

## CAMPUS REPORT

**DATE:** April 30, 2018, 2018  
**TO:** Board of Regents  
**FROM:** Donald M. Blacketter, Chancellor, Montana Tech  
**RE:** Campus Report for the May 23-24, 2018 Board of Regents Meeting

### STUDENT ACHIEVEMENT

- There is a new doctor in the house! Dr. Rick LaDouceur completed all requirements for the MUS Materials Science PhD. His dissertation was entitled "*High Fidelity Kinetic Model for Flotation: Applications to Rare Earth Elements and Copper/Molybdenum Separations*" He was advised by Dr. Courtney Young. While Rick may be the first to finish in this program, he won't be the last.

### FACULTY EFFORTS

- Dr. Robert Pal, Assistant Professor of the Biological Science delivered an oral presentation (Successful Restoration after Traditional Reclamation?), at the 2018 SME (Society of Mining Engineers) Annual Conference in Minneapolis, Minnesota. Two Montana Tech Graduate students Mark Mariano and Jared Trilling were also among the authors.
- A publication written by Dr. Dawn Atkinson (2007), entitled "Investigating Expertise in Textbook Writing: Insights from a Case Study of an Experienced Materials Writer at Work," is included on the reading list (<http://readinglists.ucl.ac.uk/lists/44F55870-F890-D031-CC83-C5E550677261.html>) for the following course at University College London: CCMEG371B Materials Development for Language Teachers (Academic Year 2017/18).
- Dr. Stella Capoccia was awarded the Wildlife Conservation Award from the Montana Chapter of The Wildlife Society for her research on Avian Loss Mitigation at the Berkeley Pit.
- Dr. Robert Pal, Assistant Professor of the Biological Science was an invited speaker at the Durrell Wildlife Conservation Trust/Durrell Conservation Academy in Jersey (Channel Islands), where he delivered an oral presentation for the DESMAN (Durrell Endangered Species Management) Graduate Certificate Students. His talk was entitled: Exotic invasions and restoration – parallel paths in ecology. He was also asked to present this same talk at the Bath office of the Durrell Wildlife Conservation Trust.
- Dr. Hsin-Hsuing Huang with co-authors Dr. Courtney Young and Professor Emeritus Dr. Larry Twidwell, all of Metallurgical & Materials Engineering, had their paper on "*Stability Diagrams for Copper-Sulfide and Copper-Recycle Systems Applied to Extractive Metallurgical Processes*" accepted in the International Journal of the Society of Materials Engineering for Resources. This is part of a Special issue dedicated to Proceedings of ICMR 2017, a conference that Dr. Huang attended by invitation in Akita, Japan, last Fall.
- Dr. Daqian Jiang, Assistant Professor of Environmental Engineering, is the lead author of the peer-reviewed paper: "Dynamic Stocks and Flows Analysis of Bisphenol A (BPA) in China: 2000-2014." Environmental Science & Technology (2018).
- Dr. Stella Capoccia, Associate Professor of the Biological Sciences was the lead author, together with co-authors Drs. Michael Masters and Scott Risser, on a recent publication entitled "Urban Chickens as a Pathway for Human Illness: An Examination of Knowledge, Behavior and Risk" published in the March 2018 issue of Urban Science.
- Trisha Southergill, Research Office, is the chair of the Predominantly Undergraduate Institution (PUI) Collaborate Working Group and chair of the PUI Collaborate Mentoring Program with the National Council of University Research Administrators.

## **MONTANA BUREAU OF MINES AND GEOLOGY ACTIVITY**

- MBMG Hydrogeologists, Jon Reiten and Kevin Chandler, presented **Results of GWIP Report and Model of Part of the Clear Lake Aquifer** at the Sheridan County Conservation District Technical Advisory Committee Meeting in Plentywood, Montana on February 12, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, Geologist, Jeff Lonn, and Geologist, Dr. Petr Yakovlov attended the Basin & Range Province Earth Quake Working Group in Salt Lake City, Utah on February 15, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, presented the **Recent Montana Happenings** at the Basin & Range Province Earth Quake Working Group in Salt Lake City, Utah on February 15, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, Geologist, Jeff Lonn, and Dr. Petr Yakovlov attended the Utah Quaternary 14th Fault Parameters Working Group in Salt Lake City, Utah on February 16, 2018.
- MBMG Hydrogeologists, Jon Reiten and Kevin Chandler, presented **Project Updates** at the Williston Area Aquifer Models Consortium (WAAMC) by conference call in Billings, Montana on February 20, 2018.
- MBMG Hydrogeologist, Ali Gebril, presented **GoldSim Simulation Software** at the Montana Bureau of Mines and Geology Brown Bag Luncheon Series in Butte, Montana on February 20, 2018.
- MBMG Hydrogeologist, Jeremy Crowley, presented **3D Mapping at Montana Bureau of Mines and Geology** by Webex to the Collaborative Database Effort for Geology, Hosted by the Alaska Division of Geological & Geophysical Surveys in Butte, Montana on February 21, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted an office tour for Earthquake Studies for Marv Speece's Geophysics Class in Butte, Montana on February 23, 2018.
- MBMG Geologist, Dr. Jay Gunderson, presented **Geology and Montana's Energy Resources** at the Boy Scout Merit Badge University, MSU in Billings, Montana on February 24, 2018.
- MBMG GIS Specialist, Yiwen Li, presented **Create and Edit Features in Geodatabases** for MT Tech Geo 585 Class in Butte, Montana on February 26, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a live interview **Earthquakes Swarm Hits Yellowstone National Park** with KXLF at Montana Tech in Butte, Montana on February 27, 2018.
- MBMG Hydrogeologist, Shawn Kuzara, presented **Groundwater and Surface Water Interaction in the Rock Creek Watershed** for the City of Joliet in Joliet, Montana on February 27, 2018.

- MBMG GIS Specialist, Yiwen Li, presented **Create and Store Text in ArcGIS** for MT Tech Geo 585 Class in Butte, Montana on February 28, 2018.
- MBMG Data Systems Manager II, Luke Buckley, presented the **Luncheon Learning Series: Skiing through Mountains of Data** at Montana Tech in Butte, Montana on March 1, 2018.
- MBMG Hydrogeologist, Alan English judged at the 2018 Intermountain Junior Science and Humanities Symposium in Butte, Montana on March 5-6, 2018.
- MBMG Data Systems Manager II, Luke Buckley, Chief Analytical Lab Chemist, Jackie Timmer, Computer Software Engineer I, Bulbul Majumder, and Geologist, Phyllis Hargrave judged at the Montana Tech Science and Engineering Fair at Montana Tech in Butte, Montana on March 5-8, 2018.
- MBMG Geologist, Dr. Jay Gunderson, presented **Coal Geology** to a Geology Class at Billings West High School in Billings, Montana on March 7, 2018.
- MBMG Geologist, Dr. Jay Gunderson, presented **Petroleum Geology** to a Geology Class at Billings West High School in Billings, Montana on March 9, 2018.
- MBMG Hydrogeologist, Dan Blythe, presented **Introduction to the Ground Water Information Center (GWIC) Database** at the Conserving Land and Protection Water Continuing Education Course for Real Estate Professionals in Big Sky, Montana on March 9, 2018.
- MBMG Hydrogeologist, Shawn Kuzara, presented **A Century of Irrigation in Montana** for the Education Session at the Miller Coors, Western Sugar and Syngenta's Sustainability Annual Results Review in Billings, Montana on March 12, 2018.
- MBMG Hydrogeologist, Jeremy Crowley, presented **The Montana Tech/Butte Silver Bow Unmanned Aerial Vehicle Training Area** to the Butte Silver Bow Parks and Recreation Board in Butte, Montana on March 19, 2018. The Board approved the motion to create a Memorandum of Agreement to establish the UAV Training Area.
- MBMG Computer Software Engineer I, Bulbul Majumder, presented **India** at the Montana Bureau of Mines and Geology Brown Bag Luncheon Series in Butte, Montana on March 19, 2018.
- MBMG Hydrogeologist, Camela Carstarphen presented **Reading Seminar I** at the Montana Bureau of Mines and Geology Brown Bag Luncheon Series in Butte, Montana on March 20, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, attended the USGS Advanced National Seismic System NetOps IX Workshop in Seattle, Washington on March 20-21, 2018.
- MBMG Data Systems Manager II, Luke Buckley, presented **Applying User Centered Design Principles to Deliver Surface Water Data to Diverse Audiences** at Montana Tech to Publically Defend his Master of Science Research Project in Butte, Montana on March 23, 2018.

- MBMG Director of Earthquake Studies, Michael Stickney, presented the **Recent Rumbings 2017 Edition** at the Butte-Silver Bow Archive Brown Bag Lunch in Butte, Montana on March 28, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a live interview **Expert says Lincoln Earthquake Largest in Lower 48 in 2017** with KXLF at Butte-Silver Bow Archives in Butte, Montana on March 28, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a live interview **Three, Two, One: Montana Resources Blast Shakes some on the Flats** with the Montana Standard Newspaper in Butte, Montana on March 28, 2018.
- MBMG Hydrogeologist, Kirk Waren, presented **New High Resolution Data from Big Sky** at the Montana Bureau of Mines and Geology Brown Bag Luncheon Series in Butte, Montana on April 3, 2018.
- MBMG Geologist, Dr. Jay Gunderson and Hydrogeologist, Dr. Elizabeth Meredith, attended The Future of Coal Conference in Billings, Montana on April 6, 2018.
- MBMG Hydrogeologist, Jon Reiten, presented **Oil Field Brine Contamination of Surface Water and Groundwater Resources in the Williston Basin of Montana** to the Board of Oil and Gas in Billings, Montana on April 10, 2018.
- MBMG Hydrogeologist, Jeremy Crowley, attended **2018 Big Sky GeoCon Conference** in Helena, Montana on April 16-18, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, conducted a live interview **Earthquake in Lincoln Tuesday was Aftershock from Quake Last Summer** with ABC Fox Montana News in Butte, Montana on April 17, 2018.
- MBMG Geologist, Dr. Colleen Elliott, presented **A Rough Guide to Iceland** at the Montana Bureau of Mines and Geology Brown Bag Luncheon Series in Butte, Montana on April 17, 2018.
- MBMG Geologist, Catherine McDonald, presented **Geologic Mapping Program Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Geologist, Catherine McDonald, presented **The Burgess Shale – It's a Wonderful Place** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG GIS Manager, Paul Thale, presented **GIS Projects** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Director of Earthquake Studies, Michael Stickney, presented **Earthquake Studies Office Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.

- MBMG Hydrogeologist, Jeremy Crowley, presented **MBMG Drone and Lidar Updates** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Hydrogeologist, Ted Duaine, presented **Environmental Studies Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Hydrogeologist, Dr. Gary Icopini, presented **Berkeley Pit Sampling with the Drone Boat** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Data Systems Manager II, Luke Buckley, presented **2017/2018 at the Data Center** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Ground Water Assessment Program Manager, John LaFave, presented **GWAP Program Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Mining Archives Manager, Peggy Delaney, presented **MBMG Mining Archives 2017-18 Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Library Technician III, Tony Roth, presented **Merging Digital Historical Data with Google Earth** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Library Technician, Jonathan Dupuis, presented **Using Photoshop Macros to Increase Digital Document Restoration** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Library Technician III, Katelyn McNamee, presented **Using Moodle for Student Training and Management** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG GIS Specialist, Yiwen Li, presented **Web Maps and Mobile Apps** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 19, 2018.
- MBMG Ground Water Investigation Program Manager, Ginette Abdo, presented **GWIP Program Update** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 20, 2018.
- MBMG Hydrogeologist, Ali Gebiril, presented **GWIP Project Presentation** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 20, 2018.
- MBMG Administrative Associate III, Catherine McKillips, presented **Data Gathering, Why, What, When** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 20, 2018.

- MBMG Geologist, Dr. Jay Gunderson, presented **Fossil Fuels – Markets, Projects and Something Interesting for you Groundwater People** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 20, 2018.
- MBMG Hydrogeologist, Dr. Elizabeth Meredith, presented **Groundwater and Frack Rule Making – It’s Even Interesting for you Oil and Gas People** at the Montana Bureau of Mines and Geology Annual Research Meeting in Butte, Montana on April 20, 2018.
- MBMG Hydrogeologist, Andrew Bobst, Geologist, Dr. Jesse Mosolf, and Mohamed Khali, published **Utilizing 2D electrical resistivity tomography and very low frequency electromagnetics to investigate the hydrogeology of natural cold springs near Virginia City, southwest Montana**: Pure and Applied Geophysics, <https://doi.org/10.1007/s00024-018-1865-2> on April 20, 2018.
- MBMG Economic Geologist, Stan Korzeb, presented **New Pb-isotope Data for Boulder Batholith Intrusions, Volcanic Host Rocks, and Mineral Deposits in Southwestern Montana** at the 2018 Seed Grant/Faculty Development Seminar in Butte, Montana on April 23, 2018.
- The Montana Bureau of Mines and Geology released Open-File Report 699: Proceedings of the Montana Mining and Mineral Symposium 2017 by Geologist, Dr. Kaleb Scarberry, and Publications Editor, Susan Barth; Open-File Report 700: Butte Mine Flooding Operable Unit Water-Level Monitoring and Water-Quality Sampling 2016 Consent Decree Update Butte, Montana 1982–2016 by Hydrogeologist, Terence Duaine, Analytical Chemist, Steven McGrath, Hydrogeologist, Dr. Gary Icopini, and GIS Manager, Paul Thale; Bulletin 136: Sapphire Deposits along the Missouri River near Helena, Montana by Emeritus Geologist, Dr. Dick Berg, and Martin Landry; Bulletin 137: Interpretations and Genesis of Cretaceous Age Veins and Exploration Potential for the Emery Mining District, Powell County, Montana by Economic Geologist, Stan Korzeb, Geologist, Dr. Kaleb Scarberry, and Jarred L. Zimmerman; Ground-Water Assessment Atlas 8-03: Groundwater quality of Gallatin and Madison Counties, southwest Montana by Ground Water Assessment Program Manager, John LaFave, and Hydrogeologist, Camela Carstarphen.