

2016 NEW MEXICO AMP STUDENT RESEARCH CONFERENCE
(BY INVITATION -- COMMUNITY COLLEGE ONLY ACTIVITIES SEPTEMBER 29& OCTOBER 1, 2016)
LAS CRUCES CONVENTION CENTER, LAS CRUCES, NM (Updated 9/14/2016)

| THURSDAY, SEPTEMBER 29, 2016 | |
|------------------------------|---|
| 2:00 p.m. – 6:00 p.m. | Early Conference Check-in (Convention Center Lobby) |
| 3:00 p.m. – 5:00 p.m. | New Mexico Community College Student Workshop (by invitation)- (Meeting Rooms 1-3) Facilitators: New Mexico AMP Staff and Sandra Castillo, DACC Division Dean of Technical Studies Division. |
| 5:00 p.m. – 7:00 p.m. | Dinner (Taos Cafeteria, NMSU Corbett Center Student Union) |
| FRIDAY, SEPTEMBER 30, 2016 | |
| 7:00 a.m. – 7:45 a.m. | Poster set up (Exhibit Hall 2) |
| 7:30 a.m. – Noon | Conference Check-in (Convention Center Lobby) |
| 7:30 a.m. – Noon | Information Tables (Convention Center Hallway) |
| 7:30 a.m. – 8:00 a.m. | Breakfast Served (Ballroom 1) |
| 8:00 a.m. – 9:00 a.m. | Conference Welcome – (Ballroom 1): Dr. J. Phillip King, Director of New Mexico AMP & Professor of Civil Engineering, New Mexico State University. Official Welcome – Dr. Daniel J. Howard, Executive Vice President and Provost, New Mexico State University; Keynote Speaker – Dr. Karletta Chief, Assistant Professor and Specialist in Soil, Water, and Environmental Sciences, University of Arizona. |
| 9:15 a.m. – 11:30 a.m. | NM MESA & PREP Orientation and Workshop: “How to Become a Well-Rounded STEM Professional” (Meeting Rooms 1-3) Dr. Nadir Yilmaz, Professor and Associate Department Chair of Mechanical Engineering, New Mexico Institute of Mining and Technology. |
| 9:15 a.m. – 10:30 a.m. | SCCORE Focus Group Session (Meeting Room 5) Group 1 |
| 9:15 a.m. – 10:15 a.m. | Workshop: “STEM Internships, Co-ops, and REU Opportunities” (Exhibit Hall 1). Facilitator: Dr. Heather Fitzgerald, Instructor, Department of Biology, Central New Mexico College. Panelists: Chris Hirani (University of New Mexico), Elan Glendening (New Mexico State University) and Reece Broughton (New Mexico Institute of Mining and Technology). |
| 9:15 a.m. – 10:15 a.m. | International Panel – “Broadening Students Global Perspective” (Meeting Room 4). Facilitator: Kristian Chervenock, President of Chervenock International; Panelists, Office of Education Abroad: Belkis Jacquez and Taylor Uselman; Panelists, Aggies Go Global: Georgina Acosta and Chelsea Canon; Panelist, New Mexico AMP Undergraduate Scholars (URS) program: Andrea Salazar. |
| 9:15 a.m. – 10:15 a.m. | Workshop: “How to Plan for Graduate School and Derive the Most Benefit From the Graduate Experience” (Ballroom 2): Facilitated by Dr. Danielle Miranda Grandjean (Former SCCORE and URS Participant and Current Research Program Coordinator for the Mayo Clinic Head and Neck .ation Program). Panelists: Cherie DeVore (University of New Mexico Graduate School Student) and Dr. Leo Bañuelos (Assistant Professor of Physics, University of Texas at El Paso). |
| 9:30 a.m. – 11:30 a.m. | Advisory Board Meeting (Meeting Room 6) |
| 10:15 a.m. – 10:30 a.m. | Break |
| 10:30 a.m. – 11:30 a.m. | Workshop: “STEM Internships, Co-ops, and REU Opportunities” (Exhibit Hall 1) Dr. Heather Fitzgerald, Instructor, Department of Biology, Central New Mexico College. Panelists: Chris Hirani (University of New Mexico), Elan Glendening (New Mexico State University), Reece Broughton (New Mexico Institute of Mining and Technology). |
| 10:30 – 11:30 a.m. | SCCORE Focus Group Session (Meeting Room 5) Group 2 |
| 10:30 a.m. – 11:30 a.m. | International Panel: “Broadening Students Global Perspective” (Meeting Room 4) Facilitator: Kristian Chervenock, President of Chervenock International, LLC; Panelists, Aggies Go Global: Belkis Jacquez, Education Abroad; Chelsea Canon, Taylor Uselman, Georgina Acosta; and Panelist, New Mexico AMP Undergraduate Scholars): Andrea Salazar. |
| 10:30 a.m. – 11:30 a.m. | Workshop: “How to Plan for Graduate School and Derive the Most Benefit From the Graduate Experience ” (Ballroom 2): Facilitated by Dr. Danielle Miranda Grandjean (Research Program Coordinator for the Mayo Clinic Head and Neck Transplantation Program). Panelists: Cherie DeVore (UNM Graduate School Student) and Dr. Leo Bañuelos (Assistant Professor, University of Texas at El Paso). |
| 11:45 a.m. – 1:00 p.m. | Lunch (Ballroom 1): Keynote Speaker: The Honorable State Representative Alonzo Baldonado, (R), District 8. University Research Council’s Awards for Creative Scholarly Activity Winners, Introduced by Dr. Jeffrey Arterburn, Professor of Chemistry and Biochemistry, New Mexico State University. (See Page 2 of Agenda for URC awardee biographies.) |
| 11:45 a.m. – 1:00 p.m. | Poster Judges’ Check-In (Convention Center Lobby) |
| 1:00 p.m. – 1:30 p.m. | Judges’ Orientation/Poster Preview (Meeting Room 4) |
| 1:15 p.m. – 3:00 p.m. | NM MESA Workshops: #1: “Metals in New Mexico,” Dr. Jose Cerrato, Assistant Professor, Civil Engineering Department, University of New Mexico & #2 Reflection of Conference, NM MESA Staff (Meeting Rooms 1-3). |
| 1:15 p.m. – 2:45 p.m. | University Research Council (URC) Poster Presentations (Exhibit Hall 2) |
| 1:30 p.m. – 2:45 p.m. | Section 1: Undergraduate Student Poster Presentations & Judging (Exhibit Hall 2) |
| 2:45 p.m. – 3:45 p.m. | Section 2: Undergraduate Student Poster Presentations & Judging (Exhibit Hall 2) |

| | |
|----------------------------------|--|
| 2:30 p.m. – 4:00 p.m. | New Mexico AMP Institutional Coordinators Meeting (Ballroom 2) |
| 3:00 p.m. – 4:00 p.m. | SCCORE Student Networking Session (Meeting Room 5): Facilitated by Dr. Danielle Grandjean. (All current and former SCCORE students are requested to attend.) |
| 3:45 p.m. – 4:30 p.m. | Poster Judges' Scoring Discussion (Meeting Room 4) |
| 4:00 p.m. – 5:30 p.m. | Dinner - Ballroom 1: Keynote Speaker: Lauren Jaramillo , University of New Mexico Ph.D. candidate, Department of Civil Engineering, Hydraulics & Water Resources. Presentation of Student Research Poster Awards for University and Community College Presenters. |
| SATURDAY, OCTOBER 1, 2016 | |
| 8:00 a.m. – noon | New Mexico AMP Community College Professional Development Workshop, (Meeting Rooms 1-2) Breakfast; Guest Speaker: Dr. Danielle Grandjean , Research Program Coordinator of the Head and Neck Transplantation Program at Mayo Clinic (former SCCORE and URS Participant). Individual and Group Reflection of the New Mexico AMP Student Research Conference. |
| 8:00 a.m. – noon | Community College Faculty Development Workshop (Meeting Room 3) Guest Speaker: Dr. Loui Reyes , New Mexico State University, Dean of Graduate School. |

University Research Council's Awards for Creative Scholarly Activity Winners:

Hongmei Luo is an Associate Professor in the Chemical & Materials Engineering Department. She earned her Ph.D in Chemical Engineering at Tulane University in 2006 and she was a postdoctoral research associate in Los Alamos National Laboratory during 2006-2009. Dr. Luo joined Chemical Engineering Department in the fall of 2009, and she was early promoted to Associate Professor with tenure in 2014. Dr. Luo's group research focuses on thin films and nanostructured materials for photocatalyst, electrocatalyst, lithium-ion batteries, supercapacitors, and solar cells applications. She has graduated four Ph.Ds and nine Master's students with thesis. Currently, her research group has eight Ph.D students and one Master's student. She has authored and co-authored 125 journal publications and has brought \$3 Million in research funding to NMSU.

Dr. James McAteer, Associate Professor of Department of Astronomy, earned his Ph.D. from Queen's University Belfast (UK) in 2004. After a four-year position at NASA studying solar physics and space weather and a prestigious three-year Marie Curie Fellowship at Trinity College Dublin, he came to NMSU with his wife Meredith and sons Leo and Max in 2010. Dr. McAteer's research is focused on studies of the Sun and addresses two main questions: 1) What is the cause of solar activity, and 2) How does this affect us on Earth? Dr. McAteer uses the interdisciplinary topic of self-organized criticality to study a wide range of topics, from studying the Sun's magnetic field and solar flares, to trying to solve the seemingly-simple problem of why the Sun is so hot. Dr. McAteer's expertise lies in effectively combining spectroscopy and imaging from both ground- and space-based instruments in conjunction with atomic data and detailed modeling efforts. He has won several grants, including an NSF Career award and over 60 refereed papers in leading astrophysics journals, including Nature and 12 papers with NMSU students as first authors. Dr. McAteer is currently leading a national effort to have NMSU lead a consortium of universities to take over operations of the Sunspot solar facility in the Sacramento Peak Mountains.

Dr. Karin M. Wiburg is currently a Distinguished Professor of Learning Design and Technology, as well as the Director of a STEM Education Research Group. She arrived at NMSU in 1993 as an Assistant Professor to integrate technology with teacher education. She soon moved beyond her initial role to create Master's and Doctoral programs around learning and technology and to build a strong research agenda using learning design and technology to increase student access and success in learning English and mathematics. Dr. Wiburg has written and received approximately \$20,000,000 in grants, most in collaboration with faculty from multiple colleges and public school leaders and teachers. Dr. Wiburg served as Associate Dean for Research in Education from 2004-2013. She returned to faculty in 2014 and her love of teaching, research, and writing. Over the last ten years, a major focus of her work has involved collaborations with school districts, mathematicians, educational researchers, and practitioners to create new designs for teaching and learning mathematics that has, in some districts, partially closed the learning achievement gap for under-represented students. She also spent eight years in higher education in California and 15 years as a public school administrator and teacher in Washington State and California. She has co-authored four textbooks and has written numerous articles and chapters for publication in research journals and handbooks. She has been a frequent presenter at national and international conferences. She attended the University of Washington for her two bachelor degrees, one in history and one in elementary education. She then became a math specialist and taught and managed math programs while completing her Masters of Education in Educational Psychology at the University of Washington and her Doctorate in 1987 in instructional design at The Alliance International University in San Diego.

Dr. Michael Hout, NMSU Assistant Professor of Psychology, recently finished his third year as a professor here at NMSU, after completing graduate school at Arizona State University, where he received crucial guidance from his mentor, Dr. Stephen Goldinger. Dr. Hout's research is focused primarily on understanding human memory and attention, with an emphasis on human visual processing and eye movements. Despite his short time as a professor, he has already amassed more than two dozen peer-reviewed journal articles, book chapters, and even articles in popular science outlets, like Scientific American magazine. His work has appeared in the media on several occasions, including being covered by our own Las Cruces Sun News. He collaborates widely across the United States and abroad, is a consulting editor at three different peer-reviewed journals, and is a Fellow of the Psychonomic Society. He teaches at the undergraduate and graduate levels, and mentors six graduate students.

Dr. Reza Foudazi holds a B.S. and an M.S. in polymer engineering from Amirkabir University of Technology (AUT), Tehran, Iran, and received a Ph.D. in chemical engineering from the Cape Peninsula University of Technology (CPUT), Cape Town, South Africa in 2010. He did a one-year postdoctoral fellowship at the Material Science and Technology Group at Cape Peninsula University of Technology, South Africa, working on replacing surfactants by nanoparticles and controlling the rheology of highly concentrated emulsions. In June 2011, he joined the Department of Macromolecular Science and Engineering at Case Western Reserve University (Ohio, USA) as a research associate, and started working on the polymerization of High Internal Phase Emulsions (HIPE) and the production of fibrous porous polymers. He joined the Department of Chemical and Materials Engineering at NMSU as an Assistant Professor in fall 2013. He has advised two Ph.D. students, two M.S. students, 13 undergraduate research assistants (URA), and two high school students in his research group since then. The students under his supervision have won different awards, fellowships, and grants (total about \$41,500). He has established a "Soft Matter" lab at NMSU, focusing on self-assembly, polymer synthesis, and colloid and interface science. He has procured \$828,232 funding from the National Science Foundation, ACS PRF, the Bureau of Reclamation, U.S. Environmental Protection Agency (EPA), the Institute for Energy & the Environment at NMSU, and the New Mexico Water Resources Research Institute. He has authored eight publications in ISI peer-reviewed journals; three of these publications were co-authored by NMSU graduate students.

Dr. Tom Manz joined NMSU in 2012 as Assistant Professor in the Chemical and Materials Engineering Department. His research group develops new computational chemistry methods and applies existing methods to design materials for green chemistry applications. Dr. Manz recently received an NSF Career Award to design new computational methods and membrane systems for gas purifications. To date, his research group has graduated one Ph.D. student (now a post-doc at the University of Minnesota) and one Master's student (continuing for Ph.D.), and he has produced some high-impact journal articles