



Blackwell-Tapia Prize

ANNOUNCING THE 2018 BLACKWELL-TAPIA PRIZE RECIPIENT

PROVIDENCE — The National Blackwell-Tapia Committee is pleased to announce that the 2018 Blackwell-Tapia Prize will be awarded to Dr. Ronald E. Mickens, the Distinguished Fuller E. Callaway Professor in the Department of Physics at Clark Atlanta University.

The prize is awarded every other year in honor of the legacy of David H. Blackwell and Richard A. Tapia, two distinguished mathematical scientists who have inspired generations of African American, Latino/Latina, and Native American students and professionals in the mathematical sciences. The prize recognizes a mathematician who has contributed significantly to research in his or her field of expertise, and who has served as a role model for mathematical scientists and students from under-represented minority groups or has contributed in other significant ways to addressing the problem of the underrepresentation of minorities in math.

Mickens' mathematical reach extends across multiple disciplines and has a significant global impact. He is well-known for his contributions in multiple areas of applied mathematics generally related to the solution of differential equations, in particular, the areas of nonstandard finite differences (NSFD) and nonlinear oscillations. In fact, he created the field of NSFD which seeks to discretize dynamical systems while retaining properties of the system. Many researchers around the world have extended Mickens' pioneering work on NSFDs to a plethora of systems.

Mickens' Ph.D. is in Theoretical Physics from Vanderbilt University (1968) and much of his work was grounded in mathematics. Since then, he has made significant and lasting contributions to the mathematical sciences. He has been at Clark Atlanta University, a Historically Black College and University (HBCU) in Atlanta, Georgia, where he has taught, mentored and researched since 1990. Before that, Mickens taught Physics at Fisk University (1970-1982) and Atlanta University (1982-1990).

Mickens' interest and engagement in issues around the underrepresentation of people of African American and Latinx descent in mathematics is sustained, significant and substantial. He has been unearthing, celebrating and publicizing the achievements of Black scientists for more than four decades. For example, he was elected a charter Fellow of the National Society of Black Physicists in 1992 and received the Edward Bouchet award for Excellence in Research from the National Conference of Black Physics Students in 2004. His book *Edward Bouchet: The First African American Doctorate* was published in 2002 and is an important contribution to the history of the participation of African Americans in STEM fields.

As a recipient of a Ford Foundation Postdoctoral Fellowship for Minorities himself (1980), Mickens has been active in mentoring Ford Fellows, regardless of discipline. These mentees are African American and Latinx individuals who are at the beginning of their academic careers, have been awarded a prestigious fellowship, and are expected to make meaningful societal contributions. During his long tenure as a professor at an HBCU, Mickens has had an immeasurable impact on a large number of students, the vast majority of whom have been African American. In addition to serving as a role model to the students who have passed through his classes, Mickens has been an accessible resource and mentor to numerous early career and mid-career mathematical scientists from various underrepresented groups.

The prize will be presented at the Tenth [Blackwell-Tapia Conference and Award Ceremony](#) on Nov. 9-10, 2018, at the Institute for Computational and Experimental Research in Mathematics (ICERM) at Brown University in Providence, RI. The conference includes scientific talks, poster presentations, panel discussions and ample opportunities for discussion and interaction. Participants will come from all career stages and will represent institutions of all sizes across the country, including Puerto Rico. It is supported by the National Science Foundation (NSF) through the [Mathematical Sciences Institutes Diversity Initiative](#), the Alfred P. Sloan Foundation, Brown University, and Cornell University.

The idea for a conference honoring Blackwell and Tapia came from Carlos Castillo-Chavez, who was a professor of mathematics at Cornell University at the time and is now Regent's professor at Arizona State University. The Blackwell-Tapia Prize was established two years later under the leadership of Castillo-Chavez and Mathematical Sciences Research Institute (MSRI) Director David Eisenbud. Recipients exemplify the high standards of research and service to under-represented minority communities recognized by this award. Past prize recipients include Arlie Petters, Benjamin Powell Professor of Mathematics, Physics, and Business Administration, Dean of Academic Affairs for Trinity College of Arts and Sciences, and Associate Vice Provost for Undergraduate Education at Duke University (2002); Rodrigo Bañuelos, Professor of Mathematics at Purdue University (2004); William Massey, Edwin S. Wiley Professor of Operations Research and Financial Engineering at Princeton University (2006); Juan Meza, Division Director of NSF's Division of Mathematical Sciences and Professor of Applied Mathematics at the University of California at Merced (2008); Trachette Jackson, Professor of Mathematics and head of the Jackson Cancer Modeling Group at the University of Michigan (2010); Ricardo Cortez, Pendergraft William Larkin Duren Professor of Mathematics at Tulane University (2012); Jacqueline Hughes-Oliver, Professor of Statistics, North Carolina State University (2014); and Mariel Vazquez, CAMPOS Professor of Mathematics and of Microbiology & Molecular Genetics at the University of California, Davis (2016).

The National Blackwell-Tapia Committee selected the prize recipient. Committee co-chairs are the 2014 and 2016 prize recipients, Hughes-Oliver and Vazquez. The other committee members are Carlos Castillo-Chavez and David Eisenbud, as well as Brendan Hassett, ICERM and Brown University; Bob Megginson, University of Michigan; Ulrica Wilson, ICERM and Morehouse College; and Robin Wilson, MSRI and California State Polytechnic University (Pomona).