

Ricardo Cortez Awarded the 2012 Blackwell-Tapia Prize

May 15, 2012 – The National Blackwell-Tapia Committee is pleased to announce that the 2012 Blackwell-Tapia Prize will be awarded to Ricardo Cortez, Pendergraft William Larkin Duren Professor of Mathematics at Tulane University.

This prize is awarded every second year in honor of the legacy of David H. Blackwell and Richard A. Tapia, two distinguished mathematical scientists who have been inspirations to more than a generation of African American, Latino/Latina, and Native American students and professionals in the mathematical sciences. It recognizes a mathematical scientist who has contributed and continues to contribute 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 contributed in other significant ways to addressing the problem of the under-representation of minorities in mathematics.

Professor Cortez is internationally regarded as a leading researcher in fluid dynamics and mathematical modeling. His current research interests are in developing and analyzing computational methods for the simulation of biological flows. His elegant and easily implemented method of Regularized Stokeslets has become a standard computational framework for engineers and physicists studying fluid flow around microorganisms. Throughout his career, Professor Cortez has promoted interdisciplinary collaborations, and continues to integrate computational investigations in joint research activities with experimentalists and applied scientists. In line with these efforts, he co-founded and now directs the Center for Computational Science at Tulane University.

Professor Cortez has also been a leader in undergraduate mentoring and the development of training opportunities for underrepresented minority students in the mathematical sciences. He has led summer research programs for undergraduates in Puerto Rico and at Tulane University, and was the creator and co-director of the Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP) in Berkeley, CA. Because of his extraordinary successful efforts in the mentoring of underrepresented students, he received the 2010 Distinguished Undergraduate Institution Mentor Award from the Society for Advancement of Chicanos and Native Americans in Science.

The prize will be presented at the Seventh Blackwell-Tapia Conference, to be hosted by the Institute for Computational and Experimental Research in Mathematics (ICERM) at Brown University on November 9–10, 2012; see <http://icerm.brown.edu/blackwell-tapia-2012> for more information. The meeting will include a mix of activities designed to inform the next generation of students about career opportunities in mathematics and to provide a chance for them to network with other students and with mathematical scientists who play a leadership role in their communities.

The co-chairs of the National Blackwell-Tapia Committee that selected the prize recipient are Trachette Jackson, Professor of Mathematics and head of the Jackson Cancer Modeling Group at the University of Michigan, 2010 recipient of the Blackwell-Tapia Prize; and Juan Meza, Dean of the School of Natural Sciences at the University of California at Merced, 2008 recipient of the

Blackwell-Tapia Prize. Other members of the committee are Robert Bryant, Professor of Mathematics at the University of California at Berkeley and Director of the Mathematical Sciences Research Institute (MSRI); Carlos Castillo-Chavez, Regents Professor and Joaquin Bustoz Jr. Professor of Mathematical Biology at Arizona State University; and Jill Pipher, Professor of Mathematics at Brown University, President of the Association for Women in Mathematics, and Director of ICERM; and *ex officio* members Victor Moll, Professor of Mathematics at Tulane University and Co-Chair of the MSRI Human Resources Advisory Committee; David Scott, Professor of Mathematics and Computer Science at the University of Puget Sound and Co-Chair of the MSRI Human Resources Advisory Committee; and Robert Megginson, Arthur F. Thurnau Professor and Professor of Mathematics at the University of Michigan.

The first six Blackwell-Tapia conferences were held at Cornell University (2000), MSRI (2002), the Institute for Pure and Applied Mathematics (2004), the Institute for Mathematics and its Applications (2006), the Statistical and Applied Mathematical Sciences Institute (2008), and the Mathematical Biosciences Institute (2010). Mathematical and Theoretical Biology Institute Director Carlos-Castillo Chavez, a member of MSRI's Human Resources Advisory Committee (HRAC) from 1997-2000 and a faculty member at Cornell University at the time, broached the idea for a conference honoring David Blackwell and Richard Tapia during an HRAC meeting, and then implemented that vision by securing funding from Cornell for the first Blackwell-Tapia Conference. MSRI Director David Eisenbud then suggested the establishment of the David Blackwell and Richard Tapia Award as a joint enterprise between Cornell and MSRI, to extend the honoring of these two eminent mathematical scientists to those who have followed in their footsteps. The conferences have continued since then through a collaborative effort of the North American mathematics institutes.

The previous five recipients of the Blackwell-Tapia Prize exemplify the high standards of research and service to under-represented minority communities recognized by this award. They are Arlie Petters, Benjamin Powell Professor of Mathematics, Physics, and Business Administration 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, Dean of the School of Natural Sciences at the University of California at Merced (2008); and Trachette Jackson, Professor of Mathematics and head of the Jackson Cancer Modeling Group at the University of Michigan (2010).