F. DuBois Bowman

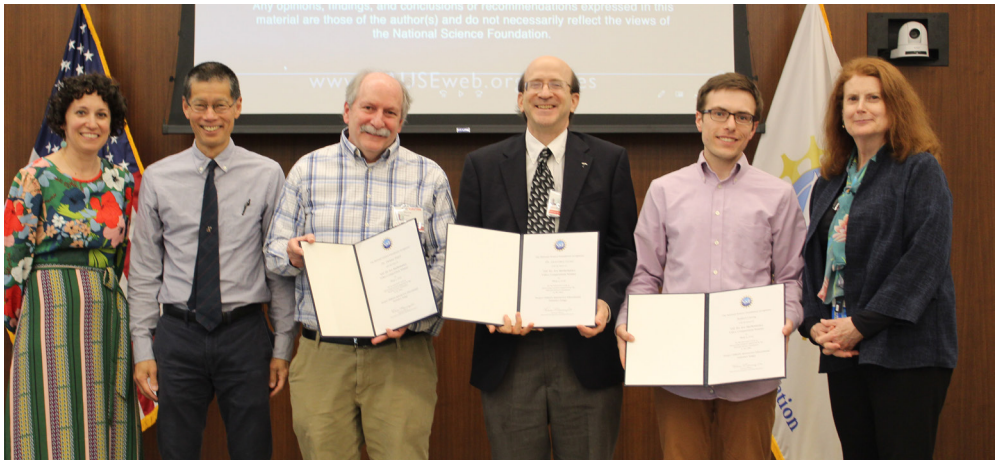
F. DuBois Bowman, dean of the University of Michigan School of Public Health, presented the 14th annual Donna J. Brogan Lecture in Biostatistics April 15 to a large audience at the Rollins School of Public Health at Emory University.

Bowman began his academic career as an assistant professor of biostatistics at Emory in 2000, was promoted through the ranks to full professor, and then moved to Columbia University in 2013 to chair the biostatistics department. In 2018, he moved to Ann Arbor to assume his current position.

Bowman's talk was titled "Precision Discovery of Neuroimaging Biomarkers for Parkinson's Disease." He summarized the natural progression of this complex neurodegenerative disorder, emphasizing the presumed delay between disease incidence and the observable onset of hallmark motor symptoms. His research focuses on using newly developed statistical methods to analyze noninvasive neuroimaging data to identify biomarkers that will detect PD much earlier than is possible today. .

Bowman concluded his presentation by expressing his gratitude to Donna Brogan for her activities over many years in advancing careers for women in statistics. He included in his slides the following quote from an invited talk Brogan gave at a recent Women in Statistics and Data Science Conference: "I hope that some of my personal and group efforts to combat sex discrimination in employment, education, and civic life have contributed in some small way to the larger and ongoing goal of equal rights and opportunities for girls and women in this country." ■

Statistics Education Project Wins Grand Prize in NSF Competition



From left: Karen Marrongelle of the National Science Foundation, Lee Zia of the National Science Foundation, Dennis Pearl of The Pennsylvania State University, Lawrence Lesser of The University of Texas at El Paso, Robert Carey of The Pennsylvania State University, and Anne Kinney of the National Science Foundation Photo by Christopher Coox/NSF

Project SMILES, a statistics education research team, received a $3,000 grand prize in the National Science Foundation's (NSF) inaugural We Are Mathematics Video Competition during a ceremony at the NSF in May.

Project SMILES is a $321,000 three-institution NSF EAGER (DUE) grant to develop and assess interactive songs for learning introductory statistics. Principal investigators for the grant are Dennis Pearl of Penn State, Lawrence Lesser of The University of Texas at El Paso, and John Weber of Perimeter College at Georgia State.

Soliciting three-minute videos about NSF-funded projects in the mathematical sciences, the We Are Mathematics Video Competition aimed to bring content to life in a way that can help break down barriers for those who may not understand what it means to conduct research in the mathematical sciences.

Professionals from all major mathematical sciences organizations conducted two rounds of judging for the competition. They were looking for creativity, clarity/accuracy of mathematical concepts/ideas, communication of mathematics in an accessible/exciting way, and artistic/technical quality. Winning videos were screened this May at the biennial National Math Festival, organized by the Mathematical Sciences Research Institute in cooperation with the Institute for Advanced Study and the National Museum of Mathematics and attended by some 20,000 people.

Project SMILES (Student-Made Interactive Learning with Educational Songs) created (and launched in May 2018) an online collection of 28 high-quality songs designed to span learning objectives of introductory statistics. The songs are interactive in that the interface solicits and provides feedback on student contributions. It then plays back the song with student input integrated with a synthetic voice and highlighted in scrolling lyrics. Pilot studies showed songs helped reduce anxiety and increase engagement with material. They were also found to be relevant to learning. Randomized experiment data were collected at two- and four-year institutions to further assess the effectiveness of the intervention. ■

MORE ONLINE
The project video and songs are at *www.CAUSEweb.org/smiles.*