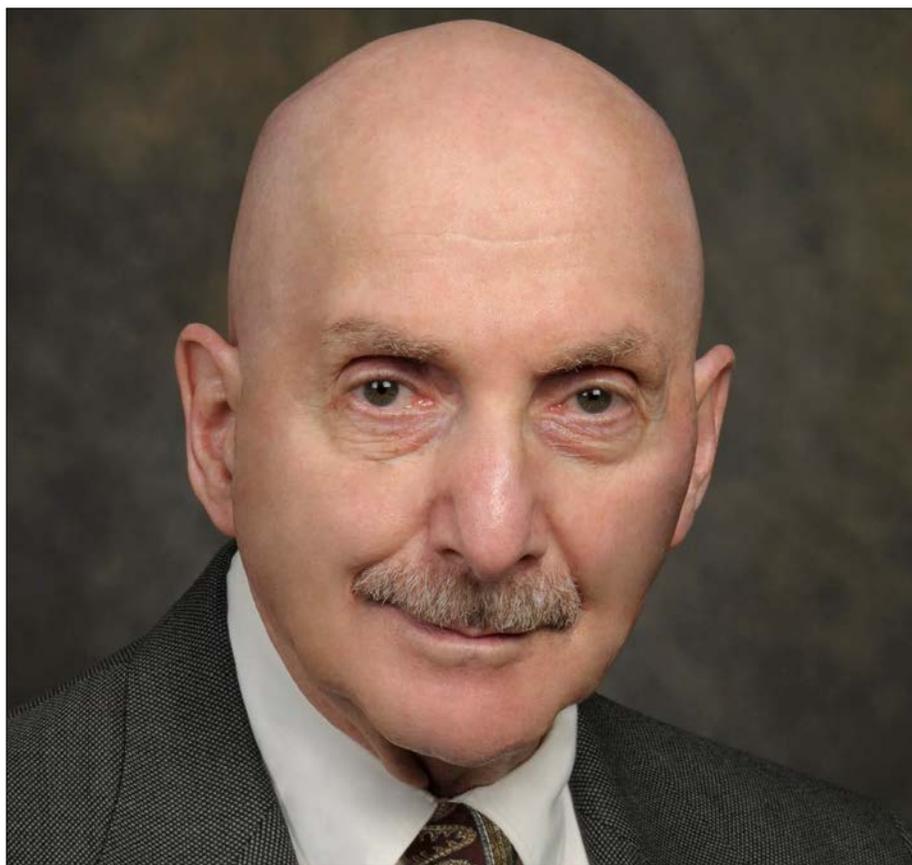
Fowler was born in Miami, Florida and earned her Bachelor's degree from the University of South Florida (USF) in Tampa. Continuing her education, she received her Ph.D. from the University of Colorado, and completed post-doc work at the University of East Anglia in England and Brookhaven. In 2011, Fowler was awarded an Honorary Doctorate of Science from USF. Throughout her career, she has mentored numerous scientists in cross-disciplinary research and has maintained her ties to Florida by supporting the education of chemists at USF as a Martin Lecturer in the Department of Chemistry. Fowler has published over 350 peer-reviewed articles and holds eight U.S. patents.

In 2008, Fowler received the nation's highest award for lifetime achievement in science, the National Medal of Science. She is also a member of the National Academy of Sciences (NAS) and, in 2009, was presented with the NAS Award in Chemical Sciences for her innovative research in the chemical sciences that contributed to the better understanding of the natural sciences and to the benefit of humanity. Her other honors include the American Chemistry Society's Glen T. Seaborg Award for Nuclear and Radiochemistry (2002), the Society of Nuclear Imaging in Drug Development's Alfred P. Wolf Award (2000), the Department of Energy's E.O. Lawrence Award (1999), and the Frances P. Garvan-John M. Olin Medal in 1998.

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Michael Bass, Ph.D.

*Professor Emeritus
College of Optics and Photonics/CREOL/FPCE
University of Central Florida
Orlando*

34 U.S. PATENTS

Michael Bass is Professor Emeritus at CREOL, the College of Optics and Photonics at the University of Central Florida (UCF). He also served UCF as Vice President for Research from 1988 to 1992. Bass' significant inventions in the area of optics and spectroscopy contributed to the discovery and optimization of lasers and optical systems in a variety of applications. These include aiding in the treatment of major diseases and improving the potential for the world's next generation fiber optic communication system. He was the first to use a laser in his thesis studies in which he discovered optical rectification. It was this phenomenon that laid the foundation for the field of Terahertz science and for which Bass was awarded the 2014 R. W. Wood Prize of the Optical Society of America.

Following graduate school and a post-doc at U.C. Berkeley, Bass was a Senior Research Scientist at Raytheon Corporation. There he worked on solid-state lasers and was one of the co-inventors of the YAP laser. While at Raytheon, he began work on laser damage mechanisms that later led to extensive work on innovative commercial laser applications such as laser drilling and cutting, welding, materials coatings and heating effects. Bass left Raytheon to join the University of Southern California (USC) where he was a founder of one of the first university interdisciplinary research centers – the Center for Laser Studies. While there, he conceived of using an optical fiber to transmit laser energy under endoscopic guidance for bleeding site cauterization. He served as director of the Center and department chair at USC before being recruited to UCF.

Through collaboration with colleagues at CREOL he invented the "beam control prism," that extracts light from high power bars of diode lasers while optimizing cooling. This prism was licensed and commercialized by Florida-based, Rini Technologies. Bass' familiarity with rare earth ion spectroscopy enabled tracking nanoparticles that aid in the treatment of disease. He also designed methods for amplifying space-multiplexed fiber systems that promise to be part of future communications networks.

Bass is a Fellow of the National Academy of Inventors (NAI), The Optical Society (OSA), Laser Institute of America (LIA), and American Association for the Advancement of Science (AAAS) and Life Fellow of the Institute of Electrical and Electronics Engineers (IEEE). He holds 34 U.S. patents.

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Hedy Lamarr

Inventor and Actress

1914-2000

Casselberry

1 U.S. PATENT

Hedy Lamarr, born Hedwig Eva Maria Kiesler, was a Hollywood film star from the 1930s through the 1940s, and more importantly, a natural inventor. In 1981, she retired to Miami Beach, Florida and later passed away in Casselberry, Florida at the age of 85.

Best known for her acting and beauty, Lamarr was a lifelong tinkerer and innovator despite having almost no formal technical training. She would often work on her inventions while on movie sets, which is how she met her main collaborator George Anthiel.

As a way to contribute to the American War effort during WWII, Lamarr conceived of the idea that the U.S. Navy would be more effective in combating German Naval fleets if torpedo frequencies were undetectable. Lamarr worked with Anthiel who helped make her "Secret Communication System" a reality. This revolutionary concept represents the birth of frequency hopping spread spectrum technology, as it detailed how a transmission initiated by a sender (U.S. Naval ships) to a receiver (U.S. guided torpedoes) could switch frequencies in a preprogrammed pattern where only the sender and the receiver have the pattern of switches.

Lamarr patented her concept in 1942, at the age of 28, and donated it to the U.S. Navy. However, the Navy did not use the patent until 1962, as a way to secure communication for the military during the Cuban Missile Crisis. The Navy declassified the frequency-hopping spread spectrum technology in the 1980s where it made its way into commercial electronic devices, without mention of Lamarr.

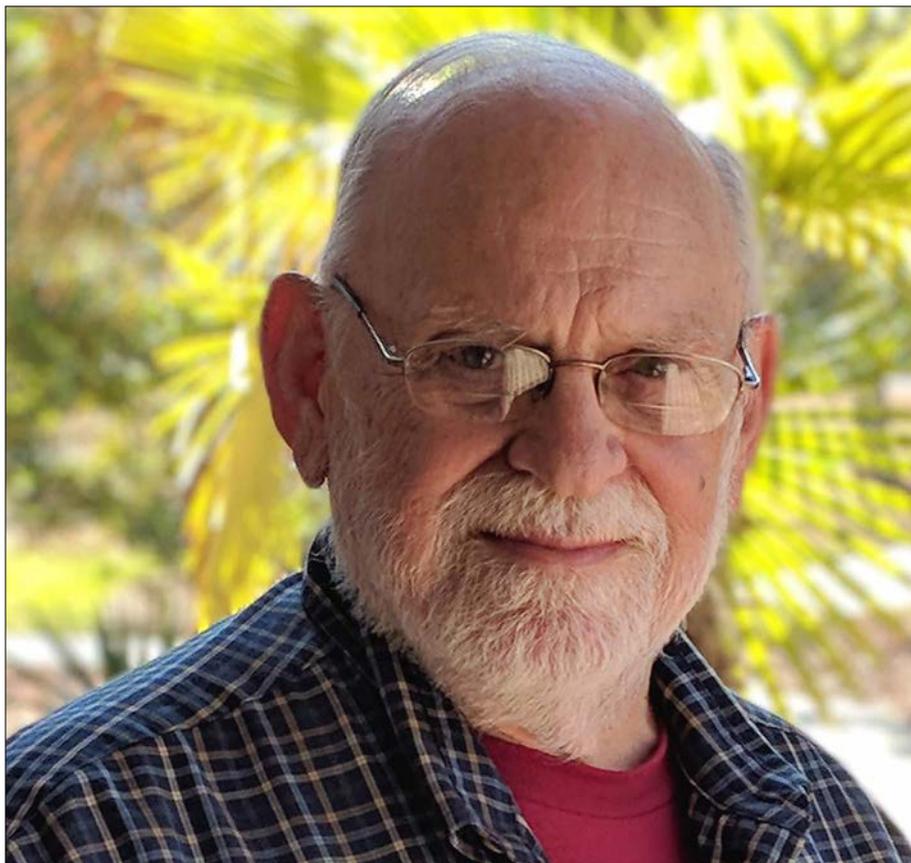
Over the course of the last six decades, Lamarr's invention went on to serve as the foundation for a multitude of communication technologies, including fax machines, top-secret military and diplomatic communications, GPS, internet, Wi-Fi, satellite communication systems, and wireless communication devices including cellular phones and Bluetooth technology. To date, her patent is cited in 62 other patents for shaping the radio frequency emissions pattern that supports cellular technology and cyber security.

Lamarr only started receiving recognition as an inventor at the end of her life and reportedly took much more pride in this than her acting. The Electronic Frontier Foundation (EFF) was the first to recognize Lamarr for her groundbreaking invention in 1997, when they awarded her the EFF Pioneer Award. She then became the first woman to receive the Invention Convention's BULBIE Gness Spirit of Achievement Award also known as the "Oscar of Inventing." In 2014, she was inducted into the National Inventors Hall of Fame. Hedy Lamarr's induction into the Florida Inventors Hall of Fame continues the work of righting her legacy.

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Thomas A. Lipo, Ph.D.

Research Professor
Center for Advanced Power Systems
Florida State University
Tallahassee

45 U.S. PATENTS

Thomas A. Lipo is a native of Milwaukee, WI. Dr. Lipo has spent his entire career in the technical field of solid state AC motor drives. He has BEE and MSEE degrees from Marquette University and a PhD from the University of Wisconsin. From 1969 to 1979, he was an Electrical Engineer in the Power Electronics Laboratory, Corporate Research and Development, General Electric Company, Schenectady, NY where he participated in some of the earliest work in this field. In 1981, he joined the University of Wisconsin, Madison, where he co-founded the industry consortium WEMPEC and served for 28 years as its Co-Director. He was a Fulbright Fellow at the Norwegian University of Science and Technology, Trondheim Norway in 2008. He is presently a Research Professor at Florida State University.

Dr. Lipo's contributions in the field of electrical machinery and power electronics are extensive, having published over 700 technical papers as well as 45 patents, 5 books and 8 book chapters. His impact factor on the Microsoft IP Citation Index in 2013 was the highest in the entire field of electrical engineering. According to Google Scholar his h-index is 111 and he has had well over 45,000 citations in the literature referring to his work. He has made pioneering contributions to motor control and emerging electrical machine topologies, including flux switched machines, axial flux machines of many types, self-excited synchronous machines, open winding machines and novel permanent magnet machines. His efforts on solid state power converters include work on resonant converters, matrix converters, low switch count and reduced cost rectifiers and inverters, to name a few.

In 2002, Dr. Lipo was elected a Fellow of the Royal Academy of Engineering(UK) (one of only about 25 US members) and in 2008, a Member of the National Academy of Engineering(USA). In 2012, he was made a Charter Fellow of the National Academy of Inventors for his patents on AC machinery. In 2004, he was the recipient of the Hilldale Award in Physical Sciences from the University of Wisconsin, the most prestigious award given by the university for scientific research and has been the only Electrical Engineering Professor ever selected for this award in its over 45 year history. In 2014, he received the IEEE Medal in Power Engineering, the highest award presented by IEEE for research in the field of power engineering.

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Alan F. List, M.D.

President and CEO
H. Lee Moffitt Cancer Center and Research Institute
Professor, Department of Oncologic Sciences
Morsani College of Medicine
University of South Florida
Tampa

6 U.S. PATENTS

Dr. Alan List is the President and Chief Executive Officer of Moffitt Cancer Center in Tampa, FL. Dr. List is internationally recognized for his many contributions in the development of novel, more effective treatment strategies for myelodysplastic syndrome (MDS) and acute myeloid leukemia. His pioneering work led to the development of lenalidomide (Revlimid®), which moved rapidly from the laboratory, to clinical trials, to approval by the U.S. Food and Drug Administration for the treatment of patients with MDS with chromosome 5q deletion and multiple myeloma, transforming the natural history of this cytogenetically defined subset of MDS.

Prior to his current position, Dr. List served as Executive Vice President and Physician-in-Chief, the Vice Deputy Physician-in-Chief, and the Chief of the Malignant Hematology Division at Moffitt, where he holds the Morsani Endowed Chair. Before coming to Moffitt in 2003, Dr. List was a Professor of Medicine at the University of Arizona, Tucson, where he served concurrently as the Director of the Leukemia and Blood and Marrow Transplant Programs and Director of the Division of Translational/Clinical Research Program.

After earning a medical degree from the University of Pennsylvania (1980), Dr. List completed an internship and residency in internal medicine in Phoenix, Arizona. He then completed fellowships in hematology and medical oncology at Vanderbilt University Medical Center in Nashville, Tennessee.

Dr. List is a member of the MDS Foundation Board of Directors; Florida Inventors Hall of Fame Advisory Board, and is the Immediate Past President for the Society of Hematologic Oncology. He is an active member of the American Society of Clinical Oncology; American Society of Hematology; American Association for Cancer Research; and the Southwestern Oncology Group.

Dr. List has 6 issued patents, 10 licensed technologies with industry partners, and 55 pending U.S. and international patents for the ongoing development of cancer treatments. He has received peer-reviewed NIH support for his research, published extensively on MDS and acute leukemia, and authored over 400 peer-reviewed manuscripts, chapters, and books. He lectures internationally and has received several awards recognizing his seminal contributions such as the Grinberg-Wisch Mount Sinai Award for significant contributions to the management of patients with MDS (2018); Celgene Career Achievement Award (2016); the Aplastic Anemia & MDS International Foundation Leadership in Science Award (2014); and induction into the National Academy of Inventors (Charter Fellow, 2013).

FLORIDA
INVENTORS
HALL OF FAME



2019 Inductee



Chris Malachowsky

*Co-Founder and Senior Vice President, NVIDIA
Graduate, University of Florida
Gainesville*

35 U.S. PATENTS

Chris Malachowsky is an inventor and entrepreneur who invented the Graphics Processing Unit (GPU), which transformed the computer graphics industry, revolutionized high performance computing, and opened the door to modern artificial intelligence. Malachowsky also cofounded NVIDIA in 1993, and continues to serve as a technology officer on its executive staff.

Malachowsky has been instrumental in managing, defining and driving the company's core technologies as it has grown from a startup to the global leader in visual and parallel computing. As an executive at NVIDIA, he has led numerous functions, including IT, operations and all facets of the company's product engineering. Most recently, he was responsible for NVIDIA's world-class research organization, which is chartered with developing the strategic technologies that will help drive the company's future growth and success.

Prior to NVIDIA, Malachowsky held engineering and technical leadership positions at HP and Sun Microsystems.

A recognized authority on integrated-circuit design and methodology, he has authored close to 40 patents. He holds a BSEE degree from the University of Florida and an MSCS degree from Santa Clara University. Both schools have honored Malachowsky with Distinguished Alumnus awards.

Malachowsky serves on the boards of the Computer History Museum and Hiller Aviation Museum, in Silicon Valley, and the Los Angeles County Museum of Art's Art & Technology Lab. Beyond his technical accomplishments, Malachowsky has also received an Emmy for a film he helped produce that won Best Documentary in 2009.

"Chris Malachowsky is an outstanding example of a world changing entrepreneur. He is a creative, big thinker who took his UF education and used it to create not just a company but essentially a new industry," said UF engineering dean Cammy R. Abernathy, Ph.D. "He remains firmly committed to the success of his alma mater and has been particularly pivotal in helping the college craft a vision around the coming 4th Industrial Revolution, which will help to position not only the university but the state of Florida as a leader in the creation of high tech innovation and jobs."

FLORIDA
INVENTORS
HALL OF FAME

2019 Inductee



Luther George Simjian

Founder
Reflectone Inc.
1905-1997
Tampa

200+ U.S. PATENTS

Luther George Simjian was a prolific inventor and the founder of the Tampa-based defense company, Reflectone Inc. He was born in 1905 to Armenian parents in Turkey. In 1915, during the infamous Armenian Genocide, he was separated from his family and arrived in the United States in 1921.

Upon completing his secondary education in New Haven, Connecticut, Mr. Simjian was admitted into the Yale School of Medicine to pursue a career as a physician. During his studies, he accepted a work-study position in the medical school's photography lab, where he quickly discovered medicine was not his passion and decided to pursue photography. During his tenure, he became the first director of the medical school's photography department and invented a way to project microscopic images and photograph organisms underwater.

In 1934, Mr. Simjian moved to New York, where he invented the colorized X-ray machine and the self-posing camera. In 1939, he founded Reflectone Inc., initially based in Stamford, Connecticut, to develop and manufacture his inventions.

During World War II, Mr. Simjian invented the Optical Range Estimation Trainer, the first flight simulator of its kind, to train pilots and tail gunners. More than 2,000 trainers were sold to the Department of Defense to aid in war efforts.

Later in 1961, Reflectone merged with the Universal Match Company and created an independent, public company. In 1979, Mr. Simjian moved Reflectone to Tampa, Florida and CAE Inc. purchased it in 2001, creating CAE USA Inc. The company remains in the business of making full-flight simulators for military aircraft, as well as providing training services.

Mr. Simjian subsequently formed two other companies, General Research Inc. and Command Automation Inc. while residing in Florida, as umbrella organizations for his increasingly eclectic list of inventions. Over the years, he invented a supersonic exploring device for the ultrasound procedures used in hospitals, a method for tenderizing meat, and a remotely controlled postage meter. Most notably, he received more than 20 patents on ideas that formed the basis of the Automatic Teller Machine (ATM).

During his seven-decade career, Mr. Simjian held more than 200 domestic and international patents, mostly in electronics and optics. In March of 2000, Mr. Simjian received his last patent posthumously for creating a process to improve the resonance of wood used for musical instruments. He passed away on October 23, 1997, at the age of 92, in Fort Lauderdale, Florida.

FLORIDA
INVENTORS
HALL OF FAME

2019 Inductee



Richard A. Yost, Ph.D.

*Colonel Allen R. and Margaret G. Crow Professor
Head of Analytical Chemistry*

Professor of Pathology, Immunology, and Laboratory Medicine

Professor of Natural Resources and the Environment

Director, Southeast Center for Integrated Metabolomics (SECIM)

Director, NIH Metabolomics Consortium Coordinating Center (M3C)

University of Florida

Gainesville

13 U.S. PATENTS

Rick Yost earned a bachelor's degree in chemistry from the University of Arizona in 1974 and went on to pursue graduate studies in analytical chemistry under an NSF graduate fellowship at Michigan State University, focusing on electronics and computerized instrumentation. Together with Professor Chris Enke, he conceived of the computerized tandem quadrupole mass spectrometer. The Office of Naval Research invested in the proposed research and a couple thousand pounds of stainless steel, aluminum, and electronics later, the instrument was taking form. A collaboration with Professor Jim Morrison of Australia's LaTrobe University – who had constructed a similar triple quad instrument for laser spectroscopy of mass-selected ions – was instrumental in the successful completion of the Michigan State instrument, which was patented by Research Corporation for MSU.

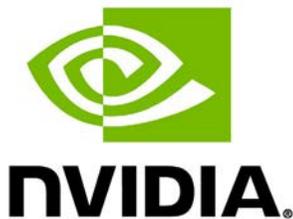
Rick received his Ph.D. in the summer of 1979 and assumed the position of Assistant Professor at the University of Florida. Rick has risen through the ranks at UF to Professor and Head of the Analytical Chemistry Division. He has supervised over 110 graduate students, graduating over 85 Ph.Ds and has served as PI or co-PI on over 100 grants and contracts, totaling over \$50 million in funding. Research in his group has led to over 190 publications and 13 patents. Also contributing to these research efforts have been collaborators at UF and around the world, visiting scientists, plus undergraduate and high school researchers. His research emphasis for the past few years has been the development and application of innovative mass spectrometric methodologies, including imaging mass spectrometry and ion mobility for global and targeted metabolomics, lipidomics, and clinical analysis.

The triple quadrupole mass spectrometer is the most common mass spectrometer in the world today, with sales of over \$1 billion per year! Other pioneering instruments from his lab that are now widely used as commercial systems include the ion trap tandem mass spectrometer and the laser microprobe tandem mass spectrometer.

Diamond Sponsors



Platinum Sponsors



Gold Sponsors



FLORIDA STATE UNIVERSITY



Judy Genshaft & Steve Greenbaum



Silver Sponsors





*Florida Inventors Hall of Fame
Previous Inductees*



Sara Blakely

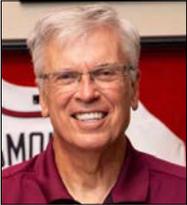
SPANX

*Graduate, Florida State University
Native Floridian, Clearwater*



Emery N. Brown, M.D., Ph.D.

*Massachusetts General Hospital
Harvard Medical School
Native Floridian, Ocala*



Phillip A. Furman, Ph.D.

*Graduate, University of South Florida
St. Augustine*



Richard A. Houghten, Ph.D.

*Torrey Pines Institute for Molecular Studies
Port St. Lucie*



Edwin A. Link

(1904-1981)

*Harbor Branch Oceanographic Institute
Florida Atlantic University
Fort Pierce*



Sudipta Seal, Ph.D.

*University of Central Florida
Orlando*



Herbert A. Wertheim, O.D., D.Sc., M.D. (hc)

*Brain Power Incorporated
Miami*



Issa Batarseh, Ph.D., PE

*University of Central Florida
Orlando*



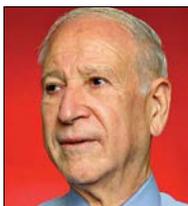
Michael J. DeLuca, J.D.

*Florida Power & Light, NextEra Energy
Boca Raton*



Kenneth M. Ford, Ph.D.

*Florida Institute for Human & Machine Cognition (IHMC)
Pensacola*



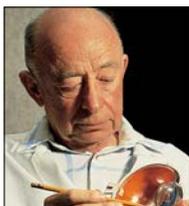
Phillip Frost, M.D.

*OPKO Health
Miami*



Richard D. Gitlin, Sc.D.

*University of South Florida
Tampa*



Thomas H. Maren, M.D.

*(1918-1999)
University of Florida
Gainesville*



Mary Helen McCay, Ph.D.

T. Dwayne McCay, Ph.D.

*Florida Institute of Technology
Melbourne*



William S. Dalton, Ph.D., M.D.

*M2Gen®, Moffitt Cancer Center
Tampa*



D. Yogi Goswami, Ph.D.

*University of South Florida
Tampa*



Alan George Marshall, Ph.D.

*Florida State University
Tallahassee*



Nicholas Muzyczka, Ph.D.

*University of Florida
Gainesville*



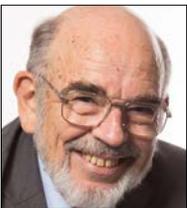
Jacqueline W. Quinn, Ph.D.

*NASA Kennedy Space Center
Titusville*



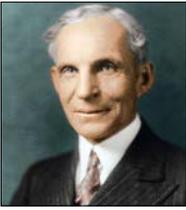
Andrew V. Schally, Ph.D, MDhc (Multi), D.Sc,hc.

*1977 Nobel Laureate
Department of Veterans Affairs
University of Miami Miller School of Medicine
Miami*



Marion J. Soileau

*CREOL, University of Central Florida
Orlando*



Henry Ford

(1863-1947)

Fort Myers



Robert Grubbs, Ph.D.

2005 Nobel Laureate

California Institute of Technology

Graduate, University of Florida

Gainesville



Robert Holton, Ph.D.

Florida State University

Tallahassee



Jerry Pratt, Ph.D.

Florida Institute for Human and Machine Cognition

(IHMC)

Pensacola



Paul R. Sanberg

University of South Florida

National Academy of Inventors

Tampa



Nan-Yao Su, Ph.D.

University of Florida

Fort Lauderdale



Janet K. Yamamoto, Ph.D.

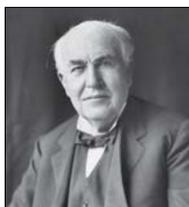
University of Florida

Gainesville



Robert Cade, M.D.

(1927-2007)
University of Florida
Gainesville



Thomas Edison

(1847-1931)
Fort Myers



William Glenn, B.E.E., M.S., Ph.D.

(1926-2013)
Florida Atlantic University
Boca Raton



John Gorrie, M.D.

(1803-1855)
Apalachicola



Shyam Mohapatra, M.S., Ph.D., MBA

University of South Florida
James A Haley VA Hospital
Tampa



Shin-Tson Wu, Ph.D.

CREOL, University of Central Florida
Orlando



2019 Selection Committee

Elizabeth Lea Dougherty, USPTO
Andres G. Gil, Florida International University
Sharon A. Heise, IHMC
David R. Makufka, NASA
David P. Norton, University of Florida
Gary K. Ostrander, Florida State University
Paul R. Sanberg, University of South Florida, NAI
Ed Schons, Florida High Tech Corridor Council
M.J. Soileau, University of Central Florida
Jack Sullivan Jr., Florida Research Consortium

2019 Advisory Board

Phoebe Cade Miles, Cade Museum
Kathy Castor, US Representative, 14th Congressional District
Steven Currall, USF President
Michael DeLuca, FPL, NextEra Energy
Elizabeth Lea Dougherty, USPTO
Kenneth Ford, IHMC
William Scott Green, University of Miami
Andrew H. Hirshfeld, USPTO
Richard A. Houghten, Torrey Pines Institute of Molecular Studies
Kelli Hunsucker, Florida Academy of Sciences
Richard Jove, Nova Southeastern University
Alan List, Moffitt Cancer Center
Julian Mackenzie, MOSI
T. Dwayne McCay, Florida Institute of Technology
Arthur Molella, Smithsonian's Lemelson Center
Janet E. Petro, NASA
Paul R. Sanberg, University of South Florida, NAI
Ed Schons, Florida High Tech Corridor Council
Mark Sharpe, Tampa Innovation Alliance

Please visit www.floridainvents.org to view full bios



Thank You for Your Support

Mike and Joan DeLuca

Carol Ann Dykes Logue,
Business Incubator at UCF Research Park

Phillip and Paulette Furman

Don and Jeanne Germaise

Yogi and Lovely Goswami, Molekule

Andrew Hirshfeld, USPTO

Anthony and Lise Loder

Julian MacKenzie, MOSI

David Makufka, NASA Kennedy Space Center

T. Dwayne and Mary Helen McCay,
Florida Institute of Technology

Stephanie Skupien,
USF Office of the Provost & Executive Vice President

USF Institute for Advanced Discovery & Innovation

USF Judy Genshaft Honors College

USF Office of Corporate Partnerships

USF Research Foundation

USF Technology Transfer Office

United States Patent and Trademark Office

WUSF and intellisMEDIA

Music by:

Catherine Lopez and Pablo Arencibia, USF School of Music

The United States Patent and Trademark Office
——— America's Innovation Agency ——
is pleased to join in recognizing and congratulating the
2019 inductees of the Florida Inventors Hall of Fame



"To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science."

— Albert Einstein



Follow us on social media:

 [USPTO.gov](https://www.uspto.gov)

 [@uspto](https://twitter.com/uspto)

 [USPTOvideo](https://www.youtube.com/uspto)

 [USPTO-jobs](https://www.linkedin.com/company/uspto)

*“Attitude is everything...
live a passion driven life.”*

Ken Ford

2017 Florida Inventors Hall of Fame Inductee



**Florida Inventors Hall of Fame
at the University of South Florida**

3702 Spectrum Boulevard, Suite 165
Tampa, FL 33612-9445
(813) 974-1101

info@FloridaInvents.org www.floridainvents.org