



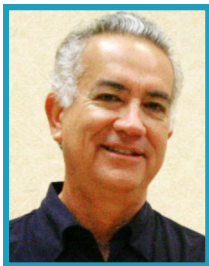
LOUIS STOKES COLORADO ALLIANCE FOR MINORITY PARTICIPATION

Interim CO-AMP Leadership



Dr. Rick Miranda

In January 2009, Dr. Rick Miranda (left) was named Principal Investigator and Director of CO-AMP to replace Dr. Omnia El-Hakim during her one-year appointment at the National Science Foundation (see full story on page 2). Dr. Miranda also serves as Interim Provost and Executive Vice-President at Colorado State University.



Dr. Ernest Chavez

Dr. Ernest Chavez (bottom left), Co-Principal Investigator for CO-AMP since January 2009, is also Professor and Chair of the Psychology Department at Colorado State University. Dr. Chavez specializes in assessment, ethnic and minority issues, substance use, adolescent issues and educational outcomes.

Dr. Beverly Marquart (bottom right) is continuing in her role as CO-AMP Program Manager with the guidance and expertise of the Management Team (top right, clockwise), Dr. Larry Johnson, Director of the Summer Science Institute, Center for Science, Mathematics & Environmental Education and math professor at Metropolitan State College of Denver; Mr. Dave Aragon, Assistant to Vice Chancellor Academic Affairs at the University of Colorado, Boulder; Dr. Hector Carrasco, Professor and Dean of the College of Education, Engineering, and Professional Studies at Colorado State University, Pueblo; and Dr. Peter Dorhout, Vice Provost for Graduate Affairs and Assistant Vice President for Research at Colorado State University, Fort Collins.

Management Team



Dr. Larry Johnson



Mr. Dave Aragon



Dr. Peter Dorhout



Dr. Hector Carrasco

Program Management

Dr. Beverly Marquart



Inside this issue:

Welcome, New Team Members!



New Site Coordinator:

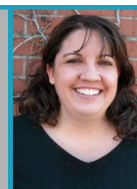
Derek Grubb — **Trinidad State Junior College**

Derek assumed site coordinator responsibilities after Carol Rankin's retirement from TSJC. Derek is the Director of Student Support Services and is a graduate of Colorado State University.

New Administrative Support:

Erin Whipple — **Program Support Services**

Erin recently joined CO-AMP as Coordinator for Program Support Services and will be providing administrative assistance and graphic design support. She has worked at Colorado State University for eight years.



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Dr. Omnia El-Hakim accepts IPA assignment at NSF

Dr. El-Hakim coordinates NSF BRIDGE Program

In January 2009, **Dr. Omnia El-Hakim** accepted a one-year IPA (Intergovernmental Personnel Act) assignment at the National Science Foundation becoming Program Director for Diversity and Outreach in the Directorate for Engineering. The Directorate for Engineering (ENG) supports engineering research and education in a competitive environment that emphasizes innovation, creativity, and excellence.



Dr. El-Hakim is currently Coordinator for the **Broadening Participation Research Initiation Grants in Engineering (BRIGE)** Program and is also responsible for envisioning ways to accomplish NSF's strategic goals as they relate to broadening participation in the engineering community that enhances equity and diversity. One of Dr. El-Hakim's visions is to reach out to international communities to provide global opportunities benefiting students and faculty, both nationally and internationally. She is a steadfast advocate for women, underrepresented minorities and persons with disabilities across the nation.

Minority Access Awards 2008

Dr. A. James Hicks Receives Innovator Role Model Award



Dr. A. James Hicks, National Science Foundation Director of the Louis Stokes Alliances for Minority Participation (LS AMP) and Bridge to the Doctorate programs, received the Innovator Role Model Award, the highest honor given by Minority Access, Inc. A tribute to Dr. Hicks was given by Dr. El-Hakim at the Ninth National Role Models Conference in Arlington, VA, highlighting his achievements and leadership to increase the number of minorities in STEM education and enhancing diversity in the nation's institutions of higher education.



Minority Access Awards 2008 (continued)

Commitment to Diversity Awards

Colorado State University, Metropolitan State College of Denver, and the University of Colorado at Boulder, all members of the Colorado Alliance for Minority Participation (CO-AMP), received awards for their commitment to diversity in 2008 from Minority Access, Inc.

Since 1995, Minority Access, Inc., a nonprofit organization of national prominence, has assisted colleges and universities, federal agencies and corporations in diversifying their campuses and worksites with their mission to focus on two issues: reducing disparities and increasing diversity. "It is fitting for Minority Access to recognize and publicize the advances colleges and universities are making toward diversifying their campuses, especially their student population," stated Andrea Mickle, Minority Access President. "Furthermore, we are pleased that our research on data supplied by the Office of Educational Statistics at the U.S. Department of Education has resulted in Minority Access' recognizing colleges and universities that genuinely seem to appreciate the value of diversity in creating a well-rounded educational experience."



Andrea Mickle, President
Minority Access, Inc.

Dr. El-Hakim accepted the award on behalf of CSU. This year, 404 underrepresented minority students from the CO-AMP Alliance graduated with a B.S. degree in a Science, Technology, Engineering, or Mathematics (STEM) field, the highest ever since CO-AMP's inception in 1996. Katrina Gillette, a CO-AMP and BD student at CSU, was invited as a guest speaker at the Role Model Conference to present how these two programs impacted her academic career and made it possible for her to pursue a graduate degree.

Left to right: Dr. Louis Dale, LS AMP Director, University of Alabama at Birmingham; Dr. Omnia El-Hakim; Felicia Guerrero, graduate student at New Mexico State University; Dr. A. James Hicks; and Katrina Gillette.





Bridge to the Doctorate News

BD 1 Fellow, John Edwards, Awarded GEM Fellowship

John Edwards, BD 1 Fellow and Computer Science student from the Missouri LS AMP, was awarded a GEM Fellowship from the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. He spent a summer as an intern at Apple Computers in California and returned to Colorado State University to enter a doctoral program. Edwards (right) is pictured presenting his research, “OS based protection against keyloggers”, at the JAM Conference in Washington, D.C.



14 New BD Fellows — Cohort 3

The Bridge to the Doctorate supplement was effectively implemented at Colorado State University with 14 Fellows receiving support to begin their path to the professoriate in STEM fields. New Fellows were welcomed into the program with substantial institutional support, including an agreement between all the colleges' Deans to guarantee research and teaching assistantships to Fellows until they are awarded the Ph.D. During the year, the University recruited this third cohort of 14 BD Fellows, bringing the total number to 35.



Back row (l to r): Gladys Bonilla, Katherine Davila Olmo, Krystle Frahm, Julia Figueroa, Mark Goodwin, Brian Leon. Front row (l to r): Jacqueline Harding, Dezaray Varland, Lisa Wolfe, Alejandro Trujillo, Daniel Feliciano, Vanessa Enriquez, Contessa Majors. Not pictured: Katrina Gillette.



Science and Mathematics Teacher Imperative: Increasing science, math teachers in U.S.

The lack of highly qualified science and mathematics teachers in middle and high school classrooms across America is a crisis that is well established. If the United States is to remain a leader in engineering, technology and innovation in the global market place, the state of science and mathematics education must be reversed, according to the National Association of State Universities and Land-Grant Colleges (NASULGC).



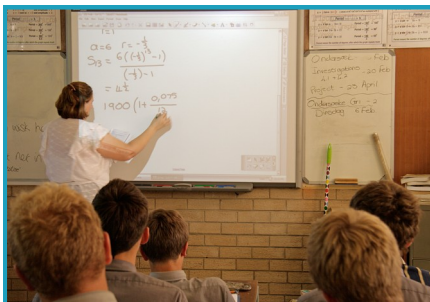
The presidents of 74 public universities and 11 university systems representing an additional 33 campuses have taken a bold step toward reversing the crisis by formally committing to the Science and Mathematics Teacher Imperative, called SMTI, developed by NASULGC, a public university association. A total of 113 NASULGC universities have committed to the SMTI, including Colorado State University, University of Colorado at Boulder, and University of Colorado at Denver.

SMTI institutions commit to increase substantially the diverse pool of highly qualified science and mathematics teachers in their states. Institutions will work with appropriate state agencies to identify their immediate and longer-term needs for high school teachers. They will bolster partnerships among universities, school systems, state governments and other entities to address state-wide needs and share best practices for the preparation of teachers.

NASULGC is also forming The Leadership Collaborative (TLC), a group of 27 institutions drawn from universities making the commitment to SMTI, with the University of Colorado at Boulder being the Colorado representative institution. The Collaborative will examine ways to strengthen science teacher preparation at their institutions and work more intensively to enhance the priority of teacher preparation and disseminate lessons learned throughout the community.

TLC activities have been funded by a \$1.5 million, three-year grant from the National Science Foundation's Math and Science Partnership: Research, Evaluation and Technical Assistance. TLC will help universities identify and address institutional constraints that impede effective and sustained secondary science and mathematics teacher preparation programs. The research outcomes will be disseminated through the Internet, collaborative meetings and sharing of technical assistance.

NASULGC member institutions, the leading public and land-grant universities in each state, educate the largest cohort of undergraduate science, technology, engineering and mathematics students on research-intensive campuses with influential colleges of education. By committing to this effort, NASULGC-member institutions are responding to the call for 10,000 new science and mathematics teachers in the National Academies report, *Rising Above The Gathering Storm*.



The teacher imperative has been supported by grants from the Carnegie Corporation of New York, the National Science Foundation, NASULGC and in-kind contributions of faculty from several universities.



International Connections:

NSF Summer Research Experience — Costa Rica

Colorado Alliance for Minority Participation (CO-AMP) biology research interns at Trinidad State Junior College, Jesse Johnson and Jess Trujillo, presented original research at the American Indian Science and Engineering Society (AISES) 2008 national conference held in Anaheim, California. Johnson's research titled, "Dewlap size, morphology, and behavior in *Norops aquaticus*" was a result of his NSF Native American/Pacific Islander Research Experience (NAPIRE) in Costa Rica during the summer of 2008. Johnson and Trujillo's research presentations were supported by the Louis Stokes Colorado Alliance for Minority Participation; Organization for Tropical Studies - Native American/Pacific Islander Research Experience (NAPIRE) program; USDA Cooperative State Research, Education and Extension Service; and the Colorado Division of Wildlife.

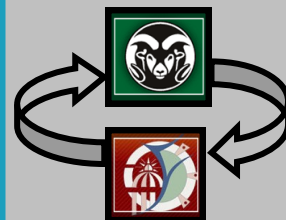


Jesse Johnson is pictured at right with a Costa Rican "resident" during his 2008 summer research experience.

Post-Doctoral Scholar From Fayoum University, Egypt



Dr. Samiha Attia (left) was recently appointed as a Post Doctoral Scholar at Colorado State University (CSU) through an International Memorandum of Understanding (IMOU) between CSU and Fayoum University, Fayoum, Egypt. Dr. Lise Youngblade (right), Professor and Department Head of Human Development and Family Studies, serves as Dr. Samiha's advisor. Dr. Samiha received her Ph.D. in Childhood Studies from Ain Shams University, Cairo, Egypt, and is a member of the faculty at Fayoum University where she teaches Childhood Socialization, Communication Skills, and Play Psychology.

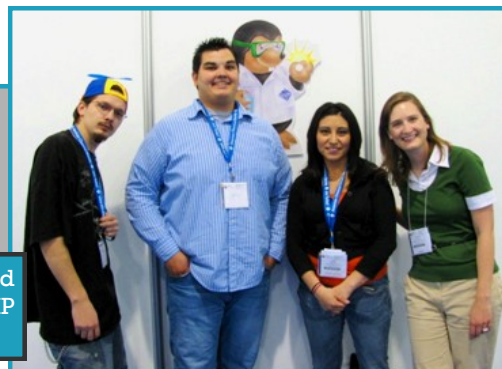


Student News:

ASC Students Attend Spring ACS Expo

Three CO-AMP students from Adams State College attended the 237th American Chemical Society National Meeting & Exposition in Salt Lake City, UT, March 22-26, 2009.

From left to right: Students Tyler Christensen, David Gurule and Jeri Chacon, and Assistant Professor of Chemistry and CO-AMP Site Coordinator for Adams State College, Dr. Renee Beeton.





Student News (continued):

CSU SACNAS Award Winners

The Society for Advancement of Chicanos and Native Americans in Science (SACNAS) Chapter at Colorado State University, for the second year in a row, received the 2007-2008 Role Model Award for outstanding faculty and university support at the 35th SACNAS national conference in Salt Lake City, Utah, October 2008. A few highlights of activities that garnered them this award: hosting more than 300 participants at the Math, Science, & Technology Day (MST Day), a one-day event that exposes diverse 4th & 5th graders to fun science experiments and college life; and raising funds to provide awards in the junior and senior division of the Colorado Science and Engineering Fair (CSEF), a 3-day event where 6th-12th graders showcase their science and engineering projects. Colorado State SACNAS also plays a key role in recruiting tutors for Trifuno, a program that provides free one-on-one tutoring and mentoring to K-12 students for support with science fair projects and homework.



SACNAS

Society for Advancement of Chicanos and Native Americans in Science

Colorado State University Student Chapter

CSM Students: SHPE Award

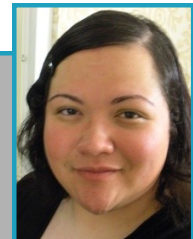


Students Roxanna Meza, Alex Lopez, Daniel Cruz and Eduardo Cervantes, members of the Academic Olympiad Team and Minority Engineering Program (MEP) at Colorado School of Mines (CSM), tied for 3rd place with University of California – Los Angeles (UCLA) at the Society of Hispanic Professional Engineers (SHPE) 2008 national conference in Phoenix, Arizona. The Colorado School of Mines team took first place in their region.

Front row (left to right): Roxana Meza, Anjali Jha, Dana Torres, Dayleen Alcocer, Gabriela Arias, Eddy Cervantes, Max Martinez. Back row (left to right): Richardo Mendez, Daniel Cruz, Jose Avitia, Alex Lopez, Eli Solis.

Eva Salas: 2008 AISES Award

Eva Salas, a mechanical specialty senior at Colorado School of Mines (CSM), won third place for her oral presentation, “Solid oxide fuel cell fabrication methods using tape casting and co-firing”, at the 2008 national American Indian Science and Engineering Society (AISES) conference held in Anaheim, California. Ms. Salas completed a 10-week summer fellowship while at the National Energy Technology Laboratory (NETL) in Morgantown, WV, part of the Department of Energy’s Office of Fossil Energy. She worked with NETL researcher, Kirk Gerdes, to investigate the effect of common syngas trace elements on the performance of solid oxide fuel cells (SOFC). Ms. Salas has also worked with Dr. Neal Sullivan, director of the Colorado Fuel Cell Center and Colorado School of Mines engineering professor, helping to conduct corrosion analyses on SOFCs. Ms. Salas is also a member of the Minority Engineering Program (MEP) at CSM.





Steering Committee Meetings

Spring Meeting at Colorado School of Mines, Golden, CO



Student Presenters at the Spring Poster Forum

Angelique D. Diaz (right) from the Department of Environmental Science and Engineering at Colorado School of Mines presented her research on the study of plutonium's behavior under a variety of environmental conditions, "Biogeochemical cycling of plutonium: Effect of aging and the presence of natural organic matter", during the student poster forum.



Misty Rowe-Konopacki (left) from the Department of Chemistry and Geochemistry at Colorado School of Mines presented her research in nanotechnology and the development of nanomedicines involving medical intervention at the molecular scale for diagnosis, prevention, and treatment of diseases, "Modification of planar and nanoparticle surfaces with reversible addition-fragmentation chain transfer polymers", during the student poster forum.

Fall Meeting at Seagate Technologies, Longmont, CO



Student Presenters at the Fall Poster Forum

Left to right: Chide Duru, undergraduate student at Metropolitan State College of Denver: "Pheromone sensing systems in insects"; Elizabeth Castelbaum, Forester at Colorado State Forest Service and Bridge to the Doctorate Fellow (Cohort 1): "Field performance of spring wheat transformed with the mtID gene for drought tolerance"; Danielle Griego, undergraduate student at CU Boulder: "Green gas emissions inventories".





Announcements!

Steering Committee Meeting

April 9th, 2009

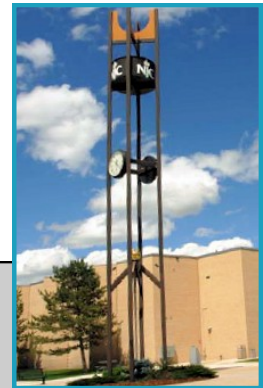
Southern Ute's
Sky Ute Casino Resort
Ignacio, CO



NSF Joint Annual Meeting

JAM Conference

June 8th—June 11th 2009
Washington, DC



Northeastern Junior College: Application for CO-AMP Subcontract Submitted

NJC Overview

- NJC is an open enrollment, public, two-year institution founded in 1941, located in Sterling, Colorado.
- NJC is Colorado's largest public residential two-year college.
- NJC offers two-year associate degrees; 19 certificate programs; GED and ESL programs.
- 1,000 full-time students and 2,000 part time students

Front row (L to R): Brenda Zink, Health/Science/Math Chair; Alice Weingardt, Director of Financial Aid; Omnia El-Hakim; Beverly Marquart. Back row (L to R): Stanton Gartin, Vice President-Academic Services; Andy Long, Director of Admissions; Judy Giacomini, Vice President Student Services; Gail LaForce, Grant Coordinator; Lance Bolton, President.





CO-AMP Site Coordinator Team

Adams State College

Dr. Renee Beeton,
Assistant Professor
Chemistry

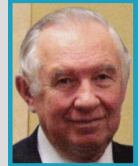
Phone: (719) 587-7383
Email: rbeeton@adams.edu



Metropolitan State College of Denver

Dr. Larry Johnson, Director
Center for Math, Science, &
Environmental Education

Phone: (303) 556-5106
Email: johnsonl@mscd.edu



AIMS Community College

Dr. Steve Mills, Instructor
Mathematics

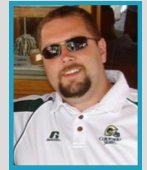
Phone: (970) 339-6238
Email: steve.mills@aims.edu



Trinidad State Junior College

Derek Grubb, Director
Student Support Services

Phone: (719) 846-5677
Email: Derek.Grubb@trinidadstate.edu



Colorado School of Mines

Khanh Vu, Director
Minority Engineering Program

Phone: (303) 273-3021
Email: kvu@mines.edu



University of Colorado - Boulder

Anthea Johnson Rooen,
Acting Director
Multicultural Engineering Program

Phone: (303) 492-4276
Email: anthea.johnson@colorado.edu



Colorado State University

Arlene Nededog, Director
Retention Programs

Phone: (970) 491-2036
Email: Arlene.nededog@colostate.edu



Cindy Cabrales, Program Coordinator Retention & Student Activities

Phone: (303) 492-0083
Email: cindy.cabrales@colorado.edu



Aaron Benally, Coordinator Women & Minorities in Engineering Program

Phone: (970) 491-4357
Email: aaron.benally@colostate.edu



University of Colorado – Colorado Springs

Tina Moore, Director
Engineering & Applied Sciences

Phone: (719) 262-3347
Email: tmoore@eas.uccs.edu



Colorado State University – Pueblo

Dr. Jane Fraser, Chair
Department of Engineering

Phone: (719) 549-2036
Email: jane.fraser@colostate-pueblo.edu



University of Colorado – Denver

Angela Marquez, Director
Hispanic Student Service & Outreach

Phone: (303) 556-6209
Email: angela.marquez@ucdenver.edu



Fort Lewis College

Dr. Don May, Professor
Engineering

Phone: (970) 247-7545
Email: may_d@fortlewis.edu



External CO-AMP Evaluator

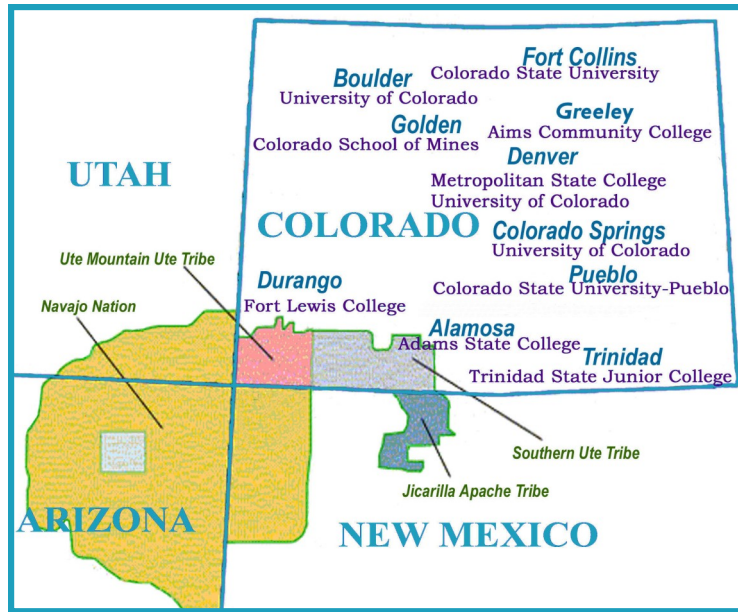
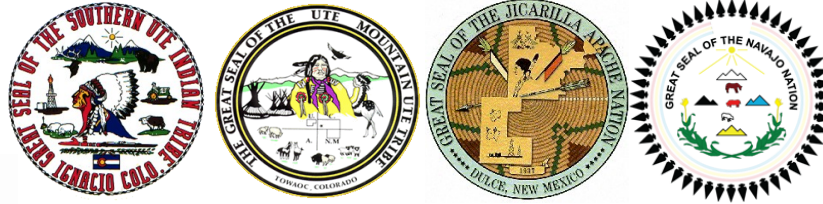
Dr. Rose Shaw, President
Metrica, Inc.

Phone: (970) 330-3161
Email: roseshaw@cybox.com





Serving Colorado and the Four Corners Region



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Fannie Posey-Eddy



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Dona Wallace

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AMD
The future is fusion

AMD
John Wu

IBM
Alma Rosales

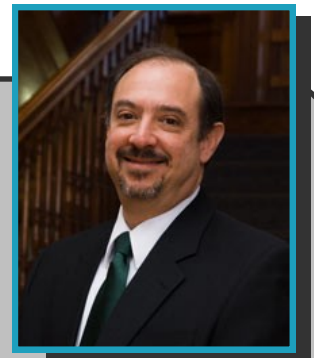


Note from the Director:

This has been an exciting year of change for the Colorado Alliance for Minority Participation! In January 2009, Dr. Omnia El-Hakim accepted a one-year appointment with the National Science Foundation becoming Program Director for Diversity and Outreach in the Directorate of Engineering. In the interim, I assumed responsibility as Principal Investigator and Director of CO-AMP along with Dr. Ernest Chavez who serves as Co-PI. I know that Dr. El-Hakim will bring back many great experiences and extensive knowledge from her service at NSF!

In February, the University of Colorado at Boulder submitted a proposal to NSF for a fourth cohort of the Bridge to the Doctorate. CO-AMP first received BD funding in 2006 and has supported the first three cohorts of graduate students at Colorado State University. In future years, CO-AMP will rotate the BD opportunity to other CO-AMP institutions, including the Colorado School of Mines and the Denver and Colorado Springs campuses of the University of Colorado. Two specialty STEM graduate programs at the University of Colorado at Boulder are ranked among the top 10 and another 4 in the top 20 in the 2008 US News and World Report's graduate schools ranking report. We are looking forward to a successful award and assisting each new BD Fellow as they progress toward a Ph.D.

Last, but certainly not least, I want to mention how very proud I am of each of our CO-AMP Site Coordinators for the work they do each day with their students. All of our CO-AMP sites do a tremendous job in supporting students at conferences, summer research opportunities, workshops, internships and mentoring programs! As evidence of their efforts, CO-AMP recently witnessed the highest number of BS degrees awarded to underrepresented minorities in STEM fields since its inception in 1996! We will continue to build on this success and are looking forward to a very bright future for our students!



Dr. Rick Miranda
*Principal Investigator
and Director of
CO-AMP
CSU Interim Provost/
Executive Vice-
President*

Dr. Rick Miranda