

**Dr. David D. Bowman**

**Professor of Geology and  
Dean of Science, Technology, Engineering & Mathematics**

**Tuesday, May 4, 2021**

Dr. David Bowman is Dean of the College of Science, Technology, Engineering, and Mathematics at Eastern Washington University (EWU). EWU is a mid-sized regional comprehensive university located 20 miles west of Spokane, Washington on the traditional homelands of the Spokane Tribe. Dr. Bowman has been at EWU since 2016 and was a 2020 Fellow of the UC Berkeley Executive Leadership Academy. He currently sits on the Board of Directors for both MOBIUS Spokane and Washington MESA. He has served as Co-Chair of Greater Spokane Inc.'s Spokane STEM Network and Honorary Commander for the 141<sup>st</sup> ANG Air Refueling Wing at Fairchild Air Force Base.

In his time at EWU, Dr. Bowman has overseen a major expansion of the college's research and teaching infrastructure. This included securing state funding and oversight of construction on a new \$67M Interdisciplinary Science Center on the main campus in Cheney as well as securing funding and overseeing design for a \$90M renovation of the campus's existing Science building. He has also been a key part of EWU's team for the "Catalyst Building" project, a recently-completed public-private partnership to build a new zero-energy mixed-use academic and industry research building in downtown Spokane that houses EWU's Electrical Engineering, Computer Science, Computer Engineering, and Design programs. The college has also significantly expanded its curricular offerings under Dr. Bowman's leadership, including new undergraduate programs in Computer Engineering and Data Science, a new graduate program in Applied Math, and the merger of the Geology and Geography programs into a new interdisciplinary Geosciences degree.

Prior to joining EWU, Dr. Bowman was a faculty member in the Department of Geological Sciences at California State University, Fullerton (CSUF) where was Department Chair from 2007-2013 and Interim Dean of CSUF's College of Natural Sciences and Mathematics from 2014-2016. Dr. Bowman's research specialty is earthquake seismology, specifically earthquake stress interactions and the formation and evolution of fault systems. Dr. Bowman has authored numerous papers on earthquake seismology with students and colleagues from around the globe and has given an uncounted number of presentations on earthquake safety to community groups. He served on the Board of Directors of the Southern California Earthquake Center from 2007-2011. He holds a B.S. and PhD. in Geology from the University of Southern California and conducted postdoctoral work in the Tectonics Lab of the Institut de Physique du Globe (Institute for Earth Physics) in Paris, France, where he held a Chateaubriand Postdoctoral Fellow from the French Embassy to the United States.

In his spare time Dr. Bowman is an avid amateur rocketeer, holding a Level-2 High Power Certification from the National Association of Rocketry. He's a passionate lover of classical music and an (admittedly mediocre) French Horn player who has been known to join EWU's marching band during football playoff games.

**Dr. Carmen Bustos-Works (her/she)**

**Professor of Chemistry**

**Wednesday, May 5, 2021**

Carmen Bustos-Works is a Professor of Chemistry at Sonoma State University. Dr. Bustos-Works earned her Ph.D. in Chemistry from U.C. Santa Barbara where she developed metal complexes to photochemically deliver nitric oxide (NO) to biological targets. Dr. Works' current research is in the area of catalysts, specifically small molecule mimics of hydrogenase enzymes to create sustainable solutions for the use of hydrogen as a fuel and is currently funded by the NSF. In addition, she works with a team to "Developing Students' Identity and Self-Perception as Capable STEM Thinkers and Learners" a project dedicated to disrupting narratives and misplaced assessments of what defines scientific brilliance. This project designs materials to help both instructors and students see science as an expansive and inclusive set of practices. This project is funded by the California Learning Lab.

Dr. Bustos-Works is a proud LatinX, first generation college student and successfully maneuvered inner city public schools. She has been an advocate for social justice, inclusion and anti-racism her entire life. Her journey inspired her to become a faculty member at a CSU and a role model for women in STEM. When she started at SSU in 2001 she was the first hire in over 17 years, the first woman and the first person of color to join the tenure ranks of the chemistry department. She became a leader early in her career at SSU and shepherded the rebirth of the chemistry department which included redesign of the curriculum and creation of a biochemistry degree program, implementation of high impact practices such as undergraduate research, learning communities and development of critical thinking courses based in STEM. Dr. Bustos-Works is a daring educator willing to adopt new pedagogies and technologies into her classroom and she has been recognized with SSU's Excellence in Teaching Award.

Dr. Bustos-Works has served in a number of leadership roles including co-chair to develop a Strategic Plan for SSU that created core values including diversity and social justice. She has served as Chair of the Chemistry Department, the university curriculum committee, the Academic Senate, the University Accreditation Committee, and has contributed to review, reform and assessment of SSU's general education curriculum. Currently she is the Director of University Studies and Associate Dean for School of Science and Technology. Dr. Bustos-Works brings a lifetime of personal experience advocating for inclusion, sense of belonging and anti-racism and is a resilient supporter of the teacher-scholar model and lifelong learning grounded in an active and hands-on approach.

**Dr. Eric M. Riggs**

**Professor of Geoscience Education**

**Thursday, May 6, 2021**

Dr. Eric M. Riggs is Professor of Geoscience Education in the Department of Geology & Geophysics at Texas A&M University. The Riggs Group studies many related aspects of teaching, learning and cognition in the geosciences, especially through the lens of embodied cognition and culturally mediated cognition, including international or cross-cultural learning settings. From 2000-2014 Riggs directed the *Sharing the Land* Project, a project funded by the National Science Foundation with the purpose of making the geosciences accessible and beneficial to Native American communities primarily across California and with reach into other regions of the southwest and north central United States. The goals of the project were to increase indigenous representation in the geosciences and enhance scientific sovereignty for tribal communities. Recent work includes studies of academic field choice in geology as a function of gender, and the role of gendered and minoritized experience in field-based learning environments and the resulting influence on career paths. He has been the primary or co-investigator on \$10.6 million in research and programmatic funding from the National Science Foundation, NASA, and other sources.

Riggs served as Associate Dean for Diversity and Climate in the College of Geosciences from 2011 until 2018, where he was charged with monitoring the academic climate and diversity of the College and was tasked with taking direct action to improve the environment for an increasingly diverse population of faculty, students, and staff. From 2014-2016 he also oversaw Graduate Affairs for the College and was instrumental in early development of the online professional master's programs which today enroll over 150 remote students in three degree tracks. In this role he also implemented graduate student professional development programs and oversaw curricular management, scholarships and recruiting activities.

At the national level, he served as the 2014-15 President of the American Geosciences Institute (AGI), the international federation of 52 professional and scientific societies in the earth and environmental sciences. He is also a Past President of the National Association of Geoscience Teachers (NAGT). On behalf of AGI, he served as the Chair of the Ad Hoc Committee on Harassment in the Geosciences, shepherding the 2018 adoption of the federation-wide position statement against harassment of all forms in the geosciences. He has provided advisory and consulting services for the National Science Foundation, the National Research Council, Canada's NSERC, and universities and companies worldwide. He is a Fellow of the Geological Society of America (GSA), and is a professional member of GSA, NAGT, AGU, and AAPG.