

## CAMPUS REPORT

**DATE:** April 4, 2013  
**TO:** Board of Regents  
**FROM:** Donald M. Blackketter, Chancellor, Montana Tech of The University of Montana  
**RE:** Campus Report for the May 23 and 24, 2013 Board of Regents' Meeting

### STUDENT ACHIEVEMENT

- Montana Tech environmental engineering student Joseph Mitzel has been awarded a 2013 Goldwater Scholarship. The one to two year scholarship gives each student up to \$7,500 a year for tuition, fees, books, and room and board.
- Highlands College student Paul Hart was selected one of the 2013 Newman Civic Fellows. Recognized for working to find solutions to community challenges while improving lives, Paul is a veteran and non-traditional sophomore at Highlands College of Montana Tech, majoring in Historic Preservation. He is dedicated to the preservation of Montana's valuable and fragile historic sites. Paul participates in the preservation of Nevada City, one of Montana's living history museums.
- Three Montana Tech Society of Women Engineers officers are attending the SWE JCON13 Conference April 5-7, 2013, in Lacey, Washington. The students are: Rahel Lemma, Treasurer (Petroleum Engineering), Melanie Brewer, Secretary (Petroleum Engineering), and Mandy Brewer, Senator (Geological Engineering).
- Haythem Memmi, a junior majoring in computer science and software engineering, attended a Monte-Carlo Methods for Artificial Intelligence course at Oregon State University over spring break. Haythem was one of 20 students selected out of 200 applicants to participate in the all-expenses-paid short course on Monte Carlo algorithms funded by the National Science Foundation.
- Digger hockey players Conrad Smith and Matt Ostertag, both Petroleum Engineering undergrads, were selected to play for the Mountain West Collegiate Hockey League (MWCHL) team in the American Collegiate Hockey Association (ACHA) Division II All Star Challenge on April 4-7, 2013 in West Chester, Pennsylvania. There are 180 ACHA Division II teams in the U.S. and the "best of the best" will compete. Coaching the MWCHL team is Utah State head coach Jon Eccles.
- Digger hockey had a very successful season; they won 13 games, lost 2, and lost another in overtime (13-2-1), while playing such teams as Brigham Young University, Weber State University, Boise State University, University of Washington, and Montana State University.
- A proposal submitted by the Professional and Technical Communications (PTC) department has been accepted for presentation by the Northwest Communication Association's 37th Annual Conference this April in Coeur d'Alene, Idaho. Entitled *From Problem to Product: Real World Technical Communication Solutions*, the panel presentation will feature five examples of how technical communication students applied theory and practice to communication challenges. Panel members are PTC Faculty Kay Eccleston and Jon Wick; grad student Paula McGarvey; and undergrads Cole Berg, Aaron Briggs, and Kayla Lester.
- Students Logan Dunlap and Daniel Zieske and General Engineering faculty Brian Kukay were featured in *Structure* magazine. They are conducting a survey of Timber Bridge Construction and Maintenance to determine the extent of the use of wood for vehicular bridges and help resolve issues. Brian will present findings to the American Association of State Highway and Transportation Official's committee in Portland in June.
- Cfwp.org's long-time student employee Chris Doyle was recognized by the Governor's Office for the Serve Montana award. His award acknowledges his many years of AmeriCorps and community service efforts.
- Cfwp.org is continuing its work with the Office of Public Instruction through our Montana Partnership with Regions for Excellence in STEM (MPRES) grant. This grant is focused on developing capacity within school districts for adoption of the Next Generation Science Standards. The MPRES team will present at the National Science Teachers Association (NSTA) conference in April.

- The Montana Street Rod Association (MSRA) is pleased to announce that Joshua Seiffert, a second year student from Red Lodge, MT, is the recipient of a \$500 scholarship from MSRA. Joshua is majoring in Metals Fabrication at Montana Tech's Highlands College.
- Five OSH students accompanied SHIH faculty members Roger Jensen, Marlin Maynard, Terry Spear, and Sally Bardsley at the 18th Annual Safety Conference sponsored by the Yellowstone Local Emergency Planning Committee/American Society of Safety Engineers/Montana Safety Services Council in Billings on March 13 & 14. Spear and Bardsley presented.

## **FACULTY EFFORTS**

- Dr. Laurie Battle and Dr. Hilary Smith Risser have been awarded a grant from the Mathematics Association of America TENSOR foundation. The grant will allow the department of Mathematical Sciences to host a summer program for high school age young women from Southwest Montana.
- The Department of Mathematical Sciences hosted a regional mathematics contest on March 27<sup>th</sup>. The contest brought 81 7<sup>th</sup> through 12<sup>th</sup> grade students to the Montana Tech campus. Winners were awarded \$400 in scholarships and other prizes.
- Keith Vertanen, Assistant Professor of Computer Science, co-authored the paper "Improving Two-Thumb Text Entry on Touchscreen Devices." The paper will be presented at the ACM Conference on Human Factors in Computer Systems.
- Keith Vertanen co-authored the paper "Developing Efficient Text Entry Methods for the Sinhalese Language." Lead author was PhD student Syham Reyah of the University of St. Andrews. The paper will be presented at the ACM Conference on Human Factors in Computer Systems workshop on "Grand Challenges in Text Entry." This workshop was co-organized by Dr. Vertanen.
- Dr. Suzan Gazioglu of the Mathematical Sciences department attended the 25<sup>th</sup> Annual International Conference in Collegiate Mathematics in Boston, Massachusetts (March 21-24, 2013) and presented a talk entitled "Using SMART Podium to teach Statistics Online."
- Dr. Stella Capoccia, Assistant Professor in the Department of Biological Sciences, was an invited speaker at the Yellowstone Audubon Society. Her talk, "The Urban Ecology of Pigeons in the Central Business District of Butte, MT," addressed the local dynamics of Butte's pigeons. Stella is also the panel discussant for a conference talk entitled "Science and the Production of Species" for the Animal Geography Specialty Group at the national conference for the American Association of Geographers on Tuesday, April 9.
- Dr. Larry N. Smith, Geological Engineering faculty, participated in an NSF-funded proposal writing workshop for Transforming Undergraduate Education in STEM (March 14-17) in Tampa, Florida.
- PTC Students and Faculty will attend the Northwest Communication Association's 37th Annual Conference in April in Coeur d'Alene, Idaho. Their panel presentation is entitled "From Problem to Product: Real World Technical Communication Solutions" and will feature five examples of how technical communication students applied theory and practice to communication challenges. Panel members are Professional and Technical Communications (PTC) Faculty Kay Eccleston and Jon Wick; Paula McGarvey, grad student; Cole Berg, Aaron Briggs, and Kayla Lester, undergraduate students.
- Dr. Waleed Al-Rawashdeh (Mathematical Sciences) authored a peer-reviewed paper "Weighted Composition Operators on Weighted Bergman Spaces of the Unit Ball" which appeared in the *Int. J. Pure and Appl. Math.* 78(2012), 161-183. He also authored two papers which have been accepted for publication: "Composition Operators on Weighted Hardy Spaces," to appear in the *Rocky Mountain Journal of Mathematics*, and "Difference of Composition Operators on Hardy Spaces," in the *Journal of Mathematical Inequalities*.
- Dr. Waleed Al-Rawashdeh gave a talk at the University of Mississippi, Oxford, as part of the AMS Southeastern Sectional Meeting. The presentation was titled, "Composition Operators between Weighted Bergman and  $S^p$  Spaces." Dr. Al-Rawashdeh will give a talk at Iowa State University later in April as part of AMS Central Sectional Meeting.
- Brian Kukay, General Engineering faculty, will present a conference paper, "Evaluating Fire-Damaged Components of Timber Bridges and Structures," at a chaired track in the 2013 Structures Congress. Brian co-

authored this conference paper with Chip Todd, a full professor in the Department of Mathematical Sciences and Liberal Studies Department Head; Tyler Jahn, a recent graduate; and Robert White, a wood scientist from the USDA National Forest Products Laboratory.

- Montana Tech announced the recipients of the Montana Tech Faculty Merit Awards. This year's awards go to: Dr. John Amtmann, professor, Safety, Health, and Industrial Hygiene; Dr. Chris Danielson, associate professor, Liberal Studies; Dr. Jerry Downey, associate professor, Metallurgical and Materials Engineering; Dr. Chris Gammons, professor, Geological Engineering; Dr. Suzan Gazioglu, associate professor, Mathematical Sciences; Dr. Michael Masters, assistant professor, Liberal Studies; and Dr. Hilary Smith Risser, associate professor, Mathematical Sciences.
- Montana Tech's Nursing Department hosted a successful site visit for initial accreditation of the bachelor degree program by The Commission on Collegiate Nursing Education (CCNE) on March 11-13, 2013. The recommendation to the CCNE Board of Commissioners is to award initial accreditation. The final decision will be made during the CCNE Board of Commissioners meeting in fall of 2013. If the board votes to award accreditation, the accreditation is retroactive to the first day of the on-site evaluation.
- Dr. Jack L. Skinner, Assistant Professor of General Engineering, recently had two journal articles accepted for publication: (1) "Spatial sensing using electrical impedance tomography" in the *IEEE Sensors Journal* and (2) "Detection of spatially distributed damage in fiber-reinforced polymer composites" in the *Journal of Structural Health Monitoring*. This is a collaborative work with Sandia National Laboratories and the University of California.
- The Metallurgical & Materials Engineering Department is hosting Dr. Yasu Takasaki for six months (March 20-Sept 19) as part of MT Tech's International Agreement with Akita University, Japan. He will work with Dr. Courtney Young on Electrochemistry of Sulfide Minerals in the Absence of Xanthate (Flotation) and Presence of Xanthate (Hydrometallurgy). They are currently examining Enargite and Chalcopyrite with two MS students.
- Dr. Pat Munday, Professor of Science & Technology Studies, recently published several photographs, including: photos of Butte and the Berkeley Pit area in the video documentary "Andrea Stierle PhD: Discovering Value in Toxic Waste," an episode in the series "Attainment: Women & Discovery" by Lorene Shyba; a photo of an elk bull harvested with a longbow, published on the "3 Rivers Archery" website and in press with *Traditional Bowhunter* magazine; and a photo of a native Westslope Cutthroat Trout with the U.S. National Forest Service's educational series, "Nursery Posters."
- SHIH faculty members Terry Spear and Julie Hart attended the academic portion of the 9<sup>th</sup> annual Asbestos Awareness Conference in Washington D.C. March 22 – 24, 2013. The conference was sponsored by the Asbestos Disease Awareness Organization. Hart and Spear's seminal research on asbestos contamination in Libby, Montana in conjunction with The University of Montana's Center for Environmental Health Sciences has spawned numerous publications and graduate thesis projects.

### **STAFF/PROGRAM HAPPENINGS**

- Marilyn Cameron, Director of Environmental Health and Safety, presented a seminar on the new Globally Harmonized System for Classification and Labeling of Chemicals at the American Society of Safety Engineers/Montana Safety Services Council conference in Billings on March 14.
- The Institute for Educational Opportunities at Montana Tech has appointed Rayelynn Connole as the Director of the Clark Fork Watershed Education Program. Connole began her directorship on March 1, 2013.
- Cfwp.org is continuing its work with the Office of Public Instruction through our Montana Partnership with Regions for Excellence in STEM (MPRES) grant. This grant is focused on developing capacity within school districts for adoption of the Next Generation Science Standards. The MPRES team will present at the National Science Teachers Association (NSTA) conference in April.

### **MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY**

- In February 2013 Montana Tech's departments of Chemistry and Geological Engineering, together with MBMG's Analytical Laboratory, announced the joint acquisition of a Picarro CRDS Water Isotope Analyzer. This

instrument brings to the Montana University System the new ability to analyze hydrogen and oxygen isotopic compositions in water samples. Previously, Montana Tech and MBMG researchers had to submit isotope samples to out-of-state laboratories.

- Mike Stickney of MBMG's Earthquake Studies Office was invited to present a talk titled *Montana Earthquakes—Standing on Shaky Ground* to the 2013 Montana Aeronautics Convention on March 1, 2013 in Butte, Montana.
- On March 1, 2013, MBMG released its first graphical interface for the Ground Water Information Center (GWIC) database. The 'Mapper' (<http://data.mbmг.mtech.edu/mapper/mapper.asp>) portrays water well and statewide monitoring well locations over a semi-transparent image of Montana's geology.
- MBMG hydrogeologist Garrett Smith met with Ms. Flor Alejandra Rodriguez on March 15, 2013 to tour the Berkeley Pit and discuss Butte's mining history and reclamation efforts. Ms. Rodriguez is currently the Chief of the Improvement of Soils and Technical Assistance Department (National Forestry Commission) and Secretariat of Environmental and Natural Resources for the Mexican government.
- On March 20, 2013, MBMG Director John Metesh and Leo Heath, Petroleum Engineering Department Head, hosted visiting members of the Nigerian National Assembly who were touring Montana to examine Extractive Industry Oversight and Resource Management. Montana State Senators Jim Keane and Jon Sesso and Regent Pat Williams also attended.
- MBMG geologist Kaleb Scarberry was interviewed for an article on Montana's only known locality of 'ringing rocks,' titled *Rock of Ages*, that ran in the March/April 2013 edition of *Montana Magazine*.

## **HIGHLANDS COLLEGE**

- Highlands College is sponsoring the first-ever Student Research Day for Two-Year Colleges on Friday, April 19<sup>th</sup>. Student Research Day for Montana's Two-Year Colleges will be a celebration of student research, creative and scholarly activities, and an opportunity for students and faculty from multiple two-year institutions to interact with peers in their respective disciplines. Research Day is the premier academic two-year event in Montana.
- Highlands College won a grant from the Office of the Commissioner of Higher Education. Entitled "Pathways to Highlands College," the grant will help inform parents, students, high school and college faculty about the career and technical educational opportunities available at Highlands College.
- Civil Engineering Technology students and faculty completed a project to establish a Continuously Operating Reference Station (CORS) at Highlands College. The National Geodetic Survey [NGS], an agency of the National Oceanic and Atmospheric Administration [NOAA], recently accepted the Highlands College CORS station into their national network and is now officially "hosted" on their website under the site ID "MTHC". The network provides data to support three-dimensional positioning, meteorology, space, weather, and geophysical applications.
- The Montana Tech community partnered with building supplier ProBuild to help a disabled Tech student. Highlands College Construction Technology students made the disabled student's home wheelchair accessible and ProBuild supplied the construction materials at their cost.
- In its Tech Gallery South exhibition space, Highlands College has installed a poster exhibit from the Smithsonian Institution entitled "Bittersweet Harvest: The Bracero Program, 1942-1964". *Bittersweet Harvest* is a moving bilingual exhibition organized by the Smithsonian's National Museum of American History (NMAH) and circulated by the Smithsonian Institution Traveling Exhibition Service (SITES).
- Evan Barrett has joined the Montana Tech staff as Director of Business & Community Outreach for Highlands College. Barrett, who served as Executive Director of the Butte Local Development Corporation (BLDC) for eighteen years before heading up the Governor's Office of Economic Development, was announced recipient of an award from the Montana Ambassadors, "Montana Ambassador Plenipotentiary."
- Highlands College has completed work on a new space dedicated for use by student military veterans. The Highlands Veterans Lounge is a comfortable, quiet, welcoming space where our veterans can relax, study, chat with other veterans, have some coffee or work on a computer.
- Highlands College recently sponsored its 2013 Wellness Fair. This day celebrated healthy lifestyles and offered educational information about sexual wellness and heart health, among others.

- Highlands College's Evan Barrett was recently heard on Montana Public Radio as part of the MTPR "Commentaries" feature on the evening news. Barrett's commentary was a "remembrance" of Montana's late Senator Lee Metcalf and coincided with the 35<sup>th</sup> anniversary of Metcalf's death.
- The Butte-Silver Bow Health Department and Highlands College recently partnered in the local sponsorship and promotion of the national "Get Yourself Tested" (GYT) Program. Students got free HIV testing and an opportunity to ask questions confidentially about their sexual health.
- Trades and Technical faculty member Dennis Noel has won Highlands College's first ever Faculty Merit Award.
- Highlands College welcomes Safe Space, Butte's own non-profit organization whose mission is to provide assistance to survivors of domestic violence and sexual assault. "We want our students to know that we are very sensitive to the fact that sexual assault impacts a significant percentage of college women," said Dr. John M. Garic, Dean of Highlands College.