CAMPUS REPORT

DATE: October 14, 2016

TO: Board of Regents

FROM: Donald M. Blackketter, Chancellor, Montana Tech

RE: Campus Report for the November 2016 Board of Regents' Meeting

STUDENT ACHIEVEMENT

 Montana Tech Environmental Engineering students earned top prizes among other awards at the Pacific Northwest International Section (PNWIS) of the Air and Waste Management Association. Montana Tech students brought home First Place in the Environmental Challenge and First, Second and Third Places in the 2016 Young Professional Papers competition. The competitions were part of the PNWIS Conference held October 5 - 7 in Juneau, Alaska.

• The Montana Tech Oredigger hockey team beat the MSU Bobcats in Bozeman 8-7 on October 13th.

- Montana Tech's 2016-17 academic-year Undergraduate Research Program (URP) is underway with 16 students doing research projects mentored by 13 faculty in seven departments. The selected students submitted written research proposals last spring that were reviewed by a faculty committee, with the best ones selected for funding. Students enroll for undergraduate research credit and will present their results orally at the spring 2017 Montana Academy of Sciences conference in April.
- Shihua Chen Brazill, a graduate of the MS-Technical Communication program, was invited to present a 1-hour paper, "Chinese to English Translation: Identifying Problems, Suggesting Solutions," at the 57th annual meeting of the American Translators Association in San Francisco.

FACULTY EFFORTS

- Montana Tech's fall 2016 distinguished public lecture series is in full swing, and the full schedule can be seen at https://www.mtech.edu/academics/public-lecture-series/files/schedule.pdf. Most lectures are video recorded and archived for anytime-anywhere public viewing on Montana Tech's digital commons at http://digitalcommons.mtech.edu/public_lectures_mtech/.
- Dr. John W. Ray of Montana Tech's Liberal Studies Department has had a paper entitled "Private Reasons versus Public Reasons: Religion and Politics" accepted for presentation next spring at the Seventh International Conference on Religion and Spirituality in Society to be held at the Imperial College London—London, UK.
- Dr. Henrietta Shirk presented a paper titled "Storied Waters: Native American Folklore at Hot Springs in the Bitterroot Valley" on September 23, 2016, at the 43rd Annual Conference of the Montana Historical Society in Hamilton, MT.
- Dr. Shirk also presented a paper titled "Invalid with an Itinerary: Harriet Martineau's Journey in (and Through) the Victorian Sick Room," on October 6th, 2016, at the session on Victorian Travelers, at the Rocky Mountain Modern Language Association's Annual Convention in Salt Lake City, UT.
- Dr. Larry N. Smith (Dept. of Geological Engineering) gave a keynote talk on glacial Lake Missoula and co-led a 1-day field trip for the annual meeting of the Ice-Age Floods Institute in Missoula, MT Sept. 23-24, 2016. At the annual meeting of the Geological Society of America, Denver, CO, he gave two talks: "Optical Ages for Deep Last-Glacial Lake Missoula, Montana" and "Late Pleistocene Mono Basin Beach Berms, California: Preliminary OSL Ages", Sept. 26-28, 2016.
- Dr. Robert Pal, Assistant Professor, Biological Science in collaboration with Dr. Manzoor Shah (The
 University of Kashmir) won a prestigious U.S.-India 21st Century Knowledge Initiative Award, for the
 project titled "Proactive management models for the effects of climate change on the range of invasive
 species." Other researchers from Montana Tech are Dr. Martha Apple (Associate Professor, Biological
 Sciences), Dr. Laurie Battle (Associate Professor, Mathematical Sciences), and Mark Mariano
 (Graduate student in Biological Sciences). The project receives an award of US\$243,900 that is shared
 between the two institutions.
- Under the supervision of Assistant Professor Dr. Robert Pal, Biological Science and international PhD candidate Tamas Henn in Hungary (University of Pecs) defended his dissertation with a Summa Cum Laude result.

- Dr. Robert Pal, Assistant Professor, Biological Science delivered an oral presentation (The
 Effectiveness of Native Seed Dispersal Islands in Reclaimed Mine Lands Dominated by Eurasian
 Grasses) at the American Society of Mining and Reclamation Conference in Spokane, and he was also
 invited to moderate the Ecological Implications of Reclamation session.
- Dr. Pal also published a per-reviewed paper in APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH in the frame of an international collaboration (authors: Dávid Nagy U, Tamás Henn, Lauren P Waller, Robert W Pal), entitled: How initial composition affects the later development? - A secondary successional study in differently managed agricultural sites.
- Dr. Pal published a per-reviewed paper in Ecology in the frame of an international collaboration (authors: Huixuan Liao, Priscilla C. S. Gurgel, Robert W Pal, David Hooper, Ragan M Callaway), entitled: Solidago gigantea plants from non-native ranges compensate more in response to damage than plants from the native range.
- Dr. Glen Southergill was accepted to write and present a pre-conference workshop at the 2017 Conference on College Composition and Communication entitled "Assessing Multimodal Writing: Exploring Course Contract Pedagogies for Emerging Composition Medias" with Lindsey Albracht (CUNY), Nicole Warwick (UCSB), and Virginia Schwarz (U. Wisconsin-Madison).
- Dr. Glen Southergill presented "Overcooking and Training Incapacity: On the Beefs between Digital Scholarship and Academic Writing" on the Rhetorical Criticism panel of the 2016 Rocky Mountain Modern Language Association conference on October 6 in Salt Lake City. The panel included Sherena Huntsman (Utah State University) & Carrie Ann K. Johnson (Iowa State University), Jacob Robertson (Utah Valley University), and Ethan Sproat (Utah Valley University).
- Chris Danielson, faculty member in Liberal Studies, has published a journal article, "Tokenism and the Slow Integration of Vietnam War Films," in *The Vietnam War and Popular Culture*. Ron Milam, ed., Praeger Press, 2016.
- Geological Engineering faculty member Glenn Shaw, along with Dr. Chris Gammons and graduate student Katie Mitchell, recently had a paper accepted by "Hydrogeology Journal" entitled "Isotope mass balance in a structurally-complex lake, with implications for lake seepage to regional groundwater".

MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY

- In August 2016, MBMG Hydrogeologists Shawn Kuzara and Dr. Elizabeth Meredith; and Montana Tech Geological Engineering Professor Dr. Chris Gammons received a \$200,000 grant from the Office of Surface Mining to: Develop an isotopic fingerprint of acid mine drainage to identify underground controls on groundwater flow paths.
- In September 2016, Economic Geologist Stan Korzeb and Museum Manager John Foley represented Montana Bureau of Mines and Geology and Montana Tech at the Denver Gem and Mineral shows. The Montana Tech Mineral Museum submitted an exhibit on Montana sapphires that won the Friends of Mineralogy Colorado Chapter's Institutional Education Award.
- The Director of the Montana Bureau of Mines and Geology and State Geologist, Dr. John Metesh, attended the Association of American State Geologists fall liaison meeting September 12-15, 2016 in Washington DC. The state geologists discussed the Federal STATEMAP, National Ground Water Monitoring Network, National Geological and Geophysical Data Preservation programs with Federal agencies. All of these programs offer cost-share grants to states. Dr. Metesh was elected as the secretary for the Association of American State Geologists at its June 2016 meeting.
- MBMG Hydrogeologist Kevin Chandler was an instructor at the annual Outdoor Classroom sponsored by the Richland and Roosevelt County Conservation Districts on September 12-13, 2016. The event engages Junior High age students with workshops on range ecology, plant identification, GPS use, hydrology, wildlife, and geology. Kevin helped students explore outcrops of the Fort Union Formation and glacial deposits near Sidney and Culbertson, Montana.
- MBMG Geologist and Director of Earthquake Studies, Mike Stickney spoke about: Recent rumblings to the Butte Rotary Club at a luncheon meeting on September 15, 2016.
- MBMG Hydrogeologist Jon Reiten presented: Extent and hydrogeology of the Lower Yellowstone Buried Channel Aquifer System Richland County, Montana: Source Water Protection concerns to attendees from Sidney, Fairview, Richland County, MSU Extension Services, and the Montana Rural Water Association. The meeting was in Sidney, Montana, on September 26, 2016.

- On September 28, 2016 MBMG Hydrogeologist James Rose presented an overview of the Ground Water Investigation Program's Big Sky project and examples of groundwater/surface water interactions to about 40 attendees at a Big Sky Sustainable Water Solutions meeting at Big Sky, Montana. In conjunction, MBMG Field Hydrologist Michael Richter provided an update on the Ground Water Assessment Program and long-term groundwater monitoring in the Big Sky area.
- On October 5, 2016 MBMG Hydrogeologists Jon Reiten and Kevin Chandler presented: Where's the Water? Finding Groundwater in Eastern Montana to a meeting of ranchers, farmers, representatives from conservation districts, representatives from the Agricultural Research Service, and the MSU Extension Service at Fort Keogh, Montana. About 30 people from Custer, Prairie, and Dawson counties attended.
- On October 7, 2016 the MBMG, in cooperation with the Geology Department at Rocky Mountain College, participated in a demonstration of the utility of ground-based Lidar in earth sciences. The MBMG sponsored Lidar scans of the Eagle Sandstone cliffs on the north side of Billings, Montana, to gather current distances to the "rims" from a known point. Subsequent scans from the same location may provide rates of movement for fractured rim sections and help the City of Billings manage the geologic hazard presented by rock falls.
- The Montana Bureau of Mines and Geology released Open-File Report 682: Hydrogeologic investigation of the Boulder Valley, Jefferson County, Montana: Interpretive report by Andrew Bobst, Julie Butler, and Luke Carlson; Open-File Report 661: Butte Mine Flooding Operable Unit water-level monitoring and water-quality sampling 2014 Consent Decree Update Butte, Montana 1982-2014 by Terrance Duaime, Martin Lorenzo, and Nicholas Tucci; Open-File Report 676: Butte Mine Flooding Operable Unit water-level monitoring and water-quality sampling 2015 Consent Decree update Butte, Montana by Terrance Duaime, Gary Icopini, Steven McGrath, and Paul Thale; and EDMAP 10 (in cooperation with Oregon State University): Geologic Map of the Ratio Mountain 7.5' quadrangle, southwest Montana by Nansen Olson, John Dilles, Ian Kallio, Thomas Horton, and MBMG Geologist Dr. Kaleb Scarberry.