## **CAMPUS REPORT**

DATE: February 16, 2012

TO: Board of Regents

FROM: Donald M. Blackketter, Chancellor, Montana Tech of The University of Montana

RE: Campus Report for the March 1-2, 2012 Board of Regents' Meeting

- Dr. Pat Munday, Professor of Science & Technology Studies with the Technical Communication program, is in the People's Republic of China as a Fulbright Scholar the spring. He teaches two courses, American Technology & Society and U.S. Environmental History, with Southwest University in Chongqing. He will deliver guest lectures at universities in Chengdu, Xiamen, and other cities.
- Suzan Gazioglu, Mathematical Sciences Associate Professor, and Professor E. M. Scott (from University of Glasgow, U.K.) published a peer reviewed article in a Statistics journal: Gazioglu, S. and Scott, E.M., "Sensitivity Analysis of linear time-invariant compartmental models with steady-state constraint," *Journal of Applied Statistics*, Vol. 38, No. 11, November 2011, pages: 2485-2509.
- Students and faculty from Montana Tech's College of Technology are partnering with the Montana Heritage Commission, the Nevada City Living History Museum and Kenworthy Electric to make improvements to the Nevada City Living History Museum. Four of the College of Technology's programs will be involved: the Sustainable Energy Technology Program will be assisting with the installation and commissioning of the solar power system; the Pre-Apprentice Lineman Program will dig the trenches required for the power lines; and both the Carpentry Program and Historic Preservation Program will assist with the installation of the new street light poles.
- The Montana Board of Oil and Gas Conservation and the Petroleum Engineering Department at Montana Tech are announcing the start of a major engineering study to focus on the Elm Coulee Bakken oil field in eastern Montana. The study will determine the technical and economic feasibility of specific Enhanced Oil Recovery (EOR) methods which could be applied in Elm Coulee field to increase future oil production.
- Montana Tech alumnus LT Christopher S. Casne from NAVFAC Hawaii was recently selected as the Military Engineer of the Year for 2012. LT Casne, who graduated from Montana Tech in 2003 with a General Engineering-Civil degree, is a registered engineer in the state of Montana.
- Recent graduates of the Montana Tech College of Technology Lineman Program scored well in the 19<sup>th</sup> Annual Montana Lineman's Rodeo, held at Pelican Point in Cascade, Montana. Dane Okerland placed 3<sup>rd</sup> and Vance Forsman placed 5<sup>th</sup> (out of 85) in the Top Apprentice Overall category. Dane also scored first in the Overall Speed Climb. Dane and Vance also finished 3<sup>rd</sup> and 5<sup>th</sup> (out of 63) respectively in the Construction category. Additionally, Dane placed 2<sup>nd</sup> in the Hurt Man Rescue. Travis Reynolds, Jason Beatty, Michael (Troy) Ramey scored 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> respectively in the Top Line School category.
- John Getty, Petroleum Engineering, was awarded \$5,000 by the Montana Board of Oil and Gas Conservation to fund a scoping study for development of a Field Inspection Procedures Manual and related software. A multidisciplinary team including the Montana Tech departments of Technical Communication, Computer Science, Safety, Health and Industrial Hygiene, Environmental Engineering and Petroleum Engineering has been assembled to produce the scope-of-work document. This project may lead to a contract for actual development of the Field Inspection system.
- John Getty authored an article published in the November edition of the trade magazine, "RockProducts." The article, titled "Fishing for Frac Sand" describes the methods used to qualify sand for use as a proppant in hydraulic fracture stimulation of oil and gas wells.
- Joann Yellow Eyes-Puckett, a Native American student in the College of Technology, has had her research accepted for publication in the *Montana Alliance for Families Touched by Incarceration (MAFTI) Newsletter.* Her research article is titled "The Loneliness of Women in Pre-Release Centers"; her research evidences the value of education in helping people help themselves, including those in prison. Joann and her faculty mentor, Dr. Elyse Lovell, have been featured by two television stations and the Montana Standard and Butte Weekly newspapers.
- Three Accounting Technology students from Montana Tech's College of Technology are assisting Southwest Montana residents prepare their income tax returns. DeAnne Owens, Michelle Schneiter and

Julie Schroder are participating in the IRS Volunteer Income Tax Assistance (VITA) Program. The VITA Program offers free tax help to people who make \$50,000 or less and need assistance in preparing their own tax returns. The students' faculty mentor is Accounting Technology Instructor, Vickie Petritz.

- Luke Buckley, computer software engineer with the Montana Bureau of Mines and Geology (MBMG), recently attended the Montana Water Well Drillers Association Annual Convention in Billings. During the banquet, the Board of Water Well Contractors presented him with a plaque acknowledging his long-standing work developing the MBMG's Ground Water Information Center (GWIC) and the 'DrillerWeb' on-line water-well-log filing system used by Water Well Contractors.
- At the National Communication Association Convention in New Orleans, Dr. John Ray was presented the 2011 Phifer Award by the Commission on American Parliamentary Practice for distinguished scholarship in parliamentary procedure. Dr. Ray was also elected President of the Commission on American Parliamentary Practice.
- Dr. Dorjsuren Dechinlhundev, Secretary General, National Water Committee, Ministry of Nature, Environment and Tourism, Mongolia, visited with Montana Bureau of Mines and Geology (MBMG) scientists Dr. Edmond Deal, Dr. John Metesh, Thomas Patton, and Ted Duaime on January 23. The group discussed similarities between Mongolian and Montanan hydrogeology, the need for long-term monitoring of groundwater levels and water quality, environmental hydrogeology, and characterization of groundwater resources.
- Professional Land Surveyor and Civil Engineering Technology Instructor Eric Martin's article "Seeking Zero" was published in the *Treasure State Surveyor* journal. The article focuses on his research with CET student, Martin Harris, in which they visited and documented Montana's "zero points", also known as Geodetic Confluence Points. These are very unique spots where lines of latitude and longitude intersect (0 minutes, 0 degrees). These spots along the 46<sup>th</sup> Parallel include the 113<sup>th</sup> longitude, which is just west of Butte, longitude 111 (near Bozeman), longitude 112 (near Whitehall), and longitude 114 (near Missoula).
- Montana Tech's Civil Engineering Technology students and faculty, in cooperation with the Montana Department of Transportation and the National Geodetic Survey (NGS), have successfully completed a project to establish a Continuously Operating Reference Station (CORS) at the College of Technology. The Tech CORS joins a nationwide network of stations that provide Global Navigation Satellite System data to support three-dimensional positioning, meteorology, space, weather, and geophysical applications.
- Casey Clark, a triple major in Environmental Engineering, Mathematics, and statistics was one of 16 students from our region that interviewed in Seattle for a Rhodes Scholarship in November.
- Professor Grant Mitman of Montana Tech's Biology Department has been elected Chair of the Coalition of Union Faculty (CUF) for MEA-MFT to a two year Term beginning Jan 1.
- Martha Apple, Biological Sciences faculty, attended the Seventh Montana Plant Conservation Conference on February 15th and 16th 2012 in Helena, Montana.
- Xiaobing Zhou of the Department of Geophysical Engineering and Martha Apple of the Department of Biological Sciences and their graduate student, Venkata Lakkaraju, published the following paper along with collaborators from Montana State University and the Brookhaven National Laboratory: Zhou, X., V.R. Lakkaraju, M. Apple, L.M. Dobeck, K. Gullickson, J.A. Shaw, A.B. Cunningham, L. Wielopolski, L.H. Spangler, Experimental observation of signature changes in bulk soil electrical conductivity in response to engineered surface CO2 leakage. International Journal of Greenhouse Gas Control 7 (2012) 20–29.
- The Montana Tech Nursing Department and The Institute for Educational Opportunities have recently moved into the newly renovated Health Sciences Building.
- Health Care Informatics has used software virtualization to make Microsoft Project accessible to the online students taking Tech's HCI 4106 (Project and Systems Management) course. Distance learners in this course now have access to exactly the same technology resources and software applications as "on-campus" students
- Dr. Courtney Young, Dept Head and Lewis S. Prater Distinguished Professor of Metallurgical & Materials Engineering, received the Mill Man of Distinction Award from the Mineral & Metallurgical Processing Division (MPD) at the Annual SME Meeting in Seattle, WA, February 19-22, 2012. This award recognizes commitment, leadership and service to the division and society and is given in honor of his past year as MPD Chair.

- Dr. Young will also present a paper entitled "Beneficiation of Terrestrial Resources for the Production of Lunar Simulant Separates" at the SME Annual Meeting in Seattle. The research was funded by NASA and MSGC but was initiated through MT Tech's Undergraduate Research Program (URP) and involved 4 undergraduate students.
- Dr. Young also had a paper entitled "ARD Remediation with Slag: An Application to Berkeley Pitlake Water" accepted for presentation at the U.S. EPA Hardrock Mining Conference 2012: Advancing Solutions for a New Legacy, which will take place April 3-5, 2012 in Denver, CO. This research was funded by CAST and the old MWTP. It involved one postbac student and one student who received his MS degree as a result.
- Dr. Michele Van Dyne (Computer Science) was accepted to the Montana NASA EPSCoR Faculty Connections Program.
- Two Montana Tech programming teams competed in the ACM International Collegiate Programming Contest on October 29th at Neumont University in Utah. The Montana Tech A Team won the Neumont University site competition and placed 6th in the Rocky Mountain Region. This is the first time Montana Tech has won a Rocky Mountain Region site competition (outside of Montana) and it is the highest regional ranking by any Montana Tech programming team. The A Team consists of seniors Matt Burt, Tyler Lee, and Chris Tenda.