New Graduates

The faculty and staff from the Division of Economics and Business joined together with students’ family and friends to celebrate the commencement of the fall class of 2017 (above) on December 15 and the spring class of 2018 (right) on May 10.

We are tremendously proud of our graduates and wish them an abundance of success as they embark on their professional careers throughout the world.

Visit EconBus.MINES.edu or find us on Facebook and Flickr for additional photos.

Congratulations 2017-2018 Award Winners

STUDENTS
Sul-Ki Lee: William Jesse Coulter Award, Mineral and Energy Economics
Eric Hale, Katelyn Hesse and Robert LaFaso: Jerome and Rebecca Broussard Family Award, Engineering and Technology Management
James Beetham and Eric Uhl: Joe Eazor Award, Engineering and Technology Management
Phillip Ruban: Hubert and Sarah Risser Award, Mineral and Energy Economics

FACULTY
Tulay Flamand: Engineering and Technology Management Program Outstanding Faculty
Ben Gilbert, Ian Lange and Andrew Pederson: Mineral and Energy Economics Program Outstanding Faculty
Steven Smith: Outstanding Faculty Undergraduate Economics and Business Program
Andrew Pederson: Senior Class Faculty Award, Economics and Business
Meet Our New Faculty Members

**BEN GILBERT, ASSISTANT PROFFESSOR**

Gilbert most recently served as assistant professor of economics at the University of Wyoming. His research interests include environmental and natural resource economics using methods from econometrics, applied microeconomics and behavioral economics. He investigates the role of fishing as a link between the market prices of crude oil and natural gas and the importance of the natural resource to the local economy. Gilbert received his PhD from Texas A&M University and is now the Director of the Carlile Center for Energy and Environmental Economics.

**SID SALEH, ASSOCIATE PROFESSOR**

Saleh’s research examines how people collaborate to innovate: How do they develop creative solutions for complex challenges in spite of the constraints they face in organizations, startups and partnerships? His research goal is to improve organizational and startup innovation while tying it closely to beneficiaries. A former Apple product manager and entrepreneur, Saleh’s practical experience enriches his teaching and informs his research. In terms of practical impact, he has conducted 100+ conjoint analysis studies for innovation-seeking high-tech organizations including Apple, Best Buy, IBM, Motorola, Philips Medical and others. Saleh serves on boards and is an award-winning author who has published more than 90 trade articles.

**STEVEN SMITH, ASSISTANT PROFESSOR**

Smith obtained a bachelor’s degree in mathematics from DePauw University before earning his PhD in economics from the University of Colorado, Boulder in 2014. His research focuses on how policies, laws and organizations impact our use of natural resources. Most often dealing with water, he has studied various settings, from groundwater to surface water and contemporary Peru to the historic U.S. He has also written on the challenges of introducing economic incentives to provide environmental services such as carbon sequestration. Most recently, as a postdoctoral fellow at Haverford College, he helped to establish a new Environmental Studies Program, teaching numerous natural resource economic courses as well as co-teaching the Environmental Studies Introduction course.

**SCOTT HOUSER, TEACHING PROFESSOR**

Teaching Professor Scott Houser is one of six Mines professors to receive a Daniels Fund Faculty Fellowships for the 2018-2019 academic year. Houser will receive $5,000 to integrate ethics into his courses, developing lessons, modules or projects that feature ethical considerations as a central focus. Houser will address ethical issues regarding equity, sustainability and decision-making in the core economics course. The goal is to create learning outcomes, assessments and learning activities that will explicitly focus on ethical considerations and analyses. Funding comes from the Daniels Fund, which awarded Mines Ethics Across Campus Program a second grant in February.

**JARED CARBONE, ASSOCIATE PROFESSOR**

Associate Professor Jared Carbone established Mines as an institutional member of the Rocky Mountain Research Data Center in Boulder. He led an invited panel at the University of Pennsylvania and joined with Mines and the University of Arizona State University to host this event. He was asked by the Library of Congress to organize a workshop on modeling transitional labor dynamics in response to environmental regulations. He also had multiple publications, including “Embodied Carbon Tariffs,” “The Scandinavian Journal of Economics,” and “A Shared Sense of Responsibility: Money Versus Effort Contributions in the Voluntary Provision of Public Goods;” Journal of Economic Behavior and Organization.

**JAN LANGE, ASSISTANT PROFESSOR**

Teaching Professor Jan Lange, director of the Mineral and Energy Economics Program, was awarded a one-year fellowship for 2019 school year. He will work with the Daniels Fund Faculty Fellowship to study what it would take to create commercially viable space-based solar power. His work on financial and economic research studies examining investments in the global space economy to be chosen for NASA’s Commercial Lunar Payload Services Program. This summer, Lange served as a Property and Environment Research Center Lane Mountain Fellow in Bozeman, Montana, where his focus was working on the connection between natural gas pipelines and electricity generation.

**CAROL DAHL, PROFESSOR**


**STEVEN SMITH**

As part of an NSF funded project, Assistant Professor Steven Smith was named one of six Mines professors to receive a Daniels Fund Faculty Fellowship to study “Responding to a Water Management Crisis: The Effects of Self-Imposed Economic Incentives.” now published in JARE. It found that farmers reduced their water use far more than expected - far greater than expected - in response to an extraction charge. He also published a study on REDD+ in the journal Forests which demonstrated that wealthy individuals in tropical forests capture more forest-income, cautioning that programs seeking to reduce carbon emissions from deforestation should be careful not to exacerbate local inequality. Smith continues to conduct follow up studies related to both.

**FACULTY NEWS**

**ECONOMIC EVALUATION AND INVESTMENT DECISION METHODS**

The 16th edition of the textbook, Economic Evaluation and Investment Decision Methods, by Frank Stermole, John Stermole and Andrew Pederson will soon be printed. The new textbook will be fully updated for the new Tax Cuts and Jobs Act legislation, and include new problems highlighting the changes and impacts of those changes.

**CELEBRATING MARIAN RADETZKI**

In celebration of Professor Marian Radetzki’s 80th birthday, the Springer Journal Mineral Economics published a special volume devoted to his life’s work now available online. Radetzki is a world-class economist at Mines. Appropriately, contributors to the special volume included four current and former Mines professors: Graham Davis, Carol Dahl, John Tilton and Istvan Doboz; and past MEE students, Dr. Grant Nulle, Dr. Roberto Aguiera, and Dana Abdulbaqi.

**FROM THE TOP**

The Cycle of Academic Activity

Many walks of life have annual cycles - birth, migration and hibernation in the plant and animal kingdoms; wet and dry seasons in the tropics, and four seasons in temperate zones; and so on. Universities and academic departments have their own annual cycles, upon which I reflect as I write this message.

Over the past year, we welcomed three new faculty members, Ben Gilbert, Steven Smith and Sid Saleh, as well as a new director for the Payne Institute, Morgan Bazilian. We celebrated the success of student teams in national and international competitions. We also celebrated the graduation of 76 students in Economic, Environmental and Technology Management, Economic and Mineral and Energy Economics and wished these graduates well as they jumped into life after Mines. We also mourned the passing of one of our own, PhD student Will Duey. In a few weeks, we will welcome a new intake of students, as the cycle of academic activity begins again.

Despite their similarities, each cycle is unique. Each intake of new students is unique, and our disciplines evolve and change, as does the external environment. As we strive to enhance our academic programs, our contributions to scholarship and the student experience, we value your engagement and support. As alumni and friends, you provide us with the resources and inspiration to improve our programs and activities. Thank you for your past and continued support for what we do. Enjoy this newsletter. We look forward to hearing from you.

- Rod Eggert, Interim Division Director, reggert@mines.edu

**SUMMER 2018**

A newsletter for alumni, friends and supporters of the Colorado School of Mines Division of Economics and Business

**COLORADOSCHOOLOFMINES**

1500 Illinois Street
Golden, CO 80401
Bazilian Leads Payne Institute as Executive Director

Morgan Bazilian, former lead energy specialist at the World Bank, joined Colorado School of Mines in February as the executive director of the Payne Institute and research professor of public policy. Bazilian is responsible for guiding and disseminating the institute’s policy-focused research and analysis, and serving as the intellectual leader of the organization.

A widely recognized expert in energy and natural resources planning, investment, security, governance and international affairs, Bazilian has more than 20 years of experience in commercial, academic and government settings. Prior to the World Bank, he was a senior diplomat at the United Nations.

“I am thrilled and honored to be joining what I believe is one of the world’s finest energy, environment and natural resources institutions in the world, and hope to help build the Payne Institute into one of the country’s foremost public policy institutes in these sectors,” Bazilian said.

Payne Institute Hosts Seminar Series

The Payne Institute hosted a seminar series featuring experts from around the globe. These distinguished guests visited the Colorado School of Mines campus to present on topics including climate change, energy and natural resources.

Pictured above is Iain MacGill, associate professor, School of Electrical Engineering and Telecommunications, University of New South Wales and joint director (engineering) at the Centre for Energy and Environmental Markets, UNSW. On March 1, MacGill presented, “Lessons from Australia on Clean Energy Opportunities and Challenges for Electricity Grids, Large and Small.”

Videos and slide decks from these seminars can be found on the Payne Institute’s newly redesigned website, PayneInstitute.MINES.edu.

Critical Materials Institute Hosts Winter Meeting

January 22-23, Mines hosted the 5th annual Critical Materials Institute winter meeting and 3rd annual forum for postdoctoral and student researchers, the largest group to date with nearly 100 participants. The event featured 19 oral presentations and 29 posters.

National laboratories represented were Ames, Idaho, Lawrence Livermore and Oak Ridge. Other participants came from Florida Industrial and Phosphate Research Institute, Momentum Technologies, UC-Davis, Yale, Purdue, SUNY-Buffalo, Rutgers, University of Tennessee, and Colorado School of Mines. Speakers included Mines President Paul Johnson, CMI Director, Alex King, CMI Deputy Director, Rod Eggert, Mines Associate Vice President for Research, Ryan Richards, and Yale Professor Emeritus, Thomas Graedel. This year also included sessions for the newly established CMI Leadership Academy. Mines student participants from the Division of Economics and Business included Alexander Campbell, Tisilile Igogo, Haeyeon Kim, Yuzhou Shen and Braeton Smith.

CMI Research Shared with SWE

The Society of Women Engineers at Colorado School of Mines is the largest professional organization on campus and the largest collegiate SWE section in the nation. Every Wednesday throughout the academic year, the society provides professional development opportunities where various engineering feats and problems are shared with the eager group.

On September 27, 2017, Dr. Rod Eggert, CMI deputy director and coordinator of CMI activities at Mines, presented the work of the Critical Materials Institute as it relates to energy and the advanced high-tech needs of everyday life and the future. With every engineering field represented in the room, the talk was well received by these future leaders.

LEARN MORE ABOUT THE CRITICAL MATERIALS INSTITUTE AT CMI.MINES.EDU.

VISIT PAYNEINSTITUTE.MINES.EDU AND CLICK ON “NEWS AND EVENTS” TO READ THE COMPLETE STORY.
Summer Field Sessions: Career Opportunities Abound

While all Mines undergraduate students participate in summer field sessions, the Division of Economics and Business takes a slightly different approach. Our summer field sessions expose students to a variety of career opportunities available to those with a degree or interest in economics through on-site visits.

This summer, our undergraduate economics students visited with companies from a variety of industries to learn about their missions, goals and current projects. They also heard from various professionals about their different career paths. Students visited the Colorado State Capitol (below) and companies such as CoBank (right), Newmont Mining Corporation, S&P Global Platts, Xcel Energy and Lockheed Martin.

If you or your company would like to schedule a visit with our students, or if you have internship or job opportunities, contact Teaching Professor Scott Houser, director of the Undergraduate Economics Program, shouser@mines.edu.

CALL FOR MENTORS

This fall, we’re offering an “Introduction to Entrepreneurship” course where students will explore starting a new venture. Each team pursues a different idea using a practical, learn-by-doing approach. We’re looking to pair each team with at least one mentor who will engage student teams during class on Thursdays for one to two hours. The course runs August 20 - December 6. To learn more about this opportunity, contact Teaching Associate Professor, Sid Saleh, shsaleh@mines.edu.

If you have internship or employment opportunities, or would like to participate as a guest speaker, contact Program Assistant, Kathleen Martin, kmartin@mines.edu.

LEARN MORE ABOUT OUR SUMMER FIELD SESSIONS THROUGH THE EYES OF OUR STUDENTS IN A SERIES OF BLOG POSTS ON OUR WEBSITE, ECONBUS.MINES.EDU. CLICK ON “PROGRAMS,” THEN “UNDERGRADUATE ECONOMICS.”

STRENGTHENING LEADERSHIP SKILLS

The ETM tradition of an intensive, two-day economic evaluation workshop, followed by a full day leadership ropes course continues. Students from the 2017-18 cohort strengthened teamwork and management skills while conquering fears in this challenging experiential learning opportunity.

ETM: Building Leaders

The Engineering and Technology Management Program welcomes 40 new students this fall. Placement is strong with our spring 2018 graduates who are now employed with companies such as Ascend Analytics, BTU Analytics, Booz Allen Hamilton and Crown Quest Operating.

CURRICULUM HIGHLIGHTS

As part of the ETM communications curriculum, two workshops were conducted.

The Joe Eazor Executive-in-Residence Series allows executives from industry to pass on insight and knowledge to students preparing for challenges that the seasoned executive understands well. This initiative facilitates active involvement by industry executives through teaching, student advising activities and more. Many thanks to author, speaker, consultant and innovator Raj Rawat for organizing an outstanding lineup of speakers.

Our students participated in another successful workshop with Kristin Swisher, a lecturer in business communications at the University of Colorado. Her areas of expertise include presentation skills, networking, interviewing and business communication.

CALL FOR MENTORS

This fall, we’re offering an “Introduction to Entrepreneurship” course where students will explore starting a new venture. Each team pursues a different idea using a practical, learn-by-doing approach. We’re looking to pair each team with at least one mentor who will engage student teams during class on Thursdays for one to two hours. The course runs August 20 - December 6. To learn more about this opportunity, contact Teaching Associate Professor, Sid Saleh, shsaleh@mines.edu.

If you have internship or employment opportunities, or would like to participate as a guest speaker, contact Program Assistant, Kathleen Martin, kmartin@mines.edu.

VISIT ETM.MINES.EDU TO LEARN MORE ABOUT THE ETM PROGRAM.
Mines Wins Mining and Sustainability Case Competition

A team of Mines graduate students took first place in an international case competition focused on mining and sustainability. The team of Emilio Castillo, Marko Visnjic, Alex Campbell, and Philip Ruban beat out six other teams from around the world to win the Schulich International Case Competition on March 3 at York University in Toronto. The team was comprised of a mix of graduate students studying Mining Engineering and Mineral and Energy Economics.

MEE Students Win Poster Contest

Four Mineral and Energy Economics students took first place over teams from Columbia and MIT to win the poster contest at the 10th annual Energy Africa Conference in November 2017. The theme was “Delivering Clean Solutions to Africa’s Energy Challenges.” Guessann Oka (Ivory Coast), Jussé Hirwa (Rwanda), Reuben Mashimbye (South Africa) and Mbeke Ekanem (Nigeria) presented, “Kivu Watt: Turning a Methane Bomb into Electricity to Save Lives in Rwanda.” The prize was $2,000, which they are using to start a scholarship fund for students in Africa studying energy economics.

Grad Spotlight

SUL-KI LEE

“I’ll be working at the Korea Institute for Industrial Economics and Trade as an associate research fellow with a focus on Korean energy and environment. South Korea imports most of the energy resources it consumes, so it’s crucial to understand how the energy market works; how to promote energy security; and what the roles that government policies can play are. Also, air pollution is a big concern, so efficient and effective environmental policy making is essential.

The Mineral and Energy Economics Program at Colorado School of Mines has trained me in a way that I have a good idea of how to answer those questions. The program offers such an efficient curriculum, mainly because the program specializes in energy and environmental issues. I’ve benefited from a team of faculty and cohort focusing on energy/environmental economics, which not many other institutions are characterized. Also, I’d proudly say that the nurturing environment that our faculty provides is the world’s best. They ensure that I make the most of my PhD degree.”

Steve Dahlke. He was selected for a Renewable Energy Materials Research Science and Engineering Center (REMRESEC) Fellowship Award. These fellowships reward the highest caliber graduate students. The funds are intended as a reward for outstanding applicants and can be used to get a head start on professional life for expenses related to conference travel, supplies, computer equipment, etc.

Congratulations to Mineral and Energy Economics PhD candidate, Steve Dahlke. He was selected for a Renewable Energy Materials Research Science and Engineering Center (REMRESEC) Fellowship Award.

Sul-Ki Lee, PhD, Mineral and Energy Economics, Class of 2018

Mines Takes Second in Columbia Case Competition

A team of Mineral and Energy Economics masters students earned second place in the Columbia University Energy Symposium’s 3rd annual Case Competition in February 2018. August Steinbeck, Phillip Ruban, Megan Geuss, Reuben Mashimbye and Kyle Chamberlain narrowly missed out on the top honors in the competition, in which teams of three to six graduate students present the most creative and innovative solutions to a main challenge facing the energy sector. Edging out Mines for first place was Stanford University, Duke University, Yale, Carnegie Mellon University, New York University, and Columbia also sent teams.
**ALUMNI SPOTLIGHT**

**Upending the Traditional Market Research Industry**

**KEVIN MABE, BS, ECONOMICS, 1997**  
CHIEF ANALYTICS OFFICER, CORUS, DENVER

What stands out in your mind regarding your time at Mines?  
I appreciated the level of seriousness and rigor that the program (and college overall) offered. I joined Mines looking for a challenge and it provided just that. Looking back, the faculty stands out in that they were not only experts in their fields, but had a true interest to teach students their experiences and subject matter.

Mines is not an easy school. But I can without question say that if you put in the work, regardless of the program, you will gain the tools and frameworks of thinking so very uncommon in this world today.

Tell us about Corus and your role there.  
I’m the chief analytics officer of a Denver company called Corus. We’re trying to upend the traditional market research industry by instilling a heavy emphasis on strategy, technology and statistical rigor. More locally, my role involves training our analytic talent to appropriately frame quantitative problems and then select the best tools and techniques to solve them. More broadly, my role involves a bit of ‘evangelism’ to teach and explain to our clients what true analysis is all about and why it’s important to demand rigor from their vendors and partners.

**ARTURO VASQUEZ CORDANO, PHD, MINERAL ECONOMICS, 2011; MS, MINERAL ECONOMICS, 2008**  
DIRECTOR OF RESEARCH AT GĚRENS GRADUATE SCHOOL, LIMA, PERU

Describe your experience at Mines.  
I studied at Mines from 2007 to 2011. It was a superb experience that has changed my career dramatically. The MinEc program offered the right balance between natural resource and environmental economics, operations research methods, energy and mineral policy analysis, applied finance and management. Compared to other traditional PhD programs in the USA, Mines’ doctoral program trains students, not only to undertake an academic career path as a university professor or a researcher, but also to assume leading managerial and strategic positions in the government and the private sector.

Tell us about your role at GĚRENS Graduate School.  
I am director of research, and associate professor of economics and business at GĚRENS Graduate School, a brand new postgraduate school focused on mine management and the sustainability of natural resource industries. My responsibilities are related to lead and promote high-quality research regarding the economics, management and sustainability of the mining, energy and natural resource industries. I also teach classes in mineral economics, operations research and statistics, advanced mine project valuation and topics of finance in the Master in Mine Management Program.

**TO READ MORE FROM OUR INTERVIEWS WITH MABE, CORDANO AND OTHER ALUMNI, VISIT ECONBUS.MINES.EDU AND CLICK ON “ABOUT US,” THEN “ALUMNI SPOTLIGHT.”**

**Student Spotlight: Will Thieme**

“What really drew me to Mines was the prestige and the value. It’s a small school, so you get a lot more focus and attention. Mines is an elite institution. It has tremendous industry connections and the weight of this school’s name carries a lot.

I’m really interested in product management. I’ve always liked the idea of blending the quantitative side of STEM fields with good business practices and using that to push ideas and capabilities of humans forward. It’s the best of both worlds: you can use good decision making and insight from the business side and back it up with strong, quantitative reasoning.

Mines is more than just a technical school. The undergraduate economics program is very good, as are the undergraduate STEM programs. If you really want to be the cream of the crop, I’d recommend a double major that includes economics. Mines graduate programs are always a great option, too. I’ve never met someone who hasn’t been impressed by my affiliation with Mines. It has opened up a lot of doors for me.”

Will Thieme, BS, Economics, 2017  
MS, Engineering and Technology Management, Class of 2018
Thank You to Our July 2017 - June 2018 Supporters

Contributions from our alumni and friends truly make a difference. These gifts fund student recognition events, scholarships, faculty research efforts, outreach activities, and the opportunity for students to attend professional conferences. We sincerely appreciate your continued commitment. The following donors made a gift of $20 or more:

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Gifts can support scholarships, fellowships, professorships, academic programs, faculty research and other initiatives that are not typically supported through state appropriations. Private philanthropy empowers the Department to achieve greater excellence in research and education.

To learn more about supporting the Division of Economics and Business, contact the Mines Foundation.

GIVING.MINES.EDU or 303.273.3275