



LS CO-AMP COMMENTARY

Fall 2006

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Colorado Diversity Forum welcomes Dr. A. J. Hicks and Senator Robert McClusky

Dr. Omnia El-Hakim, Colorado Alliance for Minority Participation Principal Investigator, welcomes Senator Robert McClusky and NSF LS AMP Director Dr. A. J. Hicks to the Colorado Diversity Forum, held April 13 in Denver.



Those attending this event honoring Dr. Hicks included college presidents, provosts, and other representatives of higher education, as well as other dignitaries from across the state. Chris O'Brien, Program Manager of the Ford Foundation Diversity Fellowship Program presented fellowship opportunities . If you are interested, e-mail her at infofell@nas.edu.



Seventeen Colorado students presented their research at the Colorado Diversity Forum.

...

... including a 5th grade RM-MSMSP student researcher and her mother!



See CO Diversity Forum p. 6)

Inspiration from Pueblo Community College

Melissa Garduno is a native of Pueblo, Colorado. She graduated from a local high school and enrolled in Pueblo Community College in 2003, declaring an Associate of Science Degree.

“take advantage of every opportunity to succeed and to assist others in reaching their goals.”

During her tenure at Pueblo Community College, Melissa was actively involved in the PCC student chapter of MAES and was an active LS CO AMP participant. Among other honors, Melissa was named as the Colorado State Fair Fiesta Queen in 2004.

Melissa has been an inspiration to other community college students, encouraging them to “take advantage of every opportunity to succeed and to assist others in reaching their goals”. . .



Melissa Garduno
Pueblo Community College

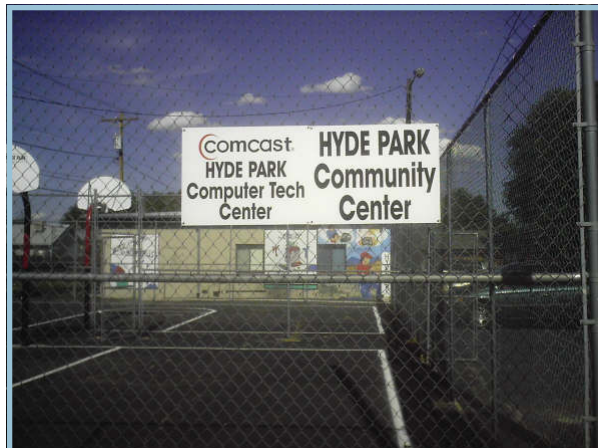
Inspiration from CSU Pueblo



The Hyde Park Community Center, where CSU Pueblo students volunteer to serve the community

Philip Gonzales, a CO-AMP participant at CSU-Pueblo, is volunteering to teach for a project initiated by the CIS Department at CSU-Pueblo and Michelle Gjerde from the CSU Career Center.

[Read more on page 4](#)



“Challenge”

Colorado School Of Mines Minority Engineering Program

The Minority Engineering Program (MEP) at Colorado School of Mines was established in 1989. The mission of MEP is to recruit, retain and graduate ethnic minorities in the areas of math, science and engineering by **M**aintaining community and cultural ties, **E**nhancing academic success, increasing student retention, expanding recruitment and **P**romoting professional development.

The MEP is committed to the academic success of our students on campus and coordinates a number of programs

designed to promote recruitment and retention of our students. One such program is *Challenge*, a four-week summer academic transitional bridge program for selected freshmen

that otherwise may not qualify to attend the School. *Challenge* introduces minority students to college life, prepares them for the academic rigors of Colorado School of Mines,

and exposes them to “gate keeping” courses such as calculus and chemistry.



Program Overview

(4 Weeks)

Mathematics 100: A strong foundation is parametric equations, vectors and trig functions are essential to excellence in Calculus. (1 credit)

Chemistry 111: Master of fundamental chemistry, including stoichiometry of analysis, equilibrium and calibration, helps ensure success in the fall. (3 credits)

MEP 100: Which type of engineering is best for you? See for yourself during weekly field trips and individual goal setting.

Requirements

- Successful completion of Challenge is required for admittance to CSM in the fall. Minimum requirements are as follows:



- Students must earn a minimum 3.0 grade point average (“B” average) for all course work.
- Students must live on campus during the entire 4-week program.
- Students must attend all classes, field trips and required events.



MEP



BRIDGE TO THE DOCTORATE

Bridge to the Doctorate

Benefits:

- \$30,000 annual student stipend
- \$10,500 tuition & fee supplement
- Individualized faculty mentoring & coaching
- Participation in professional conferences & meetings
- Links to research & professional opportunities
- Enriched academic services & support

Eligibility:

All interested candidates must:

- Be a participant in an LS AMP Program
- Have obtained a BS Degree in a STEM Discipline
- Be a U.S. Citizen or Permanent Resident
- Have a 3.0 undergraduate GPA or better
- Plan to pursue a PhD in your area of study
- Take the GRE by the end of Fall semester of this award year
- Maintain good academic standing

Requirements:

Students must:

- Maintain academic standing
- Participate in program activities
- Develop an individual academic & career plan

To apply, go to www.bridgetothedoc.colostate.edu

CSU Pueblo

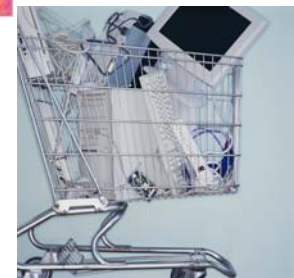
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Philip Gonzales, Computer Information Systems



major and CO-AMP participant at CSU Pueblo is participating in teaching computer skills at a local community center.

Gonzales is the classroom teacher, as well as the network/computer technician of the Hyde Park Community Center. Philip has volunteered to take up these positions on a part-time basis. He teaches anything from Introduction to Computers, Beginning Internet and Intermediate Internet to any type of Microsoft software applications.



Welcome Dr. Elaine Green— New CO-AMP/BD Program Coordinator

Dr. Green has worked in higher education her entire career including positions at the University of Oregon, the University of Kansas, the University of Nebraska, and Montana State University. She most recently served as the Executive Director of Willamette Academy, a new college access program for underrepresented students in grades 8-12. That program is sponsored by Willamette University in Salem, Oregon. She earned her Masters Degree at Indiana University and her doctorate is in Higher Education Administration from the University of Oregon.

Having recently moved to Colorado, she is looking forward to learning about each of the Alliance partner sites, meeting CO-Amp Managers and Site Coordinators, and working with CSU staff on the Bridge to the Doctorate program.



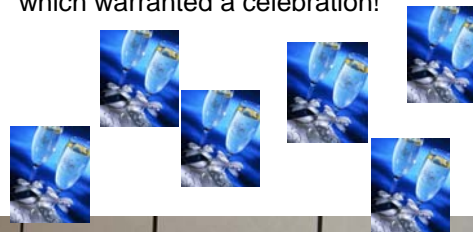
Dr. Elaine Green, Ed.D.
CO-AMP & Bridge to the Doctorate
Program Coordinator



CO AMP 10th Anniversary October 6, 2006



CSU– Pueblo hosted the bi-annual CO AMP Steering Committee and planning meeting. This coincided with the 10th Anniversary of CO AMP— which warranted a celebration!



CO AMP is celebrating a 60.4% increase in degrees awarded to underrepresented STEM students from baseline to this past year.

There was also a 63.7% increase in enrollment of underrepresented STEM students from the start of the CO AMP program .



AIMS hosts LULAC Conference

The 21st annual League of United Latin American Citizens Youth Leadership Conference was held at AIMS Community College on October 21, 2006. The objective of the conference was to prepare students to be better leaders and to understand the importance of education as they grow up. Arturo Rodriguez, the second president of the United Farm Workers of America, spoke to the students about the struggles of migrant workers and how they organized to create social change and brought awareness in a non-violent manner.

“Whenever you see the youth in the community take initiative toward making a positive change in the community, it’s always a good thing.”

- Vanessa Delgado, The Tribune

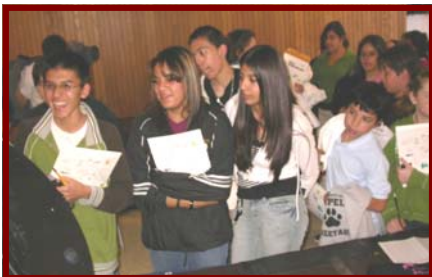


The conference also emphasized cultural pride, and included a number of colorful cultural performances, as well as leadership and management workshops. The students also listened to speeches by the LULAC Director, Tom Duran and the President and Vice President of the LULAC Council.

Read more about LULAC on page 11

“As a matter of fact, it was one of the highlights of my entire 20-year career.”

- Maria Casillas, Chappelow LULAC Advisor



The Colorado Diversity Forum



Dignitaries from across the state participated in this event.

The Huitzchilipotchli Aztec Traditional Dance Troup demonstrated and educated participants of the Forum about Colorado Native heritage.



Dr. Hicks' Site Visits in Colorado



Metropolitan State College of Denver Students with Dr. Hicks Dr. El-Hakim Dr. Johnson

U of Colorado - Denver Students with Chris O'Brien Dr. El-Hakim Dr. Encinias Dr. Hicks



Southern Ute Teacher with Dr. Hicks Dr. El-Hakim Chris O'Brien

Fort Lewis College—a Faculty member with Dr. Hicks Dr. El-Hakim Chris O'Brien Dr. May



Metropolitan State College of Denver Administration with Dr. Hicks Dr. Encinias

RM-MSMSP at CSU

The Rocky Mountain Middle School Math Science Partnership Summer Camp for Middle School students at Colorado State University is built upon the momentum and the infrastructure that has been established at the Colorado Alliance for Minority Participation, known as CO-AMP. The Summer Camp for Middle School students implements hands-on activities in Math and Sciences and exposes young students to science, technology, engineering, and mathematics. Students are involved in team work and leadership projects in a fun and exciting environment. Students receive the whole university experience by spending two weeks living and dining in CSU residence and dining halls with their counselors.

Some of the goals of this program are to:

- Widen opportunities and expand choices for all students through gender equity.
- Involve parents in STEM activities
- Encourage students to choose challenging high school science and math college preparatory courses.
- Introduce engineering concepts to middle and high school students.
- Get students involved in team work through group research activities.
- Provide an opportunity to exhibit professionalism by making a presentation of their research findings to a diverse audience.



Mike Celaya is the Education and Outreach Director at the Engineering Research Center at Colorado State University. This is the second time Celaya has worked with RM-MSMSP.

"For the second consecutive year I've had the opportunity to present interactive light and optics workshops to students participating in the RM MSMSP program. I have found the students to be alert, scientifically curious, and well mannered. In short, it has been a delight to work with them and their counselors. These workshops have also helped me reach a greater number of students, in particular students from underrepresented groups in science and engineering. This is a valuable program that I hope will continue."

- Mike



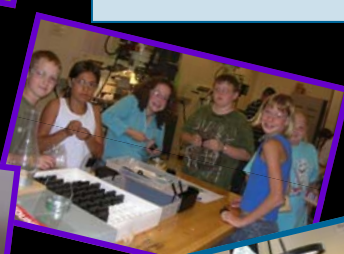
... more RM MSMSMP

In response to the overwhelming number of middle school applicants, Colorado State University offered two, two-week summer camps for middle school students. Students had the opportunity to work in small groups supervised by counselors, faculty, and college student mentors. This effort turned out to be a great encouragement for the students to consider college education in the STEM disciplines.



"The camps gave me the opportunity to teach the children what I know as a budding engineer..."

Habib Palenfo is a Junior level student in Mechanical Engineering at Colorado State University. Habib participated as a counselor in both camps this summer "It was a great experience working with the kids. The camps gave me the opportunity to teach the children what I know as a budding engineer and also let them experience the fun of flying on a simulator. I gained a lot of leadership experience and I will be happy to do it again."



Internationalization at Colorado Springs



TAIWAN

In the summer of 2006, the CO-AMP program at CU in Colorado Springs (UCCS) hosted a group of 16 exchange students from Taiwan. UCSS CO-AMP is in the process of developing a transfer program for CO-AMP students to go to Ching Yung University in Taipei. The international partnership program with Ching Yun University, supported by the UCSS College of Engineering, is a wonderful opportunity for our minority students to study abroad. Room and board will be provided by Ching Yun University. Students will have the opportunity to tutor English and have an international internship.

Colorado University — Boulder Multicultural Engineering Program “Bridge”

By Courtney Stauffer

The CU-Boulder “Bridge” Program transitions first-year students through the rigors of college.

When University of Colorado freshman Gabi Gutierrez grudgingly left her home in Odessa, Texas last summer to spend five weeks in engineering classes in Boulder, Colorado, all she could think was, “I hope this helps.”

Looking back, Gutierrez has no regrets – the hard work she put in gave her a jump start on her first college semester and introduced her to classmates who are now her friends and study partners.

Over a decade ago CO-AMP funding helped the CU Multicultural Engineering Program (MEP) launch a summer “boot camp” to help a dozen underrepresented minority students transition to their freshman year in engineering. Focused on academic rigor and the development of social ties proven to increase retention of minority students, the Summer Bridge Program has become a staple program of CU’s College of Engineering and Applied Science.

... Gutierrez has no regrets – the hard work she put in gave her a jump start on her first college semester ...

This year’s residential summer program brought 26 incoming freshmen to campus for five weeks of intense coursework in calculus, physics, chemistry, computing and humanities. A special bioengineering projects class, funded by the National Institute of Health, challenged students to build a mock cardiovascular circulatory system and exposed them to one of the fastest-growing fields of engineering.

A month into their first semester of college, Summer Bridge graduates say the program was worth the effort and sacrifice of their precious summer vacation.

“I would have gotten straight Fs if I hadn’t gone to Bridge. Now I’m getting As and Bs.”

- Andrew Van Essen



Comparing Bridge to school now, school seems easy. One night of Bridge homework is like one week of homework now,” says CU freshman Bianca Ragin.

The academic rigor of Summer Bridge came as a rude awakening to CU freshman Andrew Van Essen.

“I never did homework in high school,” he says, explaining that Bridge served as a healthy reality check that set him up for a successful first semester of college. “I didn’t do so well in Bridge, but I learned how to ‘do’ college. I would’ve gotten straight F’s if I hadn’t gone to Bridge. Now I’m getting As and Bs.”

Industry tours to Lockheed Martin, SpectraLink, and the Boulder Reservoir Water Treatment Plant, as well as social events, campus activities and frequent interaction with upper-class students enhanced the students’ academic experience while easing their anxiety about coming to college.

“On the first day of school I felt at home here,” says Kyle Madruga, a 2006 Bridge participant. Madruga admitted the program greatly influenced his decision to stay at CU. “I had planned to transfer after my freshman year but through the contacts I made in Bridge I came to love CU. It definitely made me feel welcome.”

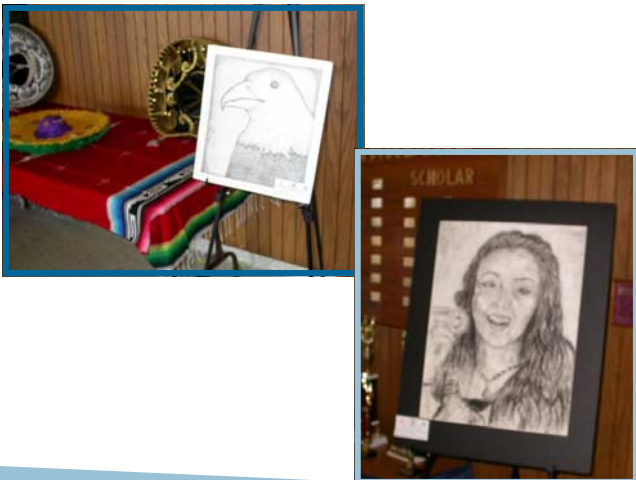
LULAC Youth Leadership Conference at AIMS Community College



Comment from Advisor:

"Wow, wow, and double wow!!! That's all I can say. My students LOVED the conference and so did I. As a matter of fact, it was one of the highlights of my entire 20-year career. It was so exciting to watch the confidence increase of the Chappelow volleyball team, as they won more and more volleyball games. They went from timid, inexperienced players to super jocks that could conquer the world!!!! Watching shy little Adriana walk confidently on stage and receive her prize for the art contest brought tears to my eyes. I am so proud of them and so grateful to all for a fabulous experience. This was truly a confidence-boosting, culturally-affirming leadership conference that my students will never be able to forget. God bless you and your LULAC work!"

- - **Maria Casillas**, Chappelow LULAC Advisor



Highlight of the TSJC CO-AMP Program

The recent highlight of the Trinidad State Junior College CO AMP Program was the recognition of excellence in biological research with a third place award in the ecology division at the TriBeta National Biennial Biology Conference, held this past summer at Melbourne, Florida. Trinidad State CO-AMP biology research intern Chris Blocker was a co-author on this research and worked on this project as a paid research intern. Chris presented earlier versions of this research at the Colorado Diversity Forum in Denver and at the Regional TriBeta Conference at Socorro, NM. Chris especially enjoyed meeting with Dr. Hicks at the Denver Forum.



Chris Blocker, Hispanic CO AMP biology research intern at TSJC, uses an inverted microscope to study lungworm parasites of Rocky Mountain bighorn sheep. Blocker's research received a third place award at the TriBeta National Biennial Biology Conference.

From the Director . . .

Centralization of Diversity Initiative:

Colorado State University has created a new administrative infrastructure that has brought significant change to the way the university recruits, retains, and graduates underrepresented doctoral students in Colorado. At CSU, the CO-AMP and Bridge to the Doctorate (BD) offices have been linked to the Alliance for Graduate Education and the Professoriate Program (AGEP) activities and other federally-funded initiatives, and are centralized and implemented through the office of the Vice Provost for Graduate Studies.

The sustained growth of CO-AMP is mainly due to the hard work and dedication of the faculty, administration, staff and community members of the participating institutions working together to recruit and retain diverse students. Centralizing all the diversity initiatives at the university level will expand the structure of the implementation of these initiatives to support the CSU strategic plan of enhancing diversity. Also, centralization will assist CSU administrators and deans to institutionalize many CO-AMP activities to insure continued support of underrepresented students after NSF funds expire.



**Dr. Omnia El-Hakim, Ph.D.
University Executive Director of
Diversity Recruitment and
Retention, CO-AMP PI & Director**

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