Building Partnerships

There is so much to celebrate this year, I hardly know where to begin.

Much of what we’re celebrating is the result of new and growing partnerships involving our department, alumni, industry, student organizations, professional organizations, the Colorado State University administration, and other units at Colorado State. I’m pleased to include our students as partners, too. By choosing to be active participants in their education, they are helping to further shape Colorado State’s construction management program to become one of national distinction.

This fall, we celebrate the completed renovation of the old Industrial Sciences Building into the new Preconstruction Center. In addition to providing our teachers and students with a state-of-the-art learning facility, the Preconstruction Center demonstrates the enthusiasm and commitment of our partners to Colorado State's CM department.

I am thankful to our university’s administration for the support they’ve given, which has allowed our department to strengthen our relationship with the industry.

During the last two years, Colorado State’s administration approved salary increases for tenure-track faculty, six new faculty positions, a new faculty start-up package supporting research and innovations in construction education, and a cap on enrollment. This support and the contributions of a superior learning environment are the cornerstones that will elevate our CM program from being a successful program to a significant one setting standards for construction education nationwide. This achievement will empower the CM department to attract and retain outstanding faculty and contribute to leading innovations in construction.

For our faculty and staff, the department-industry partnership enhances the quality of our students’ education and the likelihood for their career success. Many students will become familiar with their future employers even before they graduate. Every area within the new Preconstruction Center provides our students with examples demonstrating industry’s engagement in our construction education program. We hope our students will come back years from now to follow the lead of our construction partners – providing financial support as well as engaging in the classroom and participating on our advisory board.

While we have much to celebrate, much remains to be done. This year’s challenges are to meet the fundraising goal for the Heavy Construction Management Endowed Chair, attract more sponsored research projects that will enable our faculty and students to engage in solving problems facing the industry, and develop a residential construction program that will become a model for other such programs nationwide.

We have built a strong team, and we are on the right path toward realizing our vision. With your support, we look forward to another successful year.

Mostafa Khattab, Department Head
Many stories, no doubt, are embedded in the walls of the old Industrial Sciences Building, which has served Colorado State students and faculty for 126 years. This year, the building inherits not just one story, but many.

One story is that the building itself is a teacher. The inner workings of the new Preconstruction Center are exposed, giving students a clear look at electrical, heating, cooling, and plumbing systems. Windows look out to new HVAC rooftop units, and ductwork and pipes are suspended below refurbished, vaulted wood ceilings. Each window along the south wall of the student break room features a different kind of glass and frame, and the second-story hallway walls present museum-like display cases containing neatly labeled fixtures and parts used in electrical and plumbing work.

Formerly opaque clerestory windows have been stripped of their paint to allow natural light to filter into the classroom below.

“In some areas we lowered the ceilings to conceal HVAC and insulation,” says project superintendent Bill Bialek. “In other areas we installed soffits.” The soffits allow the building’s cherished arched windows to remain exposed, retaining the beauty of the original masonry and demonstrating one way to preserve the building’s architectural integrity while also retrofitting it for today’s needs.

**Fostering collaboration**

Now, for the first time, Colorado State’s construction management students have a place that is specifically designed and constructed for teaching and practicing preconstruction – the collaborative planning, estimating, scheduling, communications, work flow, lifecycle, trouble-shooting, safety, and marketing processes now provided at the design stage.

Before a shovel of dirt is ever turned, preconstruction occurs, involving all project team members to address every aspect of a construction project, including environmental impacts and the needs of the end user. As a result, quality rises, work flows more smoothly, safety is enhanced, operations are more efficient, schedules are maintained, stakeholders are satisfied, and the final cost of the project more closely resembles the original estimate. Furthermore, team members take pride in the project and assume greater responsibility for their own work. They are more conscientious of the project goals, the important role they play in attaining those goals, and the needs of the other stakeholders.

Ed Haselden, President of Haselden Construction, an award-winning company with annual revenues approaching $300 million, says, “Eighty percent of today’s work is done this way. A contractor is brought on board as part of the precon process. Owners want to be assured as a project is designed that it’s designed within a budget. Preconstruction allows contractors to deliver a project around the concept of best value: best quality, schedule, and most qualified project team.” (cont. on page 4)
The spacious Haselden Preconstruction Laboratory is at the heart of the new building. Partial walls create 12 separate work areas, each equipped with appropriate technology. Within these work spaces, student teams are practicing the preconstruction process.

Building relationships

Preconstruction is ultimately about building relationships, and building relationships that benefit all stakeholders is the big story behind how the Preconstruction Center came to be.

Three years ago, Larry Grosse, then Department Head, had a dream: to honor the Industrial Science Building’s Richardsonian Romanesque architecture of the past and also renew the building to serve the needs of our nation’s budding construction leaders.

Grosse approached Ed Haselden who said, “If you can overhaul the curriculum so that when students graduate, they can move directly into a preconstruction department, then I’ll help you get a whole new preconstruction center to teach students all they need to know.”

Haselden invited CM faculty and CSU administrators to tour Haselden Construction’s preconstruction department and gain a clearer understanding of how this collaborative process works – to the benefit of the industry as well as the project’s stakeholders. Haselden, a member of Colorado State’s Board of Governors, had the University’s, the students’, and the industry’s best interests at heart. He understood that effectively preparing CM students to be construction leaders would land them in good jobs where they would positively impact construction projects that ultimately would benefit the quality of life for people in Colorado, the nation, and beyond.

Drawings for the Preconstruction Center were unveiled in spring 2005, at the department’s 60th anniversary gala, revealing to University administrators, CM alumni, and industry leaders where the department was headed – not only with the building but also with the university-industry relationship that would bring the project to fruition.

Creating the project team

By the time Grosse retired in 2007, Gerald H. Phipps, Inc. and Haselden Construction were the only major donors committed to the building’s renovation. New Department Head Mostafa Khattab saw that industry partnerships and administrative support both were critical to addressing budget challenges, space constraints, and uncontrolled enrollment.

Some construction was underway, but many more major contributions were needed to realize the project’s full potential. Khattab’s vision was to elevate the CM program to one of national prominence, and the IS Building renovation was a necessary part of fulfilling that vision.

By spring 2008, the project had become a conduit for attracting leaders to come forward and work together to achieve mutually beneficial goals.

Khattab shared the department’s status with April Mason, Dean of the College of Applied Human Sciences, and Tony Frank, then Vice President of Colorado State. He explained the dire need for more faculty and an enrollment cap if the program was to remain viable. At that time, with more than 1,200 students enrolled, construction management was the University’s largest major, and there...
was every indication that more and more students would choose a CM major.

Construction industry leaders were poised to make major contributions and become actively involved in elevating Colorado State’s CM program – but changes had to be made.

In an unprecedented move, the University quickly approved funding for the department to hire six new faculty within the next three years; an enrollment cap that became effective in fall 2008; and admission requirements raising the bar for students seeking to enroll in the construction management program.

Khattab met with Haselden to share his goals for the program, including strengthening relationships with industry and his commitment to achieving program excellence. He also explained the financial need for completing the IS Building renovation.

Aware that Colorado constructors have always been active in Colorado State’s CM program; and seeing how much better the program could become with additional industry support, Haselden offered to accompany Khattab on fundraising visits to meet with executives of other leading construction companies. They discussed where the program was headed and what it would take to get there. Haselden said, “I’ve made a contribution to this building and to enhancing the quality of construction education at Colorado State. I challenge you to do the same.”

By spring 2009, Haselden Construction, Hensel Phelps, G.E. Johnson, PCL, Saunders Construction, Valley Crest, Concrete Frame Association, Gerald H Phipps and Kiewit committed major gifts that would provide each company with a named area in the building.

A consortium of mechanical contractors, MCAA, NECA, and SMACNA, also came forward with support.

Not only would the leading donors contribute the more than $5 million needed to complete the renovation, they also would collaborate with CSU’s Facilities Management to provide the design, management, and project teams to do the work.

**Bringing the project full circle**

Three months before the Preconstruction Center opens, CM student leaders partner with Saunders Construction to provide weekly tours for up to 15 students. There are never enough spaces available for the number of students wanting a tour. Wearing hardhats, the students venture through work areas and see where, in just a few months, they will be learning. They ask questions of people who, just a few years ago, also were in a classroom, intent on becoming construction professionals. The students observe in action a project like one they may eventually play a part in.

“Employees from all the major donor companies are working here, and so are employees from a lot of the plumbing and electrical contractors that donated,” Bill Bialek says while conducting a tour. The joint venture turned out to be a “remarkable feat,” says Haselden. “Never before, anywhere in the country, have 7 general contractors and 30 subcontractors collaborated – pooling cash, management expertise, physical labor, and personnel on the job site to orchestrate a project of this magnitude.” (cont. on page 22)
New PADB Chair Elevates Board

In 1974, Darrell Eastwood graduated from the ICM program at Colorado State. Today, he’s Chief Operating Officer for Saunders Construction, Inc. He’s also the new chair of the CM department’s Professional Advisory Development Board (PADB).

“I love CSU, and I’m passionate about the CM program and the direction Mostafa is taking it,” says Eastwood.

The PADB was formed in 2000 to support and promote Colorado State’s CM department. Eastwood is working to revitalize the board and strengthen the ways in which it helps advance the CM program toward becoming the best construction education program in the country.

During Eastwood’s first year as chair, the PADB has established bylaws and four committees:

• Internship and Career Committee actively seeks more internship and permanent placement opportunities that students so desperately need.

• Undergraduate Education Committee looks at curriculum issues and recommends how core ideas, such as sustainability, BIM, and new technology, can be integrated into the curriculum.

• Research and Outreach Committee helps connect faculty’s research capabilities with industry’s need for testing and new knowledge that will lead to safer and more efficient and effective operations.

• Professional Development and Membership Committee acts as the steering group to develop strategies to advance the CM program, enhance fundraising activities, and promote PADB membership.

The board also has created a vice chair position, which will help ensure continuity of leadership. The new vice chair will be nominated and selected during the fall 2009 meeting scheduled for Oct. 29.

The board, 75 to 100 members strong, meets on campus each fall and spring. “One of my goals is to increase attendance and make the meetings something that people want to attend,” says Eastwood. “We want to have a meaningful agenda, so members can really engage, enjoy what they’re doing, and know that they’re helping to direct the program and positively impact it.”

DBIA Holds Conference at CSU

In June, the CM department hosted a boot camp presented by the National Design-Build Institute of America (DBIA). Local contractors attending the program learned from nationally known experts the key principles of design-build projects. Those passing an exam given at the end of the four-day program became DBIA-certified.

The course was held in Guggenheim Hall. Attendees spoke with professors and saw how other companies are involved with the department through room sponsorships, competition team learning, mentoring, and other activities. Since most of the attendees were from companies that hire Colorado State’s CM students, they gained a better understanding of the value of the industry-university partnership in preparing their future employees.

The Rocky Mountain Chapter of DBIA Board selected CSU for the boot camp to emphasize that design-build education should start at the student level. (cont. on page 18)
A Winning Partnership for CM

Three semesters ago, CM instructor Kevin Jones started teaching CON 351, which replaced the lab section of CON 151 Construction Materials and Methods. The objective: to give students practical experience in all phases of construction; from planning, designing, and estimating to scheduling, staffing, managing, and building an actual structure. Previously, at semester’s end, students deconstructed a structure they’d built in a laboratory. They often asked Jones, “Why can’t we build something practical that people can use?”

A new partnership formed between the CM department and CSU Facilities Management enabled CON 351 students to do just that. Over the summer, students piloted the new course and built a structure that is now being used by the Colorado State Forest Service at the University’s Foothills Campus.

Before the class began, managers in Facilities Management provided Jones with a working set of plans, and Jones and two students did the layout and elevations and procured the materials. On the first day of the four-week class, Jones showed students the layout, schedule, and estimates. “We went over how we got to where we were before the class started, so they could better understand the administrative part,” says Jones.

Facilities Management had arranged for a concrete contractor to do the pour on the second day of class, so students could observe. Then they went to work building 10 eight-by-twelve foot walls, which they loaded on a truck, took to the job site, and raised.

From that point on, the class took place at the job site where all 15 students worked on the structure each day. The experience involved the building of a 336-square-foot structure with a parapet roof system and rough framing and exterior walls that allow the owner to install additional windows if desired.

“This unit was built to be interconnected with another to create a series of buildings that can be used as offices or for storage,” says Jones. “The unit has a canopy that creates a breezeway when it’s installed next to another structure.”

Students completed most of the work during their four weeks, and Facilities performed the final work on the unit.

“The project was a great learning experience for the students,” says Per Hogestad, Assistant Director of Facilities Management, “and the Forest Service is very pleased to have the extra storage.”

Jones was excited to see the level of student enthusiasm and cooperation.
Guggemos Named New Assistant Department Head

Five years ago, Angela Guggemos arrived at Colorado State as an assistant professor. This year, she also became CM’s assistant department head and undergraduate program coordinator. In addition to teaching classes and continuing her research into the life-cycle environmental impacts of construction, Guggemos is responsible for assessing the program, completing accreditation reports, developing the curriculum, supervising the undergraduate advising and internship staff, and assisting the department head.

It’s a full plate, but that doesn’t deter her. “I love coming to work,” she says. “I love what I do and the people I interact with, especially the students.”

Guggemos looks forward to the department giving students the best construction management education possible, so students are prepared to enter the industry when they graduate. “This means providing them with great networking experiences, familiarizing them with state-of-the-art technology, and continuing industry involvement in the classroom and in extracurricular activities,” she says.

Within five years, Guggemos expects the department to have reached its goals of having 800 students in the undergraduate program and 18 tenured or tenure-track faculty.

“We’ll have completed the fund-raising for our endowed chairs, and we’ll have some great industry leaders bringing their experience into our classrooms. And, because we’ll have a larger faculty, we’ll have more research going on, which means our graduate students will be more engaged in directed research,” she continues. “A strong research program leads to new knowledge, processes, and technology, which are channeled back into the classroom.”

Guggemos believes the department’s strong relationship with industry through the Professional Advisory Development Board is one of its greatest assets. She would like to take that partnership one step further by engaging the department in more research projects with PADB member companies.

Guggemos is clearly excited about the direction the program is headed. “We have new faculty coming in and a new group of students who are more purpose-driven. They want to be here, and they’re participating more, both in and out of the classroom. They realize that their participation in classes and other activities makes their degree more valuable and makes their experience here that much better.”

Department Head Mostafa Khattab says, “Angela’s dedication to construction education, our students, and our program is second to none. She has demonstrated her leadership abilities and passion for our program through her participation in several critical activities, and I am confident that she will play a critical role in moving the CM program forward.”
Improving People’s Quality of Life Motivates New Professor

Last year, while Carla Lopez del Puerto was teaching at Southern Illinois University, she received an Excellence in Undergraduate Education grant from the State of Illinois to develop an international construction travel-study course, which enabled her to take a group of CM students to Mexico to study the differences in construction management between Mexico and the United States.

Now an assistant professor in Colorado State’s CM department, Lopez del Puerto is contributing her understanding of the Hispanic culture as well as her outstanding teaching skills and her background in architecture and construction.

Lopez del Puerto’s curriculum vitae is replete with honors, awards, publications, and other examples demonstrating her knowledge, leadership skills, and dedication to advancing construction education and the profession. She says that while interviewing at Colorado State she was impressed by the faculty’s professionalism and their friendliness.

“I wanted to be part of their team,” she says.

Lopez del Puerto also appreciates being part of the College of Applied Human Sciences team. “Construction projects affect people and their quality of life – from the homes they live in and buildings where they work, to the roads they drive on,” she says. She believes this connection between the department and the college will provide opportunities for her to participate in interdisciplinary research aimed at improving people’s quality of life.

This semester, Lopez del Puerto is teaching two sections each of CON 265 Cost Estimating I and CON 317 Safety Management.

“The main research area I want to pursue is construction safety. I believe that many workplace injuries could be prevented if communication on the jobsite is improved."

She says her goal as a teacher is to “develop a spirit of inquiry in students. I try to teach students how to think, instead of giving them all the answers.”

Lopez del Puerto spends most of her free time with her four-year old daughter, Sofia. She also enjoys traveling, learning about other cultures, swimming, and being outdoors.

New Faculty Member, Carla Lopez del Puerto

Education

Ph.D., Higher Education Administration, St. Louis University, 2009
M.S., Construction Administration, The University of Oklahoma, 2003
Diploma in Construction Management, ITESM, Mexico, 2001
B.S. with honors in Architecture, Universidad de las Americas, Puebla, Mexico, 2000

Recent Positions

Instructor, Southern Illinois University, Edwardsville, IL, 2006-2009
Adjunct faculty, The University of Oklahoma, 2008-2009
Cost Estimator and Designer, The Benham Companies, Oklahoma City, OK & St. Louis, MO, 2003-2006
Graduate research assistant, The University of Oklahoma, 2003 and 2005-2006
Construction Management and Control Activities, Buenaventura, Monterrey, Mexico, 2000-2001
Farook Hamzeh's foremost teaching goal, he says, is to prepare students to be leaders of change in the construction industry. This fall, he brings to Colorado State his research, knowledge, and experience in lean construction.

Hamzeh appreciates that Colorado State's CM program already has a strong research foundation in sustainable and lean construction, particularly regarding reducing waste and increasing value. He looks forward to strengthening the lean construction emphasis by focusing on improving process design, incorporating collaborative project delivery approaches, and employing effective production planning and control.

"For example, construction processes comprise a lot of wasteful steps in addition to inconsistency and unreliable work flow. We can improve production planning by engaging everyone, by empowering the front-line people to be a part of the process," says Hamzeh. In his research and job experience, he has seen that when all players participate in helping to plan, organize, and control a project; productivity rises, costs decrease, and work flows more smoothly.

In August Hamzeh began his new position as assistant professor. He says he became excited about joining the CM family when he interviewed and saw firsthand the strong commitment of the entire CM team.

“I felt a strong team spirit, and I like that the department has strong bonds with industry,” he says.

Hamzeh says he intends to make important concepts accessible to students by actively involving them in their education. “I want to encourage students to develop and express their own ideas and help them become good academic writers and present themselves and their ideas well.”

He also looks forward to advancing lean, sustainable construction in industry through his research on improving construction work flow. His research focuses on improving planning and control by introducing the Last Planner System™ and employing Integrated Project Delivery (IPD) through the use of collaborative contracts.

“One of my outreach goals is to establish and reinforce Lean Construction Institute chapters in Colorado. A concerted effort between academics and industry professionals is required to meet the challenges of making construction more lean and increasing the value delivered to customers.”

Currently contracts do not foster collaboration,” says Hamzeh. “We cannot ask people to change their behavior without changing the way projects are delivered. IPD involves relational contracts in which all stakeholders on a project share the pains and the gains. It creates incentives for everyone to do better.”
Passionate About Students, CSU, and Third World Construction

Loren Funk began his master’s work at Colorado State in 2007, 30 years after he first stepped on campus to work toward a bachelor’s degree in construction management. Since 1979, Funk has worked in commercial and residential construction as a field engineer, a project manager, and president of Nicholas Construction, a company that several years ago had more than 100 employees.

Two years ago, after learning of Funk’s extensive experience, Department Head Mostafa Khattab asked the nontraditional student if he’d be interested in teaching. And so it was that during his first year back in school, Loren Funk also developed and taught seven sections of CON 367 Construction Contracts and Project Administration.

Funk is back on campus this fall, this time as one of CM’s newest assistant professors. In addition to his teaching and industry experience, he brings with him a research interest in using corn fiber as a structural additive in pneumatic impacted structural earth.

“Third-world construction is my passion,” says Funk, who spends time in Africa as a volunteer building consultant for the Rafiki Foundation, a nonprofit organization that builds educational and living facilities in African villages where many of the children are orphans.

Now, working at a university that has a tripartite mission of teaching, research, and service, Funk says, “I’d like to see if I can connect some of our students with third-world countries. They have such a need for people with construction skills who can help introduce ways to build economically.”

Funk considers it an honor to be teaching at Colorado State. “At two different times in my life, I’ve been a student in CSU’s construction management program. In my opinion, there isn’t a better program out there for someone who’s interested in construction.”

Funk describes himself as a “practical person” who likes the application aspects of the program. He says he finds the faculty and staff great to work with and the students energizing. “I just love them, and they’ve been so good to me.”

There’s one more reason why Loren Funk holds Colorado State dear to his heart. In 1977, he met his wife, Adele, here on campus, and two years later they married. This past August the couple celebrated their 30th wedding anniversary.
New Faculty Member, Caroline Clevenger

Education
Ph.D. candidate, Construction Engineering Management, Stanford University, 2009
M.S., Systems Engineering, University of Pennsylvania, 1998
M. Arch., University of Pennsylvania, 1997
B.S., Engineering and the Environment, Stanford University, 1991

Recent Positions
Teaching Assistant, Stanford University, 2006-2008
Instructor, University of Colorado, 2002-2004
Team Leader, Architectural Energy Corporation, 1998-2005

CM Family

Enhancing Sustainability, Design-Construction Education and Research

Caroline Clevenger is a Professional Engineer and Registered Architect. She has a bachelor’s degree in engineering and the environment, a master of architecture degree, a master of science degree in engineering, and, soon, a doctoral degree from Stanford University in construction engineering management.

She has taught at Stanford University, University of Colorado, and Colorado State. For seven years, she worked for Architectural Energy Corporation as a team leader of sustainable design assistance. Last fall, she presented at the World Sustainability Building Conference in Melbourne, Australia.

Clevenger is no stranger to rigor and challenges – in 2007 she summited Mount Kilamanjaro and this past summer she climbed Peru’s Machu Picchu – and she’s excited to be a new faculty member in a program that she sees is becoming more rigorous academically.

With a background in looking at process improvement from an interdisciplinary standpoint, Clevenger sees her research continuing in advanced building delivery and, potentially, partnering in research conducted by the Institute for the Built Environment. She says she hopes to strengthen CM’s emphasis in sustainability and bridge the design-construction aspects of the program. “I look forward to working with others and setting my own path as well,” she says.

This fall, Clevenger is teaching CON 476 Sustainable Practices – Design and Construction, and CON 562 Issues and Trends in Construction Management. She’s also finishing her dissertation on improving designer’s decision-making toward greater energy efficiency. “I’m looking at ways for people who are working on construction projects to make decisions that will contribute to a building’s energy efficiency and sustainability,” she says.

“I’m excited to bring research that focuses on BIM and design-construction and sustainability to CSU,” Clevenger adds. “I want to improve the integration of these areas through my research and by focusing on design-construction.”

The department’s required internship program also was a big draw for Clevenger who says she’s enthused about working with students who also have a practical approach to their education. She also will serve as the coach of the BIM student competition team.

“I’ve been very impressed with the students and teachers here, and I agree with Mostafa’s vision,” says Clevenger. “I’m excited to be part of such a quality program.”

New Assistant Professor Caroline Clevenger is a Professional Engineer, Registered Architect, and an Accredited LEED Professional. She has worked on many aspects of commercial building project delivery, including solar product design.
Department Bids Jaouen Farewell

Steve Jaouen is pursuing a logging business, continuing his work on the ski patrol at Winter Park, restoring his 1931 Model A pickup, and hoping to get to Antarctica. So it doesn't seem quite right to say that the CM professor has retired. Let's just say that, in July, Jaouen traded his career as an educator for a host of other activities he's also passionate about.

A third generation Colorado State graduate, Jaouen began his teaching career in 1966, after receiving his bachelor's degree from Western State College. In the late 1960s, he served in Vietnam. Afterwards, he farmed, ranced, and worked in construction, for such companies as Kiewit, Hubner, Palmer, and Turnmar, Anderson and Wilson.

Jaouen received his master's degree in 1980 in Professional Management from Colorado State University. In 1990, he began teaching classes in construction management. Over the years he has taught undergraduate and graduate-level classes in construction safety, safety in the school environment, technology studies in the classroom, alternative energy for homes and business, power and energy, heavy equipment methods and management, facility design and management, and more.

One of the highlights of his 21-year career at Colorado State, he says, was convincing a computer science student who was intent on dropping out to instead change his major to technology education and remain in school. The student went on to earn his master's degree. Jaouen says he always finds it rewarding when a student who graduated 8 or 10 years ago comes up to him and says, “Professor Jaouen, you probably don't remember me, but I want to thank you for everything you taught me.” (cont. on page 18)

“Everyday Hero” Bell Retires

In May, after working for Colorado State for nearly 23 years, Becky Bell retired and moved to Seattle, where her husband, Stuart, has been working for the last year.

Since 2007, Bell has been assistant to CM Department Head Mostafa Khattab. She began her CSU career in 1980, in the Alumni Relations Office. In 1986, she went to work in the Vice President for Public Affairs office. Later, she moved to the Student Affairs office, where she stayed for 10 years.

Bell became a valued member of the Department of Construction Management in 2002 where she began as an administrative assistant. In 2007, she was promoted to program assistant. In addition to assisting the department head, Bell also scheduled courses, made budget presentations, worked closely with faculty in regard to their teaching loads, and managed multiple other tasks.

In 2004, Bell was named a CSU “Everyday Hero.” Nominees cited her enormous compassion and drive and her willingness to go beyond the call of duty to serve more than 1,000 graduate and undergraduate students and respond to requests from faculty. Bell was recognized again in 2008, with a College of Applied Human Sciences Superior Staff Service Award.

Recently, Bell and her husband, Stuart, bought a home in Edmonds, Wash., close to the Puget Sound.

“I enjoyed my time at CSU, especially my years in the CM department,” says Bell. “We hope all of our friends from Colorado will come visit us in Seattle.”
CM Offers New Spanish for Construction Course

One of the biggest challenges in construction regards communication, and when members of a project team do not speak the same language, that challenge can become magnified.

Over the summer, the CM department added to its outreach curriculum a 20-hour Spanish for Construction course developed and taught by one the department’s newest faculty members, Carla Lopez del Puerto.

“Colorado has a large Hispanic population who work in construction and are unable to speak English,” says Lopez del Puerto. “The course is targeted to CM students and construction professionals who supervise Spanish-speaking workers.”

The goal of the course is to improve jobsite communication and safety by teaching job-specific Spanish to non-Spanish speaking construction personnel. The course also addresses cultural issues that impact the industry such as major Hispanic holidays, the role of religion in the work life of Hispanic workers, and other points of potential misunderstanding and conflict between Spanish and non-Spanish speaking individuals.

Construction Industry Institute Partnership Connects Students

Colorado State’s new partnership with a prestigious national research organization, the Construction Industry Institute (CII), is providing students with the unparalleled experience of learning directly from senior executives in the industry.

CII was established in 1983 to improve the cost effectiveness of the capital facilities industry from early project conception and front-end planning through project completion and start-up. More than 100 leading owner, engineering, contractor, and supplier firms comprise CII’s membership. CII staff works with its members to develop an industry-driven research agenda and then solicits proposals from academia to execute this research.

After selecting qualified researchers, CII member companies participate on research teams with the faculty to develop solutions to critical issues facing the industry. Research teams also develop implementation resources to help member companies and industry implement the findings.

Two years ago, senior executives of member organizations along with CII staff created a course on the best practices as defined and developed by CII over the last 25 years. This fall, the executives are visiting the University of Texas at Austin to teach the 11-week course, Construction Industry Institute Best Practices, via live videoconferencing.

Colorado State is one of only 14 universities nationwide to offer this three-credit, continuing education course to students and industry professionals. Faculty of participating universities assist the CII instructors by developing and grading assignments and establishing criteria to evaluate the students’ comprehension of the material covered.

“CII is a premier research organization. Establishing this relationship with CII will lead to research opportunities for our faculty as well.”
– Mehmet Ozbek, CM faculty

The CM department is hosting the course via live videoconferencing and assistant Professor Mehmet Ozbek is the course instructor.

The course provides students with industry contact time in the classroom, and the opportunity to see how CII Best Practices are put into practice by leading members of the construction industry that could be the students’ future employers. Students also have free access to CII’s published research reports.

“As the number of Hispanic construction workers in the U.S. continues to increase, the language and communication barrier between English-speaking supervisors and Spanish-speaking workers becomes more significant.”
– Carla Lopez del Puerto, CM faculty
Advancing Construction Education

Demands on Phelps Placement Office Lead to New Internship

One requirement of Colorado State’s CM program that scores big among both students and employers is the required internship program. For a minimum of six months, students work in construction-related positions, earning valuable experience while also getting paid in most cases. Over half of students receive job offers from the companies they intern for.

The department has a long-standing reputation for placing nearly 100 percent of its interns and graduates. This year, however, the construction industry was down at the same time that an unprecedented number of students needed to be placed, thereby presenting new challenges for Anna Fontana, coordinator of the Phelps Placement Office, and Khristy Preston, associate coordinator.

“By April, when we still hadn’t placed 120 students in summer internships, we realized we had to come up with some new strategies for these students,” says Fontana. She and Preston elected to speak frankly with students, explaining the circumstances and encouraging them to contribute solutions.

“We invited industry representatives to our pre-internship course to discuss the impact of the economic downturn on internship and job placement and to explain the real need for students to take a more active role in their own placement and to seek opportunities on their own and beyond the boundaries of what they may have initially set their interests on,” says Fontana. “Students responded well and got to work hunting down internship opportunities on their own. Some worked without pay, and some brought enthusiastic, new companies into the internship program and the Department’s Professional Advisory Development Board.”

Fontana also sought solutions from participating companies, and some enlisted their subcontractors to provide internship opportunities. In the end, all but 40 students were placed, out of over 300 interns in 2009.

The demand for internships will be even greater next spring when more than 400 students will need internships. In 2011, thanks to the enrollment cap the CM department initiated last fall, the number of students requiring internships will level off at around 200 per year, says Fontana.

Inspiring Future CM Majors

It is estimated that by 2010 the construction industry will have more than 1,000,000 jobs to fill. To interest young people in construction-related careers, the Association of Equipment Manufacturers (AEM) and Destination ImagiNation (DI) created Construction Challenge, an initiative that engages middle and high-school students in real-world experiences in the construction industry. Last fall, working with teacher Scott Burke and students in Loveland High School’s Geometry in Construction program, CM faculty members Scott Glick, Mary Nobe, and Mehmet Ozbek, along with members of CM student clubs, helped two student teams prepare for the 2009 regional Construction Challenge. The CM faculty and two students, Maria Delgado and Brady Poepping, also participated as judges for the event, which took place in Denver last February.

New Admission Requirements Attract Bright, Ambitious Students

It used to be that any new student could declare a major in construction management, and continuing students could change their major to CM as long as they had a 2.3 GPA.

That all changed a year ago, when the department began requiring all students new to the program to start as Pre-Construction Management majors and meet admission requirements that include a 2.75 GPA, a grade of B or better in College Composition and Introduction to Construction Management, and a grade of C or better in Trigonometry.

According to Kristin Hailpern, CM’s undergraduate academic counselor and key advisor, students admitted in the fall 2008 and spring 2009 application pool exceeded the minimum requirements for admission. “The average GPA was 3.0, and the average grade for College Composition, Introduction to Construction Management, and Trigonometry was B,” she says.

This fall, 211 new and transfer students were accepted as Pre-Construction Management majors. Many of them have previous work experience in the construction industry or have family members working in the construction industry.

“I believe we’re admitting students who are truly interested and excited about a major and career in construction management,” says Hailpern. “I think this interest and commitment to the industry will lead to more students getting involved in our student clubs and competitions.”
Students

A Message from the CM Student Body President

Terrance Unrein is president of the student CM Board of Directors, captain of the Design-Build Team, and a member of the Dean’s Leadership Council in the College of Applied Human Sciences. A native of Greeley, Colorado, Unrein entered Colorado State’s CM program in 2007 and has since been leading CM students into a new era of active participation in their education. In a recent interview, Unrein had the following to say about opportunities at Colorado State and the need for students to become actively engaged in their education:

“I take great pride in my education at Colorado State, which has given me so many opportunities. I’ve participated in the Alternative Break program and traveled to Panama to build nature trails and bird-watching decks to help promote ecotourism. In Kenya, I lived with a tribe, and our volunteer group taught primary education to children and did wildlife work with Save the Elephants. Not many individuals anywhere get those kinds of opportunities to go somewhere and give service, not just take a vacation.”

Students must engage

“I believe all students need to take the initiative to learn outside the classroom. The student CM Board of Directors challenges every student to be involved in a club, (or volunteering, or going to CM socials and workshops). The board has worked hard to create these opportunities and get students excited about them.

“We are also pioneering unique workshops and seminars taught by speakers who are among the best professionals in their field. We are working to effectively market these events and get students to participate in them.

“This past year, for example, we coordinated a Building Information Modeling (BIM) workshop. We rented a computer lab that accommodated nearly 100 people and invited Edward Hoagland, PCL Constructors’ Director of Virtual Construction, to demonstrate BIM technology, using examples of various BIM projects. To promote the event, we sent out mass student emails and had students make announcements in their classrooms and spread the word from student to student. Within 40 minutes of posting the sign-up sheet, the workshop was full.

A superior student website

Another goal was to create a student website. The CM Board of Directors collaborated with CM junior John Anest [past board president] and his company, Pikes Peak Web Solutions, to redesign the website. “We looked at other student websites at places like Virginia Tech, Purdue, Auburn – all the big construction education programs – as well as other student websites at CSU. We think we’ve developed a website that’s superior and that it will continue to be

Student Outreach

CM graduate student Farah McDill, with CM Professor Brian Dunbar, helped to coordinate “Teaching Teachers about Green Buildings,” a workshop for teachers working in the Poudre School District’s green schools.

“On behalf of the CM student body, I’d like to say ‘thank you’ to all alumni and industry members. We truly value these relationships, and we wouldn’t be able to execute our extracurricular activities without them.”

-Terrance Unrein
successful, because club presidents will be able to continually update information about their respective clubs.”

“We’re now developing a Code of Conduct that defines standards and procedures for making changes to the website. You can check out our website at www.csucm.com.”

On fundraising

“I think fundraising is an obligation and responsibility of student leadership. Our student website has an interface where alumni, family and friends, faculty members, and industry can purchase Department of Construction Management t-shirts, polos, hoodies, decals, and hardhats, so they can show their Ram Pride while also supporting extracurricular student activities.

“The 2009 CM Golf Classic, our annual golf tournament, was a sellout, and I want to give credit to CM junior Brady Babbitt for the tournament’s success. The tournament is all about building relationships with industry, and it’s one of the biggest CM events that industry looks forward to. They love interacting with students in an informal, interactive setting.

“The event was completely student organized and funded. Each team consisted of two students and two industry members. More than 200 students signed up for 50 available spots, and we selected student participants via a lottery. Participants got 18 holes of golf, a t-shirt, a banquet, prizes, and a whole day to network with an industry member. Proceeds from the tournament went into the CM Board’s bank account to help fund student competitions and other extracurricular activities.”

Promoting Student-Administration Communication

“This past year we initiated a department forum to give students an opportunity to provide feedback to Dr. Khattab. If students feel that changes need to be made, then they need to communicate that to him. Dr. Khattab has some innovative long-term plans for our department, and his job is to inspire and provoke enthusiasm in our students, so they will want to get involved and have pride in our department. He has an open-door policy, and he has a great relationship with students. I talk with him almost every day. He’s not an administrator – he’s an educator. He truly wants to hear feedback from students directly, and any student can go to his office and talk to him.”

The new Preconstruction Center

“We’re so lucky to have this great new building, funded almost entirely by industry, and we wanted to make sure that the new furnishings would do justice to the building. Dr. Khattab wrote a proposal for a furniture grant from the University Facility Fee Advisory Board, and he asked me to present the proposal. I did, and we got the grant. This support from the University really shows industry our appreciation for all they’ve done.

“Also to show our appreciation, the student board sponsored an industry barbecue in April for the tradesmen and construction personnel working on the building. This fall we’ll be hosting a large-scale social and will invite all the Preconstruction Center donors to attend.”

CMAA Students Learn by Doing

Last spring officers from the CMAA Student Chapter volunteered for the National Center for Craftsmanship (NCC) Deconstruct Project in Fort Collins. Cody Farmer, Maria Delgado, and Brady Poepping helped to hand-dismantle three local buildings and prepare the material for reuse and recycling. The NCC is a nonprofit organization dedicated to preserving, enhancing, and sustaining quality craftsmanship. Deconstruct teaches construction skills while also providing an alternative way to take down buildings. Participants learn emerging deconstruction technology and LEED certification protocols.

Also in April the CMAA Student Chapter participated in its first site tour. Eleven students and the chapter’s faculty advisor, Dr. Mehmet Ozbek, toured the I-25 State Highway 119 to State Highway 66 project. Students met the project manager and inspectors from PBS&J (owner’s representative for the project), asked questions regarding the project, and toured the project and the on-site materials lab.
CM Student Competition Teams Rule

Advancing Construction Education

CMAA Student Chapter Established

CM’s student organization family added a vital new chapter: the Construction Management Association of America. The CMAA administers the CCM test awarding passing individuals the Certified Construction Manager designation. Similar to the Professional Engineer designation for the engineering discipline, the CCM is poised to do the same in the construction management discipline. Dr. Mehmet Ozbek was the catalyst in getting this new organization started. During the organization’s first meeting, CMAA Colorado chapter President Gary Self spoke to some 80 students about why achieving the CCM designation should be among their career goals.

Prestigious Internships

Colorado State senior Alex Beckman was one of only two construction management students nationwide to serve as a 2009 summer intern in the NAHB Residential Construction Leadership/Internship Program funded by the National Housing Endowment.

The Office of Facilities Operations at the Smithsonian National Museum of Natural History selected CM senior Scott Mueller for its 2009 summer internship program.

More than 55 students and coaches participated in the Associated Schools of Construction competition in Sparks, Nev., Feb. 12-14, 2009. The following teams placed and were recognized during the competition:

- Commercial Team, 1st place. After winning the regional competition, the team traveled to San Diego to participate in the AGC national competition. The team again placed first, bringing home a check to the department for $3,000 and another trophy for the trophy case.
- Heavy Civil Team, 3rd place. Coaches: Steve Jaouen and Scott Shuler. Team members: John Anest, Joseph Bair, Derek Duran, Joseph Houtz, Joshua Neill, Brady Poepping, and Alex Senta.

Jaouen (cont. from pg 13)

Jaouen worked with many student clubs including the Society for International Technology Education, Sigma Lambda Chi, and Associated Builders and Contractors. He has also sponsored the Alpine Ski Team and the Heavy Civil Associated Schools of Construction competition team.

Two years ago, in recognition of his outstanding teaching, the Associated Builders and Contractors presented Jaouen the 2007 John Trimmer Excellence in Teaching Award.

DBIA (cont. from pg 6)

The DBIA also sponsored the attendance of a faculty member, Carla Lopez del Puerto, to strengthen the teacher’s knowledge of design-build and to allow for faculty-industry interaction.
CM Alumni Back on Campus

This past summer, CSU logos on cranes, hardhats, sweatshirts and flags demonstrated ram pride, as many construction management alumni returned to campus – this time to work on many of the 17 major construction projects taking place across the University.

Pinkard Construction, the contractor for the 90,000-square-foot Academic Instruction Building, employs a high number of CSU alumni, including 2006 CM graduate, Patrick Gries, senior project engineer for the new building. “Pinkard wanted to put the best people together for this project,” says Gries, “and it just so happens that we are CSU alumni who have good experience.”

Bryan Oleson, a senior CM student who has been interning with Pinkard for the past four summers, served as project engineer for the Academic Instruction Building.

Another CM alumnus, Bill Bialek, was superintendent of the new Preconstruction Center. Bialek has been with Saunders Construction since he graduated in 2002.

The Preconstruction Center presented a unique challenge, in that seven different major contractors had their own crews on the job site. Bialek says it turned out to be a very positive experience. “Everyone worked together well. There was a very cooperative spirit.”

“Working on a building that would serve construction management faculty and students only enhanced the experience,” Bialek says. “It’s been cool working with professors I had when I was a student here. Now I’m interacting with them on a whole different level.”

Former Faculty-Student Connection Leads to $250,000 Gift

When unexpected circumstances reconnected CM Department Head Mostafa Khattab with one of his former students from the University of Nebraska-Lincoln, the outcome led to a new computer laboratory benefiting Colorado State's CM students.

Chris Loeffler, Vice President of Kiewit’s Denver District and a 1991 graduate of the construction management program at the University of Nebraska-Lincoln, remembers Khattab inspiring him to always do better. “Mostafa truly challenged me and others as he raised the bar of excellence,” says Loeffler. “He has proven that the products of his programs excel to high levels of performance.”

Last spring, when seeking a donation from Kiewit to fund a computer laboratory in the new Preconstruction Center, Khattab was waiting to see another Kiewit executive when Loeffler happened to walk by. The two reconnected, and Loeffler expressed interest in helping to secure a donation from Kiewit.

“Kiewit felt a corporate responsibility to donate to the project,” says Loeffler. “CSU alumni, including CEO emeritus Walter Scott and many more throughout the ranks of Kiewit, have been integral to the Kiewit Companies’ success.” The company made a corporate gift of $150,000. Then some of the executive management team challenged CSU alumni employees to make personal donations to the project. “We were able to raise the entire $250,000 to meet Mostafa’s request,” Loeffler says.

'94 CM Graduate Named Among Top 20 Under 40

Matthew Proehl, a project manager with Haselden Construction, was cited in the March 2009 issue of Colorado Construction magazine as one of 20 top Colorado construction professionals under 40 years old. Among the significant projects Proehl has worked on are the Medical Center of the Rockies in Loveland, Colo., and Research Support Facilities at National Renewable Energy Laboratory in Golden. Proehl also served as project manager for CM’s new Preconstruction Center.

Proehl was recognized, too, for his community service, which includes Rotary International, Friends of Christmas Island project, college recruiting for Haselden Construction, and membership on CM’s Professional Development Advisory Board. In 2003 he chaired the AGC of Colorado Future Leaders Forum and, in 2007, he was chair of the AGC National Construction Leadership Council. He also volunteers as a guest lecturer in Colorado State’s CM department and helped create “Hot Jobs Cool Careers,” a video that AGC of Colorado uses to introduce high school students to the industry.

“I have always enjoyed problem solving, and construction gives me opportunities to problem solve on a daily basis,” says Proehl.
CM Team Members Recognized for Outstanding Performance

Four Colorado State CM teachers were recognized at the 45th Annual International Associated Schools of Construction Conference in Gainesville, Fla. Steve Jaouen received the Sigma Lambda Chi Fredrick B. Muehlhausen Outstanding Advisor Award, and Angela Guggemos, Mike O’Reilly, and Scott Glick each received the 2009 Associated Schools of Construction National Teaching Award.

Scott Glick’s proposal to redesign CON 151 and CON 265 led to funding from Colorado State’s Institute for Learning and Teaching (TILT), and Glick was named a TILT Teaching Fellow for the 2009-2010 academic year.

CM students again voted Mike O’Reilly 2009 Best Teacher. O’Reilly, known for his passion for teaching and the personal interest he takes in each of his students, has won the award for several years running.

Francois Jacobs, Jesse Plata, and Jon Elliott each received a top teaching assistant award from the CM department. Students nominate GTAs based on their teaching performance, passion for teaching and the subject matter they teach, and modeling leadership qualities.

CM Inaugural Honoree in New Construction Hall of Fame

This year, the Department of Construction Management is pleased to announce its new Construction Hall of Fame. Individuals who have made significant contributions to Colorado State’s CM program will be considered for induction. Contributions may include but are not limited to financial gifts, efforts to advance the curriculum, engagement with the Professional Advisory Development Board and CM faculty and students, and other activities that help elevate the CM program to becoming a program of excellence.

At the CM Awards Banquet on Sept. 10, the department recognized Ed Haselden as the first inductee into the Construction Hall of Fame and presented him with a Friend of the Department Award for his outstanding vision, dedication, and commitment to excellence. Haselden is President and CEO of Haselden Construction, LLC, in Denver. He also serves as secretary on the CSU System Board of Governors. Haselden was the catalyst for raising major gifts and support for the new Preconstruction Center.

“Haselden was the first contractor to step forward in the spring of 2006 with an incredible pledge to jump start the renovation of the Industrial Sciences Building,” says Darrell Eastwood, Chief Operating Officer for Saunders Construction, Inc. “Ed’s commitment has been unwavering through these challenging economic times, and his leadership inspired a partnership with the construction industry that resulted in a total gift of over $5 million in cash and in-kind services to the Department of Construction Management. We all thank Ed for his generosity and most of all his passion for improvement.”

Sustainability Leader Recognized

Last September, the U.S. Green Building Council (USGBC) - Colorado Chapter named Brian Dunbar 2008 Volunteer of the Year for his leadership in helping to establish the Green Schools Advocacy Committee; his engagement of CSU graduate students in creating green school case studies and presenting them at the inaugural Green Schools Summit; and his collaborative efforts with the creation of the Northern Colorado branch of the USGBC.

A month later Dunbar was recognized again – this time with a Hero of Sustainability Award from the Alliance for Sustainable Colorado. Dunbar, Director of the Institute for the Built Environment, received the award from Denver Mayor John Hickenlooper at the Alliance’s annual awards gala in Denver. He was recognized for his long record of moving the green-building industry forward through his efforts in education, industry projects, and cutting-edge research.
**Awards**

**NAHB Awards Grant to Establish Residential Construction Emphasis**

In 2006 the National Housing Endowment established its Homebuilding Education Leadership Program (HELP) grant program. HELP grants are awarded to bolster or start residential construction programs in leading two- and four-year colleges and universities around the country and to triple the number of graduates entering the home building industry.

Aware of Colorado State's CM program and its dedicated and inspired faculty, and impressed with the CM students and their participation in the NAHB Student Chapter, the National Housing Endowment awarded the department a $38,433 grant that will lead to developing a new emphasis in residential construction. The goal of the endowment is to ensure a stronger homebuilding industry for years to come.

“With this grant we will be creating a model for teaching residential construction,” says CM Department Head Mostafa Khattab. “Presently, the minimum requirement for graduation is 120 credits, which provides students with a good education. Our duty is to provide a great education, by going beyond the 120 credits. The NAHB grant and the residential emphasis being developed with that grant is the first step toward providing a great residential construction education.”

Roger Reinhart, executive director of NAHB Denver and a national board of trustees member of the NAHB in Washington, D.C., was instrumental in procuring the grant for Colorado State. CM Assistant Professor Scott Glick is developing the residential construction emphasis.

**The Impact of Scholarships**

At the CM Awards Banquet on Sept. 10, CM senior Maria Delgado made the following remarks:

“I am really honored to be here representing the student body of CM and talking about the difference that scholarships have made in my life. I want to thank all the donors for playing a significant role in our education.

“For the past several years, your financial assistance has allowed me to dedicate more time to school. Instead of worrying about how to pay for tuition and books, I’ve been able to focus my attention on studying in the library, maintaining a high GPA, and participating in extracurricular activities. I even had the opportunity to give back to the department by helping to establish a CMAA student chapter at CSU.

“You also helped me to help others by volunteering. For example, I had the chance to build a house in Mexico and, throughout my college career, I’ve taught 1st graders at Sunday school. I was able to do this because of your support and generosity.

“When donors invest in students’ educations through scholarships, they too are taking a risk. But I believe that risk demonstrates that someone is willing to take a chance and be a part of building our future.

“Personally, my self-esteem receives a boost when donors invest in my education, because they are investing in my potential and my ability to succeed and make an impact in the industry. During my career I will make it a point to give back to students, just as the donors have helped me. Thank you for your support.”

**More Awards**

Students enthusiastically voted Anna Fontana, coordinator of the Phelps Placement Office, as 2009 Best Advisor. “Anna goes above and beyond what’s expected of her,” says CM Department Head Mostafa Khattab. “She’s done a wonderful job this year.”

The objective of the award is to recognize an outstanding faculty or staff member for providing quality service to a student organization.

On Sept. 23, Department Head Mostafa Khattab presented Lenora Bohren, director of the National Center for Vehicle Emissions Control and Safety, with a Clean Air Service award in recognition of her 25 years of commitment and dedication to improving air quality locally, nationally, and internationally. Bohren’s participation in and her organization and leadership of the NCVECS-hosted annual Clean Air Conferences over the years has provided conference attendees with the knowledge to help advance the goals of cleaner air worldwide.

**Career Fair Continues to Grow**

The spring 2009 CM Career Fair, held at the Hilton Fort Collins, featured 73 company booths and approximately 200 company representatives, and attracted a record number of nearly 600 student and alumni attendees.

For more information, visit the Careers/Internships page on the CM website: www.cm.cahs.colostate.edu, or call (970) 491-4610. The next CM Career Fair takes place February 23, 2010.
A New Era In CM Education
(cont. from pg. 5)

Why did the Colorado construction industry invest so heavily to provide Colorado State University’s construction management program with a Preconstruction Center?

“It was the right thing to do: support the program, make a charitable contribution to the program and the community, and give back to the University,” says Haselden.

“But the main point is that leadership made it happen – Larry Grosse’s dream five years ago; Mostafa’s vision for elevating the program and getting the administration’s support; Tony Frank’s leadership and commitment to the program; Haselden Construction’s input on curriculum changes; major contractors writing big checks. It took a lot of courage, guts, and leadership to bring this partnership, and the new Preconstruction Center, into being.”

“And I’m proud to say that we recently hired two Colorado State graduates – Lara Jolly and Ashley Linfield,” Haselden continues. “They both participated in the precon student competition, and they’re bright, articulate, dynamic young women. They are the future of our industry.”

Global Connections

In collaboration with the University of Costa Rica, the CM Department offered the Travel Abroad Sustainable Building Course in Costa Rica. Twenty-eight students from CSU, CU, and the University of Costa Rica joined Professors Brian Dunbar and Alejandro Ugarte for 11 days in January to study sustainable development and green building in a country that continues to search for ways to protect its rich ecological heritage.

Dr. Moshira El Rafey, new Department Head of Helwan University School of Architecture in Egypt, came to CSU to meet with CM faculty and speak to department heads in the College of Applied Human Sciences. Aware of the College’s capacity to help with sustainability in Egypt in many ways, El Rafey presented, at a university-wide event, a vision for expanding the existing CSU-Helwan University construction management partnership to include human development, health and exercise science, nutrition, food safety, and other aspects of a healthy, sustainable way of life.

In July, Bolivar Senior, associate professor in CM, taught a graduate course, Construction Scheduling and Management, at the Universidad Panamericana (UP) in Guadalajara, Mexico. UP’s Maestria en Administración de Construcciones invites academics from all the Americas to teach a course of their choice, and Senior has had the distinction of being selected twice. Previous guests from the United States have included such well-known names as Gregory Howell (Research Director, Lean Construction Institute), Jorge Vanegas (Dean of the School of Architecture, Texas A&M) and Daniel Halpin (Department Head Emeritus, Purdue University).

Outreach

25 Years of Clean Air

In 1984, the National Center for Vehicle Emissions Control and Safety (NCVECS), a center within the Department of Construction Management, hosted its first Clean Air Conference. The conference was held at the famous Stanley Hotel in Estes Park, Colo., and 24 people attended.

This September, the 25th Clean Air Conference convened – again at the Stanley Hotel, which is celebrating its 100th birthday. “We’ve hosted this year’s conference in ‘Colorful Colorado,’ which is an ideal setting for reflecting on clean air issues,” says NCVECS Director Lenora Bohren. “We again discussed a wide range of crucial and timely issues that will help advance our common efforts for cleaner air and a better environment.”

Since its inception, the Conference has grown to over 250 participants representing industry, government, environmental organizations, educators, and others from North America and around the world.
Giving

New Online Giving Platform

For friends and colleagues who want to support specific programs and funds within the department, CM now has an on-line giving page linked to the department's website. Making a secure donation online allows you to choose the specific need(s) you would like your gift to support. Choose to donate to the area of greatest need or support an existing fund:

- The Road to Excellence Fund – supports faculty and staff development through travel, and mini-grants that will help faculty and staff to excel. A portion of the fund provides scholarships to students who demonstrate strong leadership skills.
- Heavy Construction Management Endowed Chair – creates funding to hire a permanent faculty member with industry experience to lead the department's heavy civil construction program.
- Scholarships – financial support for bright and ambitious CM students who are motivated to excel.
- James Parnell Student Professional Development Fund – supports professional development opportunities for students.
- New: Construction Management Newsletter Fund – funds go toward producing a well-written, high-quality color magazine that is distributed annually to CM alumni, donors, friends, and industry leaders.

To access the CM online giving platform, go to: www.cm.cahs.colostate.edu.

Heavy CM Program

CM students are filling classes in CM's heavy construction emphasis, and the Asphalt Laboratory is supporting several research projects sponsored by the Colorado Department of Transportation.

To date, CM Professor Scott Shuler, hired in 2003 to develop the heavy construction curriculum, has revised CON 366 Heavy Equipment and Methods and created two classes supporting the emphasis: CON 270 Introduction to Roadway Construction and CON 370 Principles of Asphalt Pavement Materials and Construction.

Fundraising continues for Phase 1 of the Heavy Construction Management Endowed Chair. Once the $1.5-million goal is reached, the department will be able to hire a faculty member to support the department goal in this critical area. The goals of this endowment are to:

- Provide a permanent emphasis in heavy construction management at Colorado State University as part of the Construction Management curriculum.
- Conduct research to benefit the heavy construction industry with an emphasis in asphalt pavement technology through laboratory and full-scale testing programs.
- Develop partnerships with the College of Engineering to promote a better understanding of the roles each discipline plays in heavy construction.
- Energize Construction Management students regarding the heavy construction industry and the career opportunities available.

To learn more visit the “Campaigns” page online at: www.cm.cahs.colostate.edu.

Donations through Iron Planet Boost Heavy CM Program

Iron Planet, a company specializing in online auctions of construction equipment, is supporting the CM Department's Heavy Construction Management Endowed Chair through proceeds from auction sales of construction equipment.

Iron Planet has established a format allowing contractors selling equipment to donate proceeds to the CSU program to advance heavy construction education. In addition, Iron Planet will match contractor contributions to the program up to one percent of gross sale revenues.

Approximately $1.2 million has been raised over five years toward an endowed chair funding level of $1.5 million. Connell Resources Inc. of Fort Collins has contributed $250,000 to the program.

For more information, contact Jim Abbott at (970) 631-5422 or visit www.ironplanet.com.

Pictured, left to right: Lori Sims, development director for the College of Applied Human Sciences; Jim Abbott of Iron Planet; CM Department Head Mostafa Khattab; and Matt Bousky of Iron Planet. (Photo courtesy of CAPA)
“Green” Float Ties for First Place

The CM student float again made waves in the 2008 Homecoming parade and tied for first place. The float, themed “It Is Easy Building Green,” depicted how the construction industry is focusing more and more on sustainable construction. Sunstate Equipment Company provided the telescoping forklift that towed the float, which was powered by a low-emissions diesel engine capable of running on bio-diesel.

Alumnus Sees World’s Tallest Building

Sean Weddingsfeld, a 2002 CM graduate now working at WLH Construction in Denver, is pictured in front of the tallest man-made structure ever built, Burj Dubai, in Dubai, United Arab Emirates. The building, slated for completion in fall 2009, stands 2,684 feet high and has the world’s fastest elevators.