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SPEAKER BIOS (in alphabetical order by last name)

Supporting Diversity and Excellence in Research Pathways at UC Merced

Webcast Live Here: <https://www.nationalacademies.org/event/10-28-2021/supporting-diversity-and-excellence-in-research-pathways-at-uc-merced>

October 28, 2021 | 10:00am-12:30 pm PST/1:00PM - 3:30PM EST

Jorge Arroyo, *Director, Undergraduate Research Opportunities Center, University of California Merced*

Dr. Jorge Arroyo is the Director of the Undergraduate Research Opportunities Center (UROC) at the University of California, Merced. He completed his Doctorate in Educational Leadership at California State University, Fresno where he conducted his dissertation study on Latina Women in STEM Ph.D. programs at Hispanic Serving Institutions (HSIs). In addition to his career achievements, Jorge is a first-generation college student from the Central Valley and is dedicated to working with students to pursue their educational goals. His experience in higher education, including previous work in student affairs, ground his current practice in supporting students from a holistic perspective and align with the goals of the research programs supported through his office. UROC has now expanded to support students in all disciplines and works collaboratively with faculty across campus to support the research mission of the university.

Mario Banuelos, *Assistant Professor of Mathematics, Fresno State University*

Mario Banuelos is an Assistant Professor of Mathematics at California State University, Fresno. He is from the small, agricultural town of Delano, California and a first-generation college student. He earned his B.A. in Mathematics from California State University, Fresno (Fresno State), and obtained his Ph.D. in Applied Mathematics from the University of California, Merced under the guidance of his advisor Prof. Suzanne Sindi. Dr. Banuelos' research group focuses on mathematical biology, optimization, statistical models for genome evolution, and data science. His research group at Fresno State is committed to bringing more research opportunities and innovation to the Central Valley.

Gregg Camfield, *Executive Vice Chancellor and Provost, University of California Merced*

Executive Vice Chancellor and Provost Gregg Camfield joined the University of California, Merced, in July of 2007. As UC Merced's second-most-senior executive, Camfield provides leadership for campus administrative operations and serves as the university's chief academic officer. He is thus responsible for planning, development and improvement of all academic programs, policies and infrastructure. He oversees faculty recruitment, retention and renewal processes as well as rigorous review of faculty appointments, tenure and promotion. He also oversees planning, quality and delivery of student education, working closely with the Merced Division of the University of California Academic Senate. In addition, Executive Vice Chancellor and Provost Camfield convenes, as appropriate, vice chancellors and other senior administrators to address issues that cut across divisional lines, oversees the campus budget-request process, and leads strategic planning and other strategic campus initiatives in close collaboration with the chancellor. In his time at UC Merced, Camfield has been chair of UC Merced's initial accreditation team, chair of Undergraduate Council, chair of the humanities faculty group, and

served for four years as UC Merced's first Vice Provost for the Faculty. Camfield earned his bachelor's degree from Brown University and his Doctorate from the University of California, Berkeley. He has held academic appointments at the University of Pennsylvania and at the University of the Pacific, where he also was director of the University Honors Program. He is a scholar of American literature and culture, with two books on Mark Twain, one on American literary humor, and several editions. He has also published over 40 scholarly research articles and reviews, on topics ranging from 18th to 20th century authors, and has shared his scholarship more broadly by contributing to web-sites, museums, government reports, school curricula, and documentary films.

Sarah Frey, *Vice Provost and Dean of Undergraduate Education and Teaching Professor, Applied Mathematics, University of California Merced*

Dr. Sarah Frey is the Vice Provost and Dean of Undergraduate Education at the University of California, Merced. Her main areas of focus include increasing access to undergraduate research and experiential learning and supporting adoption of evidence-based, effective pedagogical practices. Dr. Frey previously served as the Assistant Provost for Educational Innovation at the University of Illinois at Urbana-Champaign and the Executive Director of the Texas Institute for Discovery Education in Science at the University of Texas at Austin. Dr. Frey spent 10 years of her career at the University of California, Irvine, where she served as a member of the mathematics faculty and as the Associate Vice Provost for Teaching and Learning. She won the Mathematical Association of America's 2011 Alder Prize for excellence in teaching and multiple campus teaching awards. Dr. Frey earned her Ph.D. in Applied Mathematics from the University of Arizona, studying problems in non-linear elasticity related to planetary tides.

Sayantani Ghosh, *Professor of Physics, University of California Merced*

Sayantani Ghosh is a Professor of Physics at University of California, Merced. She was an undergraduate at the University of Cambridge and got her PhD in Physics from the University of Chicago in 2003. After completing her postdoctoral research at University of California, Santa Barbara, she joined UC Merced in 2007. Her group focuses on the physics of novel materials and develops techniques and protocols to manipulate their properties for applications in energy storage and information processing devices. Current topics her group is working on include nano-assembled 'smart' materials, nano plasmonics based optically triggered sensors and hybrid perovskite opto-electronic devices. She is a recipient of the Faculty Early Career Development Award (CAREER) from the National Science Foundation, and Associate Director of the NASA-funded MACES (Merced Nanomaterials Center for Energy and Sensing) research center. Professor Ghosh is also the founding faculty of UC Merced Women in Science and Engineering (WSTEM@UCM) and is very involved in educational and outreach activities at the undergraduate and graduate levels.

Hrant Hratchian, *Associate Professor and Chair of Chemistry & Chemical Biology, University of California Merced*

Hrant P. Hratchian is Associate Professor and Chair of the Department of Chemistry & Biochemistry at the University of California, Merced. He obtained his B.S. degree in chemistry from Eastern Michigan University (Ypsilanti, MI) and completed doctoral studies in physical chemistry at Wayne State University (Detroit, MI), where he was an NSF-IGERT Graduate Fellow. From 2005-2008 he was the Ernest R. Davidson Postdoctoral Fellow at Indiana University (Bloomington, IN). From 2008-2013, he was a Research Scientist at Gaussian, Inc. (Wallingford, CT). In 2013, he joined the UC Merced faculty. Professor Hratchian has served in a number of leadership roles at UC Merced, including as Interim co-Director of Cyberinfrastructure and Research Computing and as Chair of the Academic Senate's

Graduate Council. Professor Hratchian has been involved in the establishment of UC Merced's Chem Center, a student success center serving UC Merced undergraduates, and is a co-PI on a National Science Foundation supported project to improve the chemistry educational experience at Hispanic Serving Institutions. In recent years, Prof. Hratchian has been honored with a Hellman Foundation Fellowship and an NSF CAREER award. He and his research group have received extramural funding support from the Petroleum Research Fund, Hellman Family Foundation, National Science Foundation, and the Department of Energy. Professor Hratchian's research interests include the development and application of efficient computational chemistry methods to explore the unique properties of transition metals and the chemistry facilitated by transition metal catalysts.

Christopher Kello, *Professor of Cognitive Science and Interim Vice Provost and Dean of Graduate Education, University of California Merced*

Dr. Christopher Kello is a Professor of Cognitive Science and Interim Vice Provost and Dean of Graduate Education at the University of California, Merced. He earned his bachelor's degree at the University of Rochester and his Ph.D. at the University of California, Santa Cruz. He was a postdoctoral fellow at Carnegie Mellon University and advanced research associate at the House Ear Institute before joining the faculty at George Mason University in 2001. He received an early career award from the National Science Foundation for his integration of computational and experimental studies of speech and reading, and went on to become program director of the Perception, Action, and Cognition program at NSF. He also oversaw two NSF Science of Learning Centers and received an NSF Director's award before joining UC Merced in 2008 as an Associate Professor of Cognitive Science. Dr. Kello has served as both Interim and Associate Graduate Dean for several years, and he has led or co-led several sponsored research projects totaling over \$6 million dollars, including two NSF-funded graduate training programs. He has over 100 publications across a variety of fields and research communities, with broad interests in mechanisms of speech, search, and human cognition.

Jennifer Manilay, *Professor and Chair of Molecular and Cell Biology, University of California Merced*

Jennifer O. Manilay is a Founding Faculty Member, Professor and Chair of the Molecular and Cell Biology Dept at UC Merced. Over her career, she has intentionally sought to expand her knowledge base in diverse research areas related to immunology, hematology, developmental biology and stem cell biology. Since 2012, she has established herself as an investigator of "osteimmunology," analyzing the molecular and cellular interactions between the skeletal and immune systems. Dr. Manilay pursued a career in higher education because she has a passion for lifelong learning and discovery. As a Filipina-American in STEM, she is keenly aware of the value of diversity initiatives and the importance of supporting diverse students' goals at the university. She credits a faculty member with helping to shape her entry into research as an undergraduate. In addition to her research, Dr. Manilay enjoys teaching, experimenting with and sharing modern inclusive teaching approaches. Currently, she is the Program Director of UC Merced's HHMI Inclusive Excellence in Science Education projects.

Ashleigh Papp, *Communications Specialist, U.S. DOE Joint Genome Institute*

Ashleigh is a science communication enthusiast who works cross-functionally at the Berkeley Lab. Her work involves translating the work and accomplishments of the Biosciences Area into written website content, podcasts, and science videos. She also contributes to the planning and strategic growth of the Joint Genome Institute's workforce development and educational partnerships.

Marjorie Zatz, *Interim Vice Chancellor for Research & Economic Development, University of California Merced*

Dr. Marjorie S. Zatz joined the University of California, Merced in July 2014 as the first full-time Vice Provost & Dean of Graduate Education. She was a professor at Arizona State University from 1982-2014, also serving as Director of the School of Justice Studies, Associate Dean of the Graduate School, Vice Provost for Academic Personnel, and Interim Vice President & Vice Provost for the West Campus. From 2012-2014, she was on loan to the National Science Foundation where she directed the Law & Social Sciences program. Dr. Zatz earned her B.A. in Sociology with a minor in Latin American Studies from the University of Massachusetts, Amherst in 1977, and her MA. (1979) and Ph.D. (1982) in Sociology with a minor in Latin American Studies from Indiana University. She is the author or editor of 7 books. Her most recent book is *Dreams and Nightmares: Immigration Policy, Youth and Families* (with Nancy Rodriguez, University of California Press, 2015). Zatz was named one of the top 35 Women in Higher Education by *Diverse: Issues in Higher Education* in 2019, and a Fellow of the American Society of Criminology, also in 2019. She was appointed Interim Vice Chancellor for Research & Economic Development as of July 1, 2020.