

STUDENTS

Current Graduate Students and their projects



Céline Beaucamp – Ph.D. (in progress)
Earth Science and Engineering. Thesis Project: Ore forming processes at the Philipsburg mining district and the metallogeny of porphyry-lode deposits in southwest Montana .

Céline sampling a mine dump in Philipsburg



Austin Neaville – M.S. (in progress)
Geosciences/Geology. Thesis Project: Estimating pre-mining water quality for an alpine watershed contaminated with acid mine drainage.

Austin sampling a small tributary stream in his field area.



Tiffany Ostenburg – M.S. (in progress)
Geosciences/Geological Engineering. Thesis Project: Mineralogy and fluid inclusion study of the Marget Ann gold-silver deposit, Butte, MT

Tiffany sampling mine dumps behind Butte.



Ethan Coppage – M.S. (in progress)
Geosciences/Geology. Thesis Project:
Geology and geochronology of the East
Dome complex in the Hog Heaven
volcanic field, Flathead County, MT.

James Jonas – Ph.D. (in progress) Earth Science and Engineering. Thesis Project:
Geochemistry and modeling of the Berkeley Pit lake, Butte, Montana.



Jack Michael – M.S. (in progress)
Geosciences/Geology. Thesis Project:
Using stable carbon isotopes to
understand mechanisms of precipitation of
calcite in high-pH, lime-treated lakes.

*Jack collecting a sediment core from a
tailings pond near Butte.*

Recently graduated MS Students and their projects



Ian Kallio – M.S. (2020)
Geosciences/Geology. Thesis Project:
Mineralogy, fluid inclusion, and stable
isotope study of the Hog Heaven mining
district, Flathead County, MT.

Alex Brown – M.S. 2019 Geosciences/Geology. Thesis Project: The geology and geochemistry of the Golden Chest gold mine, Murray, Idaho.



Robert Rader – M.S. 2019
Geosciences/Hydrogeology. Thesis
Project: Using sediment-porewater
samplers to examine the geochemistry of
shallow hyporheic water in Silver Bow
Creek, Montana.

Bob on a field trip to Moab.



Garrett Hill – M.S. 2018
Geosciences/Hydrogeology. Thesis
Project: Fluid inclusion and stable isotope
constraints on the origin of hydrothermal
talc and chlorite deposits in Montana.

Garrett and kids at Yellowstone.



Hamadou Gnanou – M.S. 2018
Geosciences/Geology. Thesis Project: Mineralogy
and stable isotope investigation of the Apex and
Bonanza gold deposits, Golden Sunlight mine,
Montana.

Hamadou in the field.

Jon Szarkowski – M.S. 2019 Geosciences/Geological Engineering. Thesis Project:
Geologic constraints on a new underground block model for the McDonald Meadows
gold deposit, Montana.

Francis Grondin – M.S. 2019 Geosciences/Geology. Thesis Project: Mineralogy and fluid inclusion study of the Crystal Mountain fluorite mine, Ravalli County, MT.



Nick Allin – M.S. 2019
Geosciences/Geology – Thesis Project:
Hydrothermal experiments on
thermochemical arsenite reduction and the
stability of ferric chloride complexes at
high temperature.

Nick collecting a sample of silver ore.



Sara Edinberg – M.S. (2016)
Geosciences/Hydrogeology – Thesis
Project: Geochemistry of ferricretes and
natural acid rock drainage in the Judith
Mountains, Montana. Sara now works as a
hydrogeologist for the Montana Dept. of
Environmental Quality in Helena, MT.

*Sara in the field with some excellent
natural acid rock drainage.*



Margaret Doolittle – M.S. (2017)
Geosciences/Hydrogeological Engineering –
Research Project: Natural acid rock drainage
in the Anaconda-Pintler Mountains,
Montana.

*Meg (right) in her field area with classmates
Ryan Winter and Sara Edinberg.*



Alero Gure – M.S. (2016) Geochemistry
Thesis Project: Hydrothermal stability of
thiocyanate. Alero is now a Ph.D. student
at the University of Wyoming.

*Alero on one of many field trips that she
enjoyed in Montana.*



Joshua Messenger– M.S. (2016)
Geosciences/Geology – Thesis Project:
Geochemistry and mineralogy of the
Calvert tungsten skarn, Pioneer
Mountains, Montana. Josh now works as a
geochemist for EA Engineering, Science
and Technology in Albuquerque, NM.

Josh camping at his thesis site.

Jarred Zimmerman – M.S. (2016) Geosciences/Geology. Thesis Project: Reexamination of the mineralogy and geochemistry of the Emery mining district, Montana. Jarred is currently working as an exploration geologist near Butte, MT.



Jenna Kaplan– M.S. (2016)
Geosciences/Geology – Thesis Project: Mineralogy and environmental geochemistry of slag in Lower Area One, Butte, MT. Jenna now works as an exploration geologist with Broadway Gold, Inc.

Jenna operating an electron microprobe at Washington State Univ.



Corey Swisher – M.S. (2017)
Geosciences/Hydrogeological Engineering – Thesis Project: Hydrological and chemical interaction between waste dumps and a flooded mine pool. Corey now works as an engineer in the great State of Alaska.

Corey near the portal of the closed Black Pine Mine, Montana.



Kyle Eastman – M.S. (2017)
Geosciences/Geology– Thesis Project:
Geochemistry of supergene mineralization
in the Continental Pit, Butte, MT. Kyle is
enjoying the great outdoors while
applying to graduate schools to pursue a
Ph.D.

Kyle in his element.

Ben Schubert – M.S. (2017) Geosciences/Geology. Research Project: Geochemistry, mineralogy and stable isotopes of the Heddleston porphyry copper deposit, Montana. Ben now works as a geoscientist testing soil samples in Nashville, KT.



Matt Berzel– M.S. (2017)
Geosciences/Hydrogeological
Engineering – Research Project: Using
stable isotopes to track potential leakage
from a tailings impoundment. Matt is a
hydrogeologist at the Montana Bureau of
Mines and Geology in Butte, MT.

A photo of one of Matt's lake piezometers.

Ryan Stevenson – M.S. (2015) Geosciences/Geology. Thesis Project: Stable isotopic composition of carbonate minerals from the Butte porphyry-lode deposit, Montana. Ryan now works as a professional geologist in California.



Dustin Jensen– M.S. (2014)
Geosciences/Geology – Thesis Project:
Applications of portable XRF analysis of
secondary Mn-oxides to mineral
exploration and environmental
geochemistry.

*Dustin doing field work in the hills north
of Basin, MT.*



Capri Gillam– M.S. (2014)
Geosciences/Hydrogeology – Thesis
Project: Biogeochemical cycling of carbon
in a subalpine headwater stream and
riparian zone.

*Capri processing a sample of soil water in
the lab.*

Allison Brown – M.S. (2014) Geosciences/Hydrogeological Engineering. Non-thesis
Research Project: Water quality of surface water and groundwater in the Big Sky area,
Montana.

Amber McGivern – M.S. (2014) Geosciences/Hydrogeological Engineering. Non-thesis
Research Project: Geosciences/Hydrogeological Engineering – Geochemistry of surface
water and ground water in the Continental Pit, Butte, MT. Amber works as a
Hydrogeological Engineer for ECS Engineers, Billings, MT.



George Williams – M.S. (2013)
Geosciences/Geochemistry – Thesis
Project: Geochemistry of natural acid rock
drainage and ferricrete samples in the
Judith Mountains, Montana. George is a
laboratory instructor in the Dept. of
Petroleum Engineering, MT Tech.

*George collecting a sample of naturally
acidic water in the Judith Mountains.*

Katie Petteys- M.S. (2013) Geosciences/Hydrogeological Engineering. Non-thesis
Research Project: Geochemistry of stream water and ferricretes in Collar Gulch, Judith
Mountains, MT. Katie now works as a hydrogeological engineer for the U.S.D.A. Forest
Service in NW Montana.



Amanda Griffith– M.S. (2013)
Geosciences/Geology – Thesis Project:
Paragenesis and fluid inclusion study of
epithermal precious metal veins at the
Drumlummon Mine, Marysville,
Montana. Amanda works as a geologist
for Montana Resources Inc. in Butte.

*Amanda using the Scanning Electron
Microscopy in the Dept. of Metallurgical
Engineering at Montana Tech.*



Bill Henne – M.S., 2011, Geosciences/
Hydrogeological Engineering – Thesis
Project: Using chemical and isotopic
tracers to track biogeochemical processes
under ice cover at Georgetown Lake,
Montana. Bill is now working as an
engineer in Butte, MT, for Pioneer
Technical Services.

*Bill collecting water samples at
Georgetown Lake*



Josh Lee – M.S., 2012, Geosciences/
Hydrogeological Engineering – Thesis
Project: Geochemistry of arsenic in Warm
Springs Ponds. Josh is now working as
an engineer for Shannon-Wilson in the
Seattle area.

*Josh getting ready to deploy some seepage
meters into the ponds*

John Lamsma – M.S., 2012, Geosciences/Geology– Thesis Project: Economic geology
of the eastern margin of the Continental porphyry deposit, Butte. John is now working as
a geologist for Tech Cominco at their Pend Oreille Pb-Zn mine in Washington.



Lauren Gordon – M.S., 2011, Geosciences/Hydrogeological Engineering. Non-thesis research project: Comparison of sediment pore-water chemistry in ponds underlain by mine tailings vs. natural soil: Warm Springs Ponds, Montana. Lauren is now working in San Ramon, CA, for ENGEO Inc., as a hydrogeological engineer.

Lauren collecting a sediment core through the ice at Warm Springs Ponds



Jill Sotendahl – M.S., 2012, Geosciences/Geology – Thesis Project: Geology of the Madison Gold Cu-Au skarn deposit, Silver Star, Montana. Jill has a job as a mine geologist at the Pend Oreille Pb-Zn-Ag mine, Washington.

Jill underground at her field site near Silver Star, Montana.