

CAMPUS REPORT

DATE: June 11, 2015
TO: Board of Regents
FROM: Donald M. Blackketter, Chancellor, Montana Tech
RE: Campus Report for the July 10, 2015 Board of Regents' Meeting

- Representatives from the China University of Mining and Technology – Beijing (CUMT-Beijing) and Sun Yat-sen University will visit the Montana Tech campus this summer. These visits by the Chinese representatives are the next steps in developing relationships between Montana Tech and universities in China. A four person contingent from Montana Tech visited CUMT-Beijing and Sun Yat-sen University in March.

STUDENT ACHIEVEMENT

- Montana Tech student Samantha Miner, a junior majoring in Biochemistry, was selected as a Amgen Scholar for 2015. She will study biochemistry with graduate researchers at the Massachusetts Institute of Technology (MIT) this summer. The scholarship funds her research and travel to meetings at the University of California, Los Angeles (UCLA) and at Amgen's headquarters.
- Alicia Kastelitz (Sr, Petroleum Engineering) took second place in the Society of Petroleum Engineers (SPE) combined Rocky Mountain and Mid-Continent Student Paper contest held at Oklahoma State University on April 25th. Her paper was titled: "Application of the Automated Optical Particle Size Analyzer."
- Dr. Chris Gammons and four Geological Engineering graduate students (Jarred Zimmerman, Sara Edinberg, Margaret Doolittle, and Ryan Stevenson) presented four papers at the 2015 Rocky Mountain Section Meeting of the Geological Society of America in Casper, WY in May.
- Dr. Chris Gammons, along with M.S. student Joshua Messenger, gave an invited talk at the 2015 Mine Design Operations and Closure Conference, Fairmont, entitled "Geology and geochemistry of the Calvert tungsten skarn deposit and its associated pitlake."
- M.S. students George Williams and Katelyn Petteys, along with professors Steve Parker and Chris Gammons, recently got a paper accepted for a Special Issue of Applied Geochemistry in honor of the esteemed USGS scientist Kirk Nordstrom, entitled "An investigation of acidic head-water streams in the Judith Mountains, Montana, USA."
- Nine students along with advisor Ronda Coguill of the Society for Advanced Material Process Engineering (SAMPE) student club at Montana Tech recently traveled to the Spring Technical Conference in Baltimore, Maryland. Two student teams built carbon and natural fiber bridge beams that were tested at the conference. Both bridges placed 5th in their categories. Two other students competed in the 3-D printing contest with successful printed designs.

FACULTY EFFORTS

- Dr. Larry N. Smith, Associate Professor of Geological Engineering was awarded a USGS Edmap grant for "Geologic mapping of portions of the Cabinet, Heron, and Smeads Bench 7.5' Quadrangles, Sanders County, northwestern Montana." The monies will support two Graduate Assistants in their M.S. projects. The students, Emily Welk and Michael Chambers, will be conducting geologic mapping this summer.
- Dr. Chris Danielson, Associate Professor of History, was named to a one-year appointment to the editorial board of the African American Experience database for publisher ABC-CLIO.
- Dr. Courtney Young was invited to South Africa to give a seminar at University of Pretoria and a presentation at South African Institute of Mining and Metallurgy Conference on Copper and Cobalt being held in Livingstone, Zambia. As a corresponding peer-reviewed paper was accepted for publication at the conference, Dr. Young accepted the speaking invitations. The paper, entitled "Xanthate Chemisorption at Copper and Chalcopyrite Surfaces" is co-authored with student Jesse L. Bowden, a May M.S. graduate who was a standout on the Montana Tech volleyball team.
- Dr. Traci O'Neill, Associate Professor of Business, was invited to present a paper entitled *Academic motivation and student self-concept: The keys to positively impacting student success*, at the 2015 International Management and Marketing Association conference in Chicago in March.

HIGHLANDS COLLEGE

- Highlands College held its Spring Student Research, Creative and Scholarly Activity Celebration on Wednesday, April 1st. The event featured poster presentations from 46 students of various majors. All students, faculty, staff and the greater Butte Community were invited to view the students' poster presentations in the Commons at Highlands College.

PROGRAMS, RESEARCH & ECONOMIC DEVELOPMENT

- Amy Verlanic, Executive Director of the Institute for Educational Opportunities, has had her proposal entitled **Political Advocacy: Best Practices In Influencing Educational Inequalities Through Applied Applications** accepted for presentation at the European Access Network's 24th Annual Conference in Oslo, Norway. Verlanic is one of four Americans on the agenda for the conference which will take place June 4-12.
- The Center for Advanced Mineral and Metallurgical Processing (CAMP) and Synesis7 Corp. of Butte have partnered to jointly develop enhanced and scalable integrated Additive Manufacturing (AM) and Intelligent Digital Thread processes, technologies, and operational capabilities. Synesis7 and CAMP recognized that their combined capabilities could be brought together to develop and deliver a flexible Additive Manufacturing and Digital Thread process, data, technology, and operational Integration Framework.
- The Center for Advanced Mineral and Metallurgical Processing (CAMP) at Montana Tech has recently partnered with Space Propulsion Group (SPG), formerly of Sunnyvale, CA. SPG is the world leader in the formulation, casting, and processing of high regression rate hybrid rocket fuels. Along with the business partnership, SPG and CAMP share equipment that is essential to the fabrication of rocket test motors and other wound composite parts. A 3-axis, 30-foot long filament winding machine is now housed at the Montana Tech Research Center and is operated under the guidance of CAMP Material Test Lab Manager, Ronda Coguill. "With this state-of-the-art machine, we can now provide realistic training for our students who are interested in working with advanced materials such as fiberglass and carbon composites," said Coguill.
- During the Spring 2014 semester Montana Tech Business and Information Technology department launched a Business Expansion and Retention (BEAR) Program. The program is a partnership between Montana Tech, the Southwest BEAR Team, and NorthWestern Energy. To date, seven Montana Tech seniors have assisted six businesses in their quest for strategic growth, marketing, and operational processes over the last year and a half.

MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY

- MBMG hydrogeologist Shawn Kuzara presented an overview of the hydrology of the Rock Creek Watershed to the Carbon County Conservation District at their meeting on February 15, 2015.
- MBMG hydrogeologist Shawn Kuzara discussed options for potential monitoring wells and protection of the city water supply at a Joliet City Council meeting on February 17, 2015.
- Montana Ground Water Investigations Program leader Ginette Abdo presented a discussion, "Geology and water resources in the Virginia City area" at a public meeting in Virginia City hosted by Montana Rural Water Systems Inc. on March 26, 2015.
- Todd Myse, a Ground Water Investigations Program hydrogeologist, presented, "Findings by the Ground Water Investigations Program in the Bitterroot Valley" to the University of Montana's Bitterroot College's Water Resources class in Hamilton on April 2, 2015.
- James Rose and Kirk Waren, Ground Water Investigations Program hydrogeologists, and Program Leader Ginette Abdo met with the Gallatin Water Quality District Board on April 2, 2015. The MBMG scientists reported on progress in the Big Sky Ground Water Investigations Study and answered questions. The Big Sky Study area is within the Water Quality District's borders.
- Margaret Delaney, MBMG's Mining Archives Program Leader, discussed the Montana Bureau of Mines and Geology's data preservation program which includes acquisition of historic oil and gas and coal exploration data collections at a public seminar in Butte on April, 2, 2015.
- On April 7, 2015 the Montana Bureau of Mines and Geology released Geologic Map 65, "Geologic Road Map of Montana". The full color map shows the geology along many of Montana's highways and offers information about Montana's many geologic highlights. The map is printed on heavyweight paper and folded to be easily viewed while in an automobile.