

WASHINGTON STATE  
**Academy of Sciences**  
Science in the Service of Washington State

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## Press Release

July 26, 2017

The Washington State Academy of Sciences (WSAS) has announced the election of 13 new members in recognition of their outstanding record of scientific achievement and willingness to work on behalf of the Academy in bringing the best available science to bear on issues within the state of Washington. The new members will be inducted into the WSAS during the tenth annual meeting at the Seattle Museum of Flight on September 14, 2017. The newly elected bring the total number of members to 267.

In addition, one new Officer and four Board members were elected by the Membership.

**Individuals elected by virtue of their election into the United States National Academies**  
-- *National Academy of Sciences (NAS), National Academy of Engineering (NAE), and National Academy of Medicine (NAM).*

- **Dianne Chong**, Vice President, Materials, Manufacturing Structure & Support (Retired), Boeing Research and Technology; NAE

Dr. Chong was elected to the NAE by virtue of her contributions at Boeing leading the materials and process engineering and manufacturing support team. She was responsible for providing non-destructive evaluation for programs such as the Boeing 787 Dreamliner.

- **Steven B. Lipner**, Executive Director, SAFECODE; NAE

Dr. Lipner was elected to the NAE for his outstanding contributions developing and deploying practical methods for engineering secure software and computer systems.

## Individuals elected by the WSAS membership

- **Amit Bandyopadhyay**, Herman and Brita Lindholm Endowed Chair, Professor, School of Mechanical and Materials Engineering, Washington State University

Dr. Bandyopadhyay is an expert in materials and advanced manufacturing with a special emphasis on additive manufacturing and biomaterials for bone disorders. He holds 15 U.S. patents.

- **Susmita Bose**, Herman and Brita Lindholm Endowed Chair, Professor, School of Mechanical and Materials Engineering, Washington State University

Dr. Bose is an interdisciplinary researcher, combining the fields of chemistry, bioengineering, materials science, and advanced manufacturing. She is a leader in studying and promoting the use of technology to improve human health.

- **Douglas Call**, Professor of Molecular Epidemiology, Washington State University

Dr. Call's research, combatting antimicrobial resistance, which is widely considered to be the public health challenge of the 21st century. Dr. Call's work was the first to illustrate the critical role of the environment in selecting for and maintaining this resistance.

- **Howard Frumkin**, Professor of Environmental and Occupational Health Sciences, University of Washington School of Public Health

Dr. Frumkin is one of the nation's leading environmental public health thinkers. He established the CDC's climate change program and was one of the first to call attention to the health impacts of climate change.

- **Dayong Gao**, OriginCell Endowed Professor, University of Washington

Dr. Gao is a major contributor in the field of cryobiology and the science and technology of artificial organs. His work impacts the development of cutting-edge biotechnology that treats diseases, organ failure, and contributes to species conservation worldwide.

- **Alexes Harris**, UW Presidential Term Professor of Sociology, University of Washington

Dr. Harris outstanding research on judicially administered monetary sanctions makes her an influential leader in the field of criminal justice and a sought-after public speaker nationwide.

- **Bruce D. Kay**, Laboratory Fellow, Pacific Northwest National Laboratory

Dr. Kay is an internationally recognized experimental chemical physicist and a world leader in the use of molecular beams to study a broad range of problems in condensed phase and interfacial chemistry and physics.

- **Joel D. Kaufman**, Professor and Interim Dean, University of Washington School of Public Health

Dr. Kaufman is a physician-scientist and public health leader in the field of air quality. His research illustrates the impact of air pollution as a major contributor to cardiovascular disease.

- **Larry D. McLerran**, Director, Institute for Nuclear Theory and Professor of Physics, University of Washington

Dr. McLerran is an influential leader of research in high nuclear energy and particle physics. His state-of-the-art techniques are widely applied to study color superconductivity.

- **Anthony Waas**, Professor of Aeronautics and Astronautics, University of Washington

Dr. Waas is a groundbreaking researcher in the field of aerospace engineering structures and materials. He served as the only academic consultant for Boeing's 787 Dreamliner site-of-body team.

- **Jonathan Yoder**, Professor and Director, Washington Water Research Center, School of Economic Sciences, Washington State University

Dr. Yoder is an internationally renowned economist whose applied economic approaches provide an evidence-based foundation for natural resource policy.

### **2017-18 Officers & Board of Directors elected by the WSAS membership**

- **Secretary-Donald R. Baer, Secretary**, Laboratory Fellow Team Lead, Pacific Northwest National Laboratory

Dr. Baer has been elected to serve as Board Secretary after being appointed to that role and serving in an interim capacity. Dr. Baer's research explores the impact of surfaces and interfaces on material properties.

- **Board Member-Shirley Beresford**, Senior Associate Dean, School of Public Health, University of Washington

Dr. Beresford's research focuses on nutritional epidemiology and chronic disease prevention and is especially focused on establishing the scientific basis for public health policy.

- **Board Member-Sue B. Clark**, Battelle Fellow, Pacific Northwest National Laboratory and Regents Distinguished Professor of Chemistry, Washington State University

Dr. Clark has been elected to a second term on the Board of Directors. Her research explores the environmental chemistry of plutonium and other actinides.

- **Board Member-Cynthia Dougherty**, Professor of Biobehavioral Nursing and Health Informatics, School of Nursing; Adjunct Professor, UW School of Medicine, Division of Cardiology; Nurse Practitioner, VA Puget Sound Health Care System, Department of Cardiology, University of Washington

Dr. Dougherty's research investigates the human responses to sudden cardiac arrest and cardiac arrhythmias in order to enhance physical and psychosocial health and reduce health care costs in patients and patients' families.

- **Board Member-Jud W. Virden, Jr.**, Associate Laboratory Director for the Energy and Environment Directorate, Pacific Northwest National Laboratory

At PNNL, Dr. Virden leads a team of 1,000 staff in delivering science and technology solutions for energy and environmental challenges.