

# 2021 NEW MEMBER RECOGNITION



## **Dr. Christopher L. Barrett**

Executive Director, Biocomplexity Institute; Distinguished Professor in Biocomplexity, Biocomplexity Institute; Professor of Computer Science, School of Engineering and Applied Science at the University of Virginia

Dr. Barrett is an endowed Distinguished Professor in Biocomplexity, the founding Executive Director of the Biocomplexity Institute, and Professor of Computer Science at the University of Virginia. Over the past 35 years, Barrett has conceived, founded, and led interdisciplinary complex systems research projects and organizations, established national and international technology programs, and co-founded organizations for federal agencies including: the Department of Defense, the Department of Energy, the Department of Homeland Security and the Department of Transportation.

Barrett received the 2012–2013 Jubilee Professorship in Computer Science and Engineering at Chalmers University in Sweden and was a member of the 2010 Royal Colloquium for the King of Sweden. He was a distinguished international professor at the Royal Institute of Technology in Stockholm. He has received Distinguished Research, Service, Advisory and Security Awards from the U.S. Navy, Los Alamos National Laboratory, and the Alliance for Transportation Research. He has served as advisor to U.S. government agencies, the Commonwealth of Virginia, the European Commission, and others.

Dr. Barrett received a Master of Science and Ph.D. from Caltech in an early interdisciplinary program that brought together multiple fields. These included information science, physics of computation-system biology, and bioinformation systems.



## **Dr. Anthony J. Beasley**

Director, National Radio Astronomy Observatory

Dr. Beasley is the Director of the National Radio Astronomy Observatory and the vice president of the Associated Universities, Inc. Founded in 1956, the NRAO provides state-of-the-art radio telescope facilities for use by the international scientific community. His scientific interests include non-thermal stellar radio emission, Very Long Baseline Interferometry techniques, radio supernovae, and astrometry of stellar/interstellar masers. Since 2000, his career has focused on the design, construction, operation, and management of major scientific research facilities.

And he has played key roles in the implementation of some of the world's most advanced and successful radio astronomy facilities.

After receiving his Doctorate in Astrophysics from the University of Sydney, Beasley joined NRAO as a Postdoctoral Fellow in 1991. He was appointed NRAO Director in February 2012.



## **Robert M. Carritte**

Principal Officer, MPR Associates

Mr. Carritte is a principle officer at MPR Associates, a mid-size engineering firm headquartered in Alexandria, Virginia. In that role, he is responsible for defining and communicating a vision and direction for the business enterprise, one that provides opportunities for growth in a sustainable manner consistent with the company's culture and values.

He has gained extensive expertise in industries and technologies including nuclear, coal-fired, and gas-fired power plants, wind farms, switchyards and substations, liquefied natural gas facilities, petrochemical and steel facilities, and naval vessels.

Mr. Carritte is a member of the American Nuclear Society, CIGRE, and a Senior Member of the Institute of Electrical and Electronics Engineers where he serves on numerous industry committees. He is also the current chairman of the Institute of Nuclear Power Operations (INPO) Supplier Participant Advisory Committee.

Robert Carritte received a Bachelor of Electrical Engineering Technology and Bachelor of Science in Electrical Engineering degrees from Northeastern University in Boston, Massachusetts. He also earned a Master of Engineering degree in Electric Power Engineering from Rensselaer Polytechnic Institute in Troy, New York.



### **Dr. Lance R. Collins**

Vice President and Executive Director, Virginia Tech Innovation Campus Member, Professor of Mechanical Engineering; Thrust Area Specialty: Energy Engineering and Science

Dr. Collins is the inaugural vice president and executive director of the Virginia Tech Innovation Campus planned for Alexandria, VA. Prior to that appointment, he served as the Joseph Silbert Dean of Engineering at Cornell University. In 2011, he was part of the team that successfully bid to partner with New York City to build Cornell Tech, which opened its Roosevelt Island campus in 2017.

Dr. Collins is a professor of mechanical engineering. His research is focused on the application of direct numerical simulation to a broad range of turbulent processes. He is a fellow of the American Physical Society, the American Association for the Advancement of Science, and the American Institute of Chemical Engineers. In 2014, he received the William Grimes Award from the AIChE and in 2021 he was elected to the National Academy of Engineering.

Dr. Collins received his B.S. from Princeton University with honors and holds a M.S. and Ph.D. from the University of Pennsylvania, all in chemical engineering.



### **Dr. Dennis R. Dean**

University Distinguished Professor and Fralin Hall Principle Scientist, Virginia Tech Department of Biochemistry

Dr. Dean is a professor of Biochemistry in the College of Agricultural and Life Sciences at Virginia Tech. He previously held the title of Stroobants Professor of Biotechnology and is currently a University Distinguished Professor. Between 2008 and 2009, Dean served as the founding Director of the Virginia Tech Carilion Research Institute and is the founding director of the Virginia Tech Fralin Life Science Institute.

Research in the laboratory of Dr. Dean is focused on two principal themes: the mechanism for biological nitrogen fixation and the biological pathways for assembly of simple and complex metalloclusters. Very recently his laboratory used a genetic approach to remodel nitrogenase such that it has the capacity to reduce carbon dioxide to yield methane and various short-chain high-value olefins

Dr. Dean received a BA from Wabash College and PhD in Molecular Biology from Purdue University.



### **Dr. Jonathan L. Goodall**

Professor, Engineering Systems and Environment; Associate Director Link Lab at the University of Virginia

Dr. Goodall is a professor of civil engineering in the Department of Engineering Systems and Environment at the University of Virginia. He is trained as a water resources engineer and works to advance the field of hydroinformatics, where data and computational science are used to improve the understanding, forecasting, and management of water systems. Much of his current work focuses on adapting techniques from cyber-physical systems for real-time flood mitigation in coastal urban communities experiencing sea-level rise impacts. Dr. Goodall was a co-author of the Virginia

Academy's study on Prosperity in the Coastal Zone.

Dr. Goodall is also the associate director of the interdisciplinary Link Lab in UVA's School of Engineering and leads its Smart Cities research area. He is a member of UVA's Pan-University Environmental Resilience Institute steering committee and is an affiliated faculty member of the Center for Transportation Studies. His activities exemplify the importance of working across traditional boundaries to better serve society.

Dr. Goodall is a registered Professional Engineer and was a fellow of the American Society of Civil Engineers. He holds a B.S. in civil engineering from the University of Virginia and an M.S. and Ph.D. in civil engineering from the University of Texas at Austin.



### **Dr. Christopher T. Jones**

Chief of Operations, The Leadership Compass

Dr. Jones recently retired as corporate vice president and the president of the Technology Services sector of the Northrup Grumman Corporation. As president of the Technology Services sector, Dr. Jones led a complex organization of over 13,000 employees with annual revenues of more than \$4 billion. He was responsible for supporting a diverse customer base, including: the U.S. departments of Defense, Energy, Homeland Security, State and Interior; NASA and the U.S. Postal Service.

In conjunction with his civilian career, Dr. Jones served in the U.S. Air Force from 1986 until his retirement in 2012. As an active-duty Air Force officer, he worked as a systems analyst at Wright-Patterson Air Force Base, Ohio, where he performed analysis on foreign ballistic missile and space systems. He was a member of the Connecticut Air National Guard for 14 years, serving as the chief of maintenance for the 103rd Air Control Squadron.

He is a Fellow of the American Institute of Aeronautics and Astronautics, and a member of the National Academy of Engineering.

Jones earned a bachelor's degree in aerospace engineering from the Georgia Institute of Technology. He earned two master's degrees in aerospace engineering and engineering management from the University of Dayton and a doctorate degree in aerospace engineering from the University of Maryland.



### **Dr. Melina R. Kibbe**

Dean of the School of Medicine and Chief Health Affairs Officer, James Carroll Flippin Professor of Medical Science, University of Virginia

Dr. Kibbe joined the University of Virginia in September 2021 as the Dean of its School of Medicine and its Chief Health Affairs Officer. Before joining UVa, Dr. Kibbe was the Professor of Surgery, and the Colin G. Thomas, Jr. Distinguished Professor and Chair of the Department of Surgery at the University of North Carolina.

Dr. Kibbe's research interests focus on developing novel drug-eluting therapies for patients with vascular disease while simultaneously studying the mechanism of how these therapies impact the vascular wall. Her research was recognized by President Obama with the Presidential Early Career Award for Scientists and Engineers in 2009.

In addition to being a busy clinician, she is the Editor-in-Chief for Journal of the American Medical Association Surgery which is currently the #1 surgery journal in the world. She has served as president for the Association for Academic Surgery, the Midwestern Vascular Surgical Society, and the Association of VA Surgeons. She is also an active member in the American College of Surgeons, the American Surgical Association, and the Society for Vascular Surgery. She was inducted into the American Society for Clinical Investigation and most notably, the National Academy of Medicine.



### **Colonel Pamela Melroy**

NASA Deputy Administrator

Colonel Melroy is a long-time aerospace executive with government and industry experience across civil, commercial, and national security spaces. She is a retired Air Force test pilot with more than 6,000 hours of flight time in over 50 different aircraft. She was also a former NASA astronaut, and one of only two women to command the Space Shuttle. She flew three missions in space: as Space Shuttle pilot during STS-92 in 2000 and STS-112 in 2002, and as Space Shuttle Commander during STS-120 in 2007. All three missions were assembly missions to build the International Space Station.

She has logged more than 38 days in space.

On June 21, 2021, Colonel Melroy took office as the Deputy Administrator of NASA, after being nominated by President Biden and confirmed by the Senate.

Colonel Melroy received a Bachelor's degree in physics and astronomy from Wellesley College and a Master of Science degree in earth and planetary sciences from the MIT. She is a member of the National Academy of Engineering.



### **Dr. Jennifer L. West**

Dean, University of Virginia School of Engineering and Applied Science; Nancy and Neal Wade Professor of Engineering and Applied Science; Professor, Biomedical Engineering and Mechanical and Aerospace Engineering

Dr. West joined the University of Virginia as Dean of its School of Engineering and Applied Science in July 2021 as the first woman to lead UVa Engineering in the school's history. Prior to this appointment, she had been on the faculty at Duke University since 2012, after having been the department chair and Cameron Professor of Bioengineering at Rice University. Professor West was one of the founding members of Rice's Department of Bioengineering, building it to a top ten program.

Professor West's research focuses on the development of novel biofunctional materials. Her program has developed nanoparticle-based approaches to biophotonics therapeutics and diagnostics. Professor West founded Nanospectra Biosciences, Inc. to commercialize the nanoparticle-assisted photothermal ablation technology, now called AuroLase. Dr. West is a member of the National Academy of Engineering.

Dr. West holds a Ph.D. in Biomedical Engineering from the University of Texas at Austin.