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IMPROVING OUR WORLD AND INSPIRING THE NEXT GENERATION OF GREAT
SCIENTISTS, ENGINEERS AND BUSINESS LEADERS
THE FRANKLIN INSTITUTE ANNOUNCES
THE 2017 FRANKLIN INSTITUTE AWARDS LAUREATES
INTERNATIONALLY RECOGNIZED AWARDS HONOR PHILADELPHIA GENETICIST AND
PIONEER OF GLOBAL CLIMATE CHANGE

PHILADELPHIA October 17, 2016—The Franklin Institute announced today the names of eight extraordinary visionaries who will be recognized and honored in Philadelphia next May with prestigious Franklin Institute Awards. The esteemed recipients join a remarkable list of great men and women whose revolutionary discoveries and innovations have transformed our world. They have expanded our knowledge of the brain, pioneered new materials, illuminated vital genetic processes, developed essential sources of light, and deepened our understanding of global climate change. These scientists and engineers have made enormous strides in their fields, improving the lives of billions of people across the world, and paving the way for a better future. Among the seven Benjamin Franklin Medal recipients is **Philadelphia geneticist Douglas Wallace, Ph.D.**, who was the first to show that mutations in mitochondrial DNA can cause inherited human disease. The Bower Award for Achievement in Science, which includes a \$250,000 prize, one of the most significant scientific prizes in America, is presented to **French glaciologist and climate change pioneer Claude Lorius, Ph.D.**, whose monumental discoveries in Antarctica have significantly impacted our overall understanding of climate and launched an awareness of the effects of global warming.

The Franklin Institute Awards have publicly recognized and encouraged preeminent accomplishments in science and technology on an international level since the Institute was founded in 1824. Past laureates, many of whom have come to Philadelphia to receive their medals, include Thomas Edison, Marie Curie, Stephen Hawking, Jacques Cousteau, and more recently Jane Goodall, Dean Kamen, and Bill Gates.

“Philadelphia has a long history of leading innovation, generating new and progressive ideas, and making those ideas a reality—a legacy set forth by Benjamin Franklin,” said Larry Dubinski, President and CEO of The Franklin Institute. “The Franklin Institute Awards Program celebrates some of the greatest minds and most influential pioneers of our time, and they are recognized right here in the birthplace of science and innovation for accomplishments that will transform our world. They are the true Franklins of today, who will undoubtedly inspire the Franklins of tomorrow.”

The Franklin Institute Awards Ceremony and Dinner is the culmination of a weeklong sequence of events and programs designed to shine an important spotlight on advancements in science and technology, as well as extraordinary business leadership. In addition to an array of lectures and symposia throughout the week, educational programs for area students and public demonstrations are designed to provide direct and unprecedented access to the laureates. Bank of America returns in 2017 as Presenting Sponsor of the Awards Ceremony and Dinner.

On Thursday, May 4, 2017, The Franklin Institute will celebrate the enormous impact of science, technology, and business leadership by honoring the following pioneers for their monumental and critical achievements:

2017 BOWER AWARD & PRIZE FOR ACHIEVEMENT IN SCIENCE
CLAUDE LORIUS, PH.D.
French National Center for Scientific Research (CNRS)
Paris, France

For iconic contributions to the understanding of global climate change from the analysis of greenhouse gas concentrations in ice cores from Antarctica, including discovering the glacial-interglacial cyclic relation between atmospheric carbon dioxide concentration and temperature that governs past and future climate.

2017 BOWER AWARD FOR BUSINESS LEADERSHIP
TO BE ANNOUNCED

2017 BENJAMIN FRANKLIN MEDAL IN CHEMISTRY (SHARED)

KRZYSZTOF MATYJASZEWSKI, PH.D.

Carnegie Mellon University

Pittsburgh, Pennsylvania

MITSUO SAWAMOTO, PH.D.

Kyoto University

Kyoto, Japan

For their seminal contributions to the development of a new polymerization process involving metal catalysts. This powerful process affords unprecedented control of polymer composition and architecture, making possible new materials including improved composites, coatings, dispersants, and biomedical polymers.

2017 BENJAMIN FRANKLIN MEDAL IN COMPUTER & COGNITIVE SCIENCE

MICHAEL I. POSNER, PH.D.

University of Oregon

Eugene, Oregon

Weill Medical College of Cornell University

New York, New York

For his central role in establishing the fields of cognitive science and cognitive neuroscience, thus increasing understanding of the human mind and brain through the pioneering use of reaction times and brain imaging in rigorous analyses to characterize attention, individual differences in attention, and both typical and atypical attentional development.

2017 BENJAMIN FRANKLIN MEDAL IN ELECTRICAL ENGINEERING

NICK HOLONYAK, JR., PH.D.

University of Illinois at Urbana Champaign

Urbana, Illinois

For the development of the first visible (red) laser and LED used in displays and lighting, and the use of various alloys in colored light sources, which led to reduced energy consumption worldwide and contributed to the realization of optical data communications as the backbone of the Internet.

2017 BENJAMIN FRANKLIN MEDAL IN LIFE SCIENCE

DOUGLAS C. WALLACE, PH.D.

Children's Hospital of Philadelphia

Perelman School of Medicine, University of Pennsylvania

Philadelphia, Pennsylvania

For demonstrating the maternal inheritance of mitochondrial DNA (mtDNA) in humans, using mtDNA variation to reconstruct ancient human migrations, identifying the first mtDNA mutation associated with an inherited disease, and showing that mutant mtDNA can profoundly affect the nuclear genome, causing complex diseases, thereby leading the way to therapies for those diseases and the aging process.

2017 BENJAMIN FRANKLIN MEDAL IN MATERIALS SCIENCE AND ENGINEERING

MIDRED S. DRESSELHAUS, PH.D.

Massachusetts Institute of Technology

Cambridge, Massachusetts

For her fundamental contributions to the understanding and exploitation of carbon nanomaterials, such as the spheres known as buckminsterfullerenes, the cylindrical pipes called nanotubes, and the single-atom-thick sheets of carbon known as graphene, and for launching the field of low-dimensional thermoelectricity, the direct conversion of heat to electricity.

2017 BENJAMIN FRANKLIN MEDAL IN PHYSICS

MARVIN L. COHEN, PH.D.

University of California, Berkeley

Lawrence Berkeley National Laboratory

Berkeley, California

For making possible atomic-scale calculations of the properties of materials so detailed that new materials and their mechanical, thermal, electrical, and optical properties can be predicted in agreement with experiments.

Honored with a regional Emmy® award, [The Franklin Institute Awards: Declaration of Progress](#) video illustrates the rich history of the 192-year-old Awards Program. For more information including photos, visit [Press Kit: 2017 Franklin Institute Awards](#) . Follow The Franklin Institute on [Facebook](#) (TheFranklinInstitute), [Twitter](#) (@TheFranklin), and [Instagram](#) (franklininstitute).

The Franklin Institute

Founded in honor of America's first scientist, Benjamin Franklin, The Franklin Institute is one of America's oldest and premier centers of science education and development in the country. Today, the Institute continues its dedication to public education and creating a passion for science by offering new and exciting access to science and technology in ways that would dazzle and delight its namesake. Recognizing outstanding achievements in science throughout the world is one important way that the Institute honors its commitment to Benjamin Franklin's legacy. For more information, please click [here](#).