CAMPUS REPORT

DATE: April 24, 2012

TO: Board of Regents

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

RE: Campus Report for the May 24 - 25, 2012 Board of Regents' Meeting

- Montana Tech student Robert Hark has been awarded a 2012 Goldwater Scholarship. Robert will
 graduate from Montana Tech in May of 2013, with Bachelor of Science degrees in Chemistry,
 Mathematical Sciences, and Statistics. "After I graduate from Montana Tech, I intend to pursue a Ph.D.
 in either statistics or chemistry (computational) at a top university in the United States, a goal that my
 education at Montana Tech has certainly placed within my reach," stated Hark.
- A team of Montana Tech engineering students were awarded the Most Applicable Technology and Best Poster at the 22nd Annual Environmental Design Contest held April 1 - 4, 2012 at New Mexico State University in Las Cruces, New Mexico. The Environmental Design Contest brings together industry, government and academia in the search for improved environmental solutions. Members of the 2012 design team were Caitlin Brown, Nathan Dillon, Kayla Lester, Kevin Tweten, and Peixi Yan. The team's advisor is Rajendra Kasinath.
- Construction Technology students have partnered this year with Habitat for Humanity of Southwest
 Montana to build an unprecedented 9 homes, consisting of a four-plex and five stand-alone houses.
 The Construction Technology program has a very low cost profile because Habitat provides all of the
 building materials for the homes, and the program provides a hands-on experience for the students. In
 return, Habitat receives many homes for needy citizens.
- Student Stephen "PJ" Neary, Computer Science major, was accepted into the 2011-2012 EPSCoR
 Cyberinfrastructure Student Engagement Program. As part of the program, PJ attended a kickoff/orientation meeting at Clemson University in February and will attend the Supercomputing
 Conference (SC12) in Salt Lake City next November.
- Mathematics major Katherine Steiner gave the Undergraduate Research Program presentation at the Bozeman Montana Space Grant Consortium conference, and won Best Undergrad Presentation from a small institution.
- Students from Montana Tech's Pre-Apprentice Lineman Program recently participated in a national lineman "rodeo" competition in Chandler, Arizona. Individual accomplishments included Gabe Webster placing first overall in the cross arm change-out completion. Mike Arnold and Ronnie Te Beest placed 3rd and 7th respectively in the written test competition. Zane Yount took 10th place in the obstacle climb.
- Celebratory events were held at Montana Tech during National Student Employment Week, April 8-14, to honor student employees. There were daily drawings, recognition for Student Employee of the Year nominees & winners, and ice cream & cake. Kyle Murphy is this year's Montana Tech Student Employee of the Year award winner.
- The NAIA announced the Men's and Women's Basketball 2011-12 Daktronics-NAIA Scholar-Athletes. Brianne McClafferty, Tabitha Tomlinson and AJ Paine received the academic award.
- Montana Tech Mining Team competed at the International Mining Competition in Camborne, Great Britain and brought home 4 first place trophies.
- The College of Technology at Montana Tech hosted 50 high school students from five different high schools in the TrigSTAR Competition, a national competition sponsored by the National Society of Professional Surveyors (NSPS). The competition consists of a math test for high school trigonometry students, testing their knowledge of angles, distances, and trig functions.
- Montana Tech's College of Technology continued its "Passport To" Program with a celebration of the Republic of Serbia. The celebration, sponsored by the College of Technology, was held on March 29th. Speakers were Serbian students Ivana Lacmanovic and Ivan Sljivar.
- Dr. John M. Garic, COT Dean, and Dr. Elyse Lovell, Adjunct Faculty, presented at the College!Now 2nd Annual Teaching and Learning Conference in Helena on April 13th. Entitled "Retention Success! Research, Creative and Scholarly Activities (RCSA) Program," the presentation focused on the value of faculty-mentored, student-conducted research, creative and scholarly activities.

- Dr. John Morrison, Professor of Electrical Engineering, received his second patent on methods of dynamic impedance measurements in batteries. Collaborators in the invention include Qualtech and the Idaho National Laboratory. The team, winners of last year's IR100 award, has five more patents pending.
- The College of Technology at Montana Tech, in partnership with the Powell & Deer Lodge Adult Basic and Learning Education (ABLE) Programs, has been selected by OCHE to receive a \$10,000 grant to carry out the Collaborative Model of Aligning Adult Career Pathways Program. The goal of this program is to provide adult learners who use the ABLE programs in Deer Lodge and Powell counties a Career Pathway to transition to postsecondary education or employment.
- John Jackam, Instructor at the Montana Tech College of Technology, secured a patent on a process for
 producing biodiesel titled "Production of biodiesel and glycerin from high free fatty acid feedstocks." The
 US Patent and Trademark Office granted patent number 8,088,183 to Mr. Jackam and his co-inventors
 Joel Pierce and Jeffrey Jones.
- The Butte-Silver Bow Health Department and Montana Tech partnered in the local sponsorship and promotion of the national "Get Yourself Tested" (GYT) Program. The national GYT Program is about using the power of a youthful social movement to encourage young adults to get tested for STDs.
- Montana Tech hosted Ms. Ninia Baehr of the American Civil Liberties Union (ACLU) of Montana on April 18th. Ms. Baehr is the LGBT Advocacy Coordinator for the ACLU. Ms. Baehr showed a short video of the 2012 St. Patrick's Day Parade featuring interviews with gay and straight Butte residents.
- April was Sexual Assault Awareness Month and events were scheduled around the nation to raise
 awareness of the issues and problems associated with sexual assault. This year's national theme was
 "IT'S TIME ... TO TALK ABOUT IT!" Tech hosted Safe Space advocate Officer Dan Murphy of the
 Butte Police Department, who spoke on domestic violence generally and more specifically how Butte
 has been impacted.
- In March 2012, Dr. Jerome Downey of the Metallurgical and Materials Engineering Department completed his two-year appointment as the chair of the TMS Pyrometallurgy Committee. Dr. Downey was the lead organizer for the highly successful International Smelting Technology Symposium, which was held in conjunction with the 2012 TMS Annual Meeting.
- The Montana Tech Geophysical Engineering Department was recently awarded two educational software grants. The first is a 3-year software grant continuation from Halliburton's Landmark Software and Services business line valued at over \$20,000,000. The second is an educational grant extension for the software package SMT Kingdom Suite. The 3-year grant is valued at \$2,330,200. The total value of the software is \$23.9 million.
- Curtis Link and two Geophysical Engineering MS students presented research results in March in Tucson, AZ at SAGEEP, the annual international Symposium for the on the Application of Geophysics to Engineering and Environmental Problems through EEGS, the Environmental and Engineering Geophysical Society.
- United States Senator Jon Tester will deliver the commencement speech at Montana Tech's 112th graduation ceremony on Saturday, May 12, 2012. Senator Tester will speak about hard work and the value of public service.
- Mr. William F. Madison, retired Marathon Oil executive, will receive an honorary doctorate of science degree from Montana Tech during the university's 112th commencement ceremony.
- Montana Tech has been named to the 2012 President's Higher Education Community Service Honor Roll in recognition of thousands of hours student volunteers provide to the Butte-Silver Bow area.
 Montana Tech received the award along with Flathead Valley Community College, Montana State University, and The University of Montana.
- Dr. Roger Jensen, Professor of Safety, Health, and Industrial Hygiene, had a book published by Wiley Press. Entitled *Risk-Reduction Methods for Occupational Safety and Health*, the book describes engineering and administrative methods for reducing the risk of work-related injuries and illnesses.
- Liberal Studies faculty member Chris Danielson has published a book, titled *After Freedom Summer:* How Race Realigned Mississippi Politics, 1965-1986, University Press of Florida, 2011.
- Chancellor Don Blackketter was appointed to the newly-formed 5-member Montana Workforce Development Task Force. The group's first meeting was held in Sydney on March 8.
- The Montana Bureau of Mines and Geology, and Jon Axline, Montana Department of Transportation employee, were presented with "First Lady Awards" for creation of Montana's Geological Road Signs.

The citation states "These Geo-signs are a cornerstone piece of the Governor and First Lady's Math and Science Initiative, reflecting their personal interest in Montana's geologic history".

- Nick Tucci, Montana Bureau of Mines and Geology, made Butte Superfund Issues presentations on April 13, 2012 to a Mining - History of Butte class from the University of Montana-Western and a geology class from Rocky Mountain College. The students learned about groundwater contamination from waste left in place and water quality in the Berkley Pit and underground workings. Both classes toured the current Montana Resources' Continental Pit for a close-up view of Butte's geology and current mining operations. About 30 students were involved.
- Dr. Keith Vertanen, Computer Science Assistant Professor, received Honorable Mention for Best Paper at the ACM Eye Tracking Research and Application (ETRA) Conference in March for his paper "The Potential of Dwell-Free Eye-Typing for Fast Assistive Gaze Communication".
- Dr. Michele Van Dyne, Computer Science Associate Professor, presented "An Inferential System for Determination of Candidate Crash Sites for Search and Rescue Operations" at the 2012 IEEE Aerospace Conference.
- Dr. Michele Van Dyne presented "Robotics in Education: A Tool for Recruiting, Engaging, Retaining and Educating Students" at the WSEAS International Conference on Robotics, Control and Manufacturing Technology (ROCOM'12) in Rovaniemi, Finland.
- John LaFave, Montana Ground Water Assessment Program leader, made a presentation on March 19, 2012 to the Shields Valley Watershed Group about potential impacts to groundwater quality from hydrofracturing and hydrocarbon development. The Shields Valley is in northern Park County and within the Ground Water Characterization Program's upcoming Park-Sweet Grass groundwater assessment study. About 40 people attended.
- John LaFave also presented an overview of groundwater conditions in Park and Sweet Grass counties at an April 18, 2012 water rights workshop in Livingston, Montana. About 50 people attended.
- Liberal Studies professor Robert Ziegler authored "Conversation et supplice: comment est généré le récit dans *Le Jardin des supplices*," which appeared in Volume 19 (2012) of the *Cahiers Octave Mirbeau*, published in Angers, France.
- Tom Michalek, Montana Ground Water Investigations Program, presented a talk on April 11, 2012 on water resources in the Gallatin Valley to the Montana Water Court's spring water meeting in Bozeman. About 30 people attended the presentation.
- Thomas Patton, Montana Bureau of Mines and Geology Research Division Chief, presented a talk on April 12, 2012 to the Governor' drought advisory council about groundwater level response in wells to the 2000-2006 drought.
- Dr. Pat Munday, Professor of Science & Technology Studies with the Technical Communication program, was invited by the American Consulate in Guangzhou, China, to deliver a guest lecture about the U.S. Clean Water Act of 1972 and to participate in round table discussions about environmental education & activism.
- Waleed Al-Rawashdeh, Mathematical Sciences Assistant Professor, presented at the 2012 Joint Mathematics Meetings in Boston, Massachusetts, January 4-7, 2012, on "Compact Weighted Composition Operators on Bergman Spaces".
- John Getty, Petroleum Engineering, was invited to present a talk, 'Fracture Stimulation Proppants: "Fishing for Frac Sand" at the Montana Expo 2012 energy conference and trade show, held April 3 and 4 in Billings, MT.
- John Getty and Don Blackketter sat on discussion panels at the Miles Community College Energy Summit, held March 15 and 16 in Miles City, MT.
- Steve Parker (Professor, Dept. of Chemistry/Geochemistry) and Chris Gammons (Professor, Dept. of Geol. Engineering) received \$29,500 from NSF-EPSCoR to investigate "Seasonality and sources of recharge water to the Nyack floodplain in relation to rates of biogeochemical processes and ecosystem function". Dr. Gammons is co-PI on another NSF-EPSCoR grant for a project entitled "Linking microbial processes to landscape-scale trace gas fluxes via hydrologic controls on soil chemistry in a forested montane ecosystem" (Pls John Dore and Brian McGlynn, MSU, \$58,000).
- Steve Parker and Chris Gammons, along with former student Garrett Smith and colleague Simon
 Poulson from the University of Nevada, published a paper in the journal Applied Geochemistry entitled
 "Behavior of stable isotopes of dissolved oxygen, dissolved inorganic carbon and nitrate in groundwater
 at a former wood treatment facility containing hydrocarbon contamination".

- Montana Tech completed a licensing agreement with Dr. Kumar Ganesan, Professor of Environmental Engineering. Dr. Ganesan's patent will be part of an intellectual property portfolio of his new Butte startup Company, Energy and Environmental Research and Technology.
- Montana Tech, the University of Montana, and Montana State University successfully negotiated a change in the Sloan Indigenous Graduate Partnership program. The program, which provides support to MS and PhD native American students, now becomes a Pan-Montana Program, the first of its kind in the Sloan Foundation's portfolio.