

CAMPUS REPORT

DATE: August 26, 2011
TO: Board of Regents
FROM: Donald M. Blackketter, Chancellor, Montana Tech of The University of Montana
RE: Campus Report for the September 21-22, 2011 Board of Regents' Meeting

- Biological Sciences Professor Grant Mitman's chapter on Euglenophyta, including his own biological illustrations, appeared in *Algae: Source to Treatment* (American Water Works Association, 2010.) The book won a second place 2011 Ben Franklin award (Reference/Directories division.) Dr. Mitman was invited to display the original artwork from the book chapter at the August Artwalk at the Buttopia Studio on Main Street in Butte.
- Suzan Gazioglu, Associate Professor of Mathematical Sciences gave two presentations at the 24th International Conference of Jangjeon Mathematical Society on July 20 -23, 2011 in Konya/Turkey. The presentations were titled: "Studying Discrepancies in Compartmental Models" and "Online Course Design: A Statistics Course Example." Suzan also chaired the Statistics session at the conference.
- Julie Hart, Associate Professor of Safety, Health and Industrial Hygiene (SHIH) presented a paper titled *Evaluating the Impact of Weatherization Procedures on Homes with Vermiculite Attic Insulation and or Other Asbestos Containing Materials* at the Johnson Conference at the University of Vermont. SHIH Department Head Terry Spear also attended. Spear and Hart have published several papers pertaining to potential public and occupational exposures to Libby amphibole asbestos. Hart's presentation was a summary of a three year research project conducted in 37 Montana homes.
- Engineers Without Borders students Hattie Torgerson and Frankie Schwartz traveled to San Juan El Espino, El Salvador to share their engineering skills. Three rural communities depend on a twisty gravel road to haul their goods to market, access medical care, and send their children to school. Rainy season floods have been eroding the road at an important culvert crossing. While expertise to fix the problem exists in-country, the government's resources and engineers are stretched too thin across the country – a perfect scenario for intervention by Engineers Without Borders. Torgerson and Schwartz, along with advisor Butch Gerbrandt and bridge expert Brad Miller of HDR, Inc. in Missoula spent nine days at the site, meeting with community leaders, surveying the site, and gathering soils data. Local governments will collaborate by supplying topographical maps, hydrological data, and partial financial support. The Montana Tech team returned to their home campus to develop designs and raise \$20,000 to help fund the construction of the solution. The Tech chapter plans several future trips to the site.
- Dr. Grant Mitman was named the Montana MEA-MFT faculty member of the year for all units in the MUS system at a celebration in Helena in April. MEA-MFT's members of the year were chosen for their professionalism on the job and their leadership as union members.
- John Getty, Instructor in Petroleum Engineering, and student Tim Denton developed a program operating under the name Proppant Research Division to evaluate local Montana material for suitability as proppant. This material is a critical component of the process of fracture stimulation of oil and gas wells. The recent increase in demand for proppant material opens opportunities for Montanans to develop natural sand deposits. If suitable deposits are located, the economic impact on the State could be significant. To date, about 20 samples have been evaluated in the Petroleum Department labs.
- The MT Tech Society of Women Engineers Student Chapter held the first annual "Save the Tatas Fun 5K Walk/Run 10K Bike for the Cure" in the spring. From the race proceeds, they donated \$500 to the National Breast Cancer Foundation, whose mission is to increase awareness of breast cancer through education and by providing mammograms for those in need.
- Liberal Studies Professor Robert Ziegler's essay "Conversation et supplice: Comment est généré le récit dans *Le Jardin des supplices*" has been accepted for publication in the 2012 issue of the *Cahiers Octave Mirbeau*, published by the Société Octave Mirbeau in Angers, France.
- Geophysical Engineering Professor Marvin Speece's research in Antarctica was highlighted in the recent PBS NOVA special: "Secrets beneath the Ice."
- Mary North-Abbott received a one-year \$35,561 renewal for her DOE EPSCoR project. The project, which supports a larger carbon sequestration research project at MSU-Bozeman, has been funded for

three years and has provided financial support to three graduate students, five undergraduate students, and five faculty members.

- Mary Peterson, a junior in Electrical Engineering, was selected as a Society of Women Engineers (SWE) Future Leader. As such, she was sponsored by the SWE national organization to attend the SWEFL Conference in Austin, Texas in mid-August. She is the first student from Montana Tech to be selected for this honor.
- The College of Technology's Learning Center secured a \$133,607 Perkin's Grant from the Commissioner of Higher Learning.
- The combined undergraduate and graduate training program received \$107,000 from the National Institutes of Health (NIH).
- The Montana Bureau of Mines and Geology received \$100,000 from the Bureau of Land Management to monitor the ground water in southeastern Montana's energy development areas; \$129,880 from the Confederated Tribes of the Umatilla Indian Reservation to conduct seismic surveys & data evaluation on ground water units; and \$203,638 from the US Geological Survey for the Montana STATEMAP 2011-2012 project.
- The Technical Outreach group received \$307,925 from the Montana Department of Labor & Industry, Workforce Services Division for a College Access Challenge Grant; and \$379,434 from the National Resource Damage Program for the Clark Fork Education Program.
- The Biological Sciences Department received \$112,583 from the National Institutes of Health to study The Phage Pipeline: From Dirt to Genomics.
- Dr. Grant G. Mitman presented a poster at the Joint Meeting of the Psychological Society of America, International Society of Protistologists & Northwest Algal Symposium in July. Based on collaborative biofuel work with Montana Tech's Chemistry Department, the presentation was entitled Analysis Of Chromulina Freiburgensis -Lipids & Saccharides For The Use Of Biofuels. Other authors were Montana Tech students Amanda Mondloch and Danielle Hall and Chemistry Department Head Doug Cameron.
- Biology Ph.D. student Luciana Piudo successfully defended her dissertation two weeks ago at Universidad del Comahue in Bariloche, Patagonia. Luciana studied rodents and hantavirus in peridomestic settings. Two peer reviewed papers have been published from her work so far.
- Dr. Larry N. Smith and Geological Engineering undergraduate students Aric Hotaling and Shawn Christensen presented a poster entitled "3D outcrop mapping by photogrammetric methods—assessing depositional and erosional events in Glacial Lake Missoula" at the Geological Society of America Rocky Mountain Section meeting in Logan, Utah on May 18-20.
- Larry N. Smith, Geological Engineering, was the conference organizer of the 36th annual Tobacco Root Geological Society Field Conference, July 29-31. He and Richard Gibson edited the associated volume The Superior Area and other papers, Northwest Geology, v. 40, p.162. Smith and **Montana Tech students** Shawn Christensen and Shannon Wilson wrote an article for the volume "Stream terraces along the Clark Fork River from Ninemile to the Flathead River, Montana." Smith led a field trip on the sedimentary record of Glacial Lake Missoula, and co-led (with Robin McCulloch, MBMG) on the Quaternary geology and placers in Quartz Creek, Mineral County, Montana.
- Mathematical Sciences faculty Hilary Smith Risser and Biological Sciences faculty Marissa Pedulla were selected by the Montana Office of Public Instruction and the Montana STEM Leadership team to participate in a STEM working group for the state of Montana. The working groups will help develop a statewide STEM plan that will be implemented in the fall of 2012.