

Division of Economics and Business

Summer 2016 Newsletter

Distinguished Lecture Series Features Thomas Petrie



On April 14, 2016, Thomas Petrie, chairman of Petrie Partners, presented in the Payne Institute's Distinguished Lecture Series. His lecture, "Shifts in the Geopolitical Landscape and their Impact on Petroleum Sector Capex Strategies" identified global drivers that affect upstream petroleum operators. Petrie discussed changes in Chinese economic growth, emerging power triangles driving the energy strategies of key Eastern Hemisphere nations, and redefinition of the North American security needs given advances in hydrocarbon extraction technology. The presentation concluded with an examination of the possible changes in oil and gas trading patterns. The lecture was followed up with a lively question and answer session.

Prior to joining Petrie Partners as chairman in 2012, Petrie was vice chairman of Bank of America Merrill Lynch. He is also co-founder of Petrie Parkman & Co., a Denver-based energy investment banking firm. Petrie has been an advisor on more than \$250 billion in energy-related mergers and acquisitions. Petrie Parkman advised the Kingdom of Saudi Arabia on its

natural gas initiative, the state of Alaska on gas pipeline options, and the U.S. Department of Energy on the sale of the Elk Hills oil field.

Petrie is a past president and member of the National Association of Petroleum Investment Analysts board of directors and has served on the U.S. Securities and Exchange Commission Advisory Board on Oil and Gas Accounting. He recently authored the book, "FOLLOWING OIL: Four Decades of Cycle-Testing Experiences and What They Foretell about U.S. Energy Independence." Petrie has a BS degree from the U.S. Military Academy at West Point and a MS degree in Business Administration from Boston University.

ETM Program Receives Gift from Joe Eazor

The Engineering and Technology Management program renamed its capstone co-curricular offering activity to the Joe Eazor Executive-In-Residence Series, thanks to a generous gift of \$200,000 from Joe Eazor. This program brings executives from the industry to share their knowledge through multiple one-hour seminars over the course of the spring semester, while also personally mentoring graduate students in the ETM program. The Executive-in-Residence series was launched in 2002 and is an important part of the co-curriculum educational activities for students. This gift will also support the leadership and team-building ropes course and communications seminar.

Eazor, who received his BS degree in Petroleum Engineering from Mines in 1985, is the CEO and President of EarthLink, a national IT services, network, and communications provider.

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An Eventful Year for the Division of Economics and Business



Greetings to our Division of Economics and Business alumni, colleagues, and supporters,

We are delighted to share our annual newsletter. We hope you find the mix of faculty, student, research, and outreach activities throughout the past few months interesting and insightful. It has been an eventful year in the Division and I am excited to report a number of key developments surrounding our efforts.

The Division's newest initiative, the Payne Institute for Earth Resources, had an active and productive year. The Payne Institute sponsored two very successful installments of our Distinguished Lecture Series, initiated a new Visiting Scholar Program, conducted its first Policy Conference, and launched a series of new research efforts by our associated faculty. The institute is well on its way to advancing its mission to "inform and shape public policy as it relates to earth, energy, and the environment." Learn more about the institute activities by visiting EarthPolicy.Mines.edu.

Our MS program in Engineering and Technology Management has experienced significant growth throughout the past year with one of the largest cohorts of students since the program launched in 2001. The ETM faculty continue to enhance and update the program – both curricular and co-curricular activities. Professional Masters programs, such as our ETM program and Mineral and Energy Economics program, are an important part of the Mines educational strategy and we are proud to be a part of that effort.

Other Division developments include significant research efforts and other graduate student activities associated with the Critical Materials Institute, an evolving undergraduate program with a particularly interesting "field session," an increased emphasis on public policy research efforts, the launch of a new Visiting Scholars Program, and some interesting success stories from our recent PhD graduates. The Division also continues its participation and leadership in Mines' new emphasis on entrepreneurship, and we look forward to additional developments in that area.

We are grateful to each and every one of you who has provided financial support for our efforts in the Division of Economics and Business – it is greatly appreciated by the faculty and students. To learn more about our activities, I invite you to visit our website, EconBus.Mines.edu. I look forward to visiting with you in the future to discuss our ongoing activities. Please feel free to drop me a note or stop by and visit us when you are in Golden.

Michael R. Walls, Division Director

mwalls@mines.edu

Meet Kelly Beard, Communication Specialist

The Division of Economics and Business is pleased to welcome Kelly Beard as the newest member of our team. Beard will serve as communication specialist, implementing new and creative marketing and communication strategies.

A graduate of Florida Atlantic University, Beard has a BA in multimedia journalism and a minor in political science. She has worked in the newspaper, public relations, and health care marketing industries. Since 2009, she has owned and operated New Growth Media, a firm specializing in custom communications strategies for non-profit organizations including Florida Oceanographic Society and Habitat for Humanity. In her free time, she enjoys camping, hiking, and stand up paddleboarding with her husband, Justin, and their two dogs.

Beard looks forward to supporting the Division's educational and research missions.

If you have a story idea, email kbeard@mines.edu or call 303-273-3452.



Faculty Highlights



Ed Balistreri, National Center for Atmospheric Research Appointment

Associate Professor Edward J. Balistreri was recently reappointed to a three year term as an affiliate scientist at the National Center for Atmospheric Research in Boulder, Colorado. This appointment reflects the significant contributions Balistreri has made collaborating with scientists in NCAR's Climate and Global Dynamics Division. As a part of the appointment, Balistreri devotes a number of weeks during the summer term to work with NCAR's Integrated Assessment Modeling Group. In July, Balistreri helped develop methods for calibrating a 100-year horizon economic model of global markets. The goal is to accommodate the range of different technological, socioeconomic, and policy futures considered by the Intergovernmental Panel on Climate Change.

Mark Mondry, Entrepreneurship

If there is an event or activity on campus relating to entrepreneurship, it is likely that Teaching Associate Professor and Director of the Engineering and Technology Management program, Mark Mondry, is involved. Mondry led a multi-disciplinary team of Mines faculty members to increase innovation and entrepreneurship across campus as part of a National Science Foundation grant-funded effort called "Pathways to Innovation." His team is instrumental in the creation of new courses, innovation competitions, student organizations and maker-spaces, as well as mentoring student startup teams. This spring, he presented at the 2016 Venturewell OPEN Conference with a talk titled, "Towards Increasing the Number of Innovation and Entrepreneurship Faculty Mavericks: Enhancing the Traditional Faculty Work Model."



Graham Davis, Journal of Commodity Markets

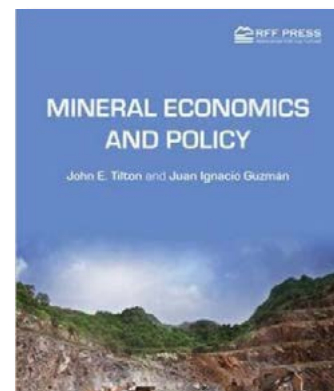
Professor Graham Davis is an associate editor of the new Journal of Commodity Markets (Elsevier). The journal grew out of academic and practitioner demand for a dedicated peer-reviewed journal focusing on economic and financial aspects of commodity markets. He is also co-editor of Social Science Research Network's Global Commodity Issues (Editor's Choice) eJournal, sponsored by the J.P. Morgan Center for Commodities at the University of Colorado, Denver. Both journals contain papers of relevance to Mineral and Energy Economics students and alumni. Table of contents alerts are easy to set up through the respective journal websites.

After 23 years at Mines, Davis is retiring as of September 1, 2016. He will continue on a half-time transitional appointment for the next few years.

John Tilton, Book Release

Dr. John Tilton's book with Juan Ignacio Guzmán entitled, "Mineral Economics and Policy," was published by Resources for the Future Press in March. This textbook provides an introduction to the field of mineral economics and its use in understanding the behavior of mineral commodity markets and in assessing both public and corporate policies in this important economic sector. The focus is on metal and non-metallic commodities, rather than oil, coal, and other energy commodities.

Dr. Tilton continues his association with Mines and the Division of Economics and Business.



Payne Institute Conference

The Payne Institute for Earth Resources hosted its inaugural conference February 25-26 at the Oxford Hotel in Denver. More than 60 professionals and academics from various fields and specialties attended. The focus this year was “Local Solutions to Global Problems: Designing Energy and Environmental Policy in an Interconnected World.”

Many of the most important energy and environmental issues facing society today cross jurisdictional boundaries. For example, failure at the international or national level to develop a coordinated strategy for controlling greenhouse gas emissions has led some states, such as California, British Columbia, and members of the Regional Greenhouse Gas Initiative, to push ahead on their own. Even in cases where action comes at the national or global level, policy design often leaves substantial room for member states to choose how they meet with the plan’s objectives, such as under the U.S. Clean Power Plan or in National Action Plans under the European Union’s Renewable Energy Directive.

This characteristic presents challenges for policy design because state and regional economies and environments are often tightly linked. Developing sound regulatory responses at the state or local level will require policymakers to understand not only their own economy, but how it interacts with others.

The Payne Institute for Earth Resources at the Colorado School of Mines bring together leading researchers working at the nexus of energy, environment, and the economy to explore these issues and develop takeaway lessons for policymakers.



Payne Institute Visiting Scholars

The Payne Institute established a Visiting Scholars program to facilitate the residency of distinguished scholars from other academic institutions and accomplished professionals whose expertise coincides with the Payne Institute’s current research efforts. It provides researchers the opportunity to work alongside our research team, interact with faculty and students, and share and collaborate around emerging research concepts in the area of public policy.

Ralph Mastromonaco is an Assistant Professor of Economics at the University of Oregon, and was a Payne Institute Visiting Scholar August 10 through September 10, 2015. Mastromonaco’s research covers a variety of topics in public and environmental economics. His current research focuses on applications and methods of non-market valuation. Additionally, he has several projects examining the impact that the hydraulic fracturing boom has had on local communities. During his visit, Mastromonaco presented his seminar, “Measuring Neighborhood Preferences under Credit Constraints.”



Kevin Novan is an Assistant Professor of Agricultural and Resource Economics at the University of California-Davis, and was a Payne Institute Visiting Scholar September 14 through October 13, 2015. Novan’s research interests are in the fields of energy and environmental economics, focusing primarily on the design of environmental policies targeted towards the electricity sector. Recent work quantifies the impact of renewable electricity on pollution and examines the energy savings provided by residential energy efficiency investments. During his visit, Novan presented a seminar, “Using Smart Meter Data to Evaluate the Returns to Energy Efficiency.”

Distinguished Lecture Series



COLORADO SCHOOL OF MINES

PAYNE INSTITUTE
for EARTH RESOURCES


Adam Sieminski

On October 29, 2015, Adam Sieminski presented in the Payne Institute Distinguished Lecture Series. He spoke about the U.S. Energy Information Administration and its Annual Energy Outlook for 2015; this report presents long-term projections of U.S. energy supply, demand, and prices through 2040. The projections focus on the long-term factors that shape U.S. energy. Under the assumption that current laws and regulations remain unchanged throughout the projections, the outlook's reference case projections provide the basis for examination and discussion of energy production, consumption, technology, market trends, and the direction they may take in the future. It also serves as a starting point for analysis of potential changes in energy policies.

Sieminski was sworn in as the eighth administrator of the EIA on June 4, 2012. Sieminski has also served as senior director for energy and environment on the National Security Council, and as a senior energy analyst for Deutsche Bank. He has served in leadership positions for the International Association for Energy Economics and U.S. Association for Energy Economics.

EIA is responsible for collecting, analyzing, and disseminating independent and impartial energy information to promote sound policy-making, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA also prepares analyses and special reports on topics of current interest.

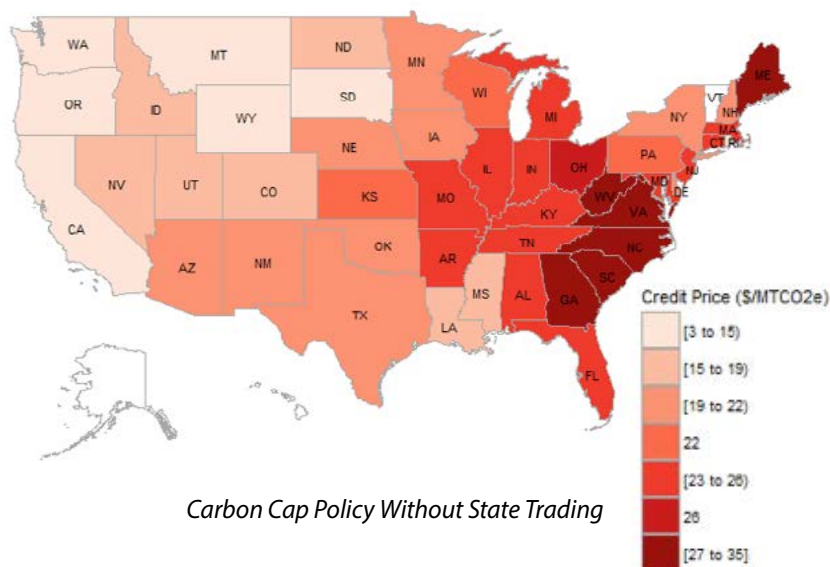
Thomas Petrie

On April 14, 2016, Thomas Petrie, chairman of Petrie Partners, presented in the Distinguished Lecture Series. His lecture identified global drivers that affect upstream petroleum operators. The presentation concluded with an examination of the possible changes in oil and gas trading patterns. *(See page 1 for complete story)*

Payne Institute Research Project

Dr. Jared Carbone and Maxwell Brown

collaborated to develop an interactive web-based tool for Internet users to explore the impact of alternative scenarios associated with the Clean Power Plan implementation. The Clean Power Plan is an initiative launched by President Obama aimed at reducing carbon emissions from fossil fuel electricity production. To begin this project, Dr. Carbone and Brown built an electricity dispatch model which represents all electricity producing units in the U.S. and Canada while being capable of implementing the Clean Power Plan's policies. Results for the carbon cap policy without state trading are presented in this map and indicate that a carbon reduction credit price ranges from \$3 to \$35 per metric ton of carbon dioxide equivalent.



They are also working on developing a results explorer which will allow Internet users to browse different scenarios (e.g. high coal price) and Clean Power Plan policy implementations; the tool will be online at EarthPolicy.Mines.edu by the end of summer 2016. Associate Professor Dr. Carbone and Brown, a PhD student, also presented their work at the American Environmental and Resource Economist summer conference in Breckenridge, Colorado on June 11, 2016.

Ongoing Research

Michael Heeley, Osmotic Heat Engine



Associate Professor Michael Heeley, Tzahi Cath (Civil and Environmental Engineering), and faculty from Yale University recently completed a U.S. Department of Energy Advanced Research Projects Agency-Energy sponsored project to evaluate the commercial potential of a Closed-Loop Osmotic Heat Engine that is designed to convert low-grade heat energy to electricity. The OHE is a two-stage process that uses energy from low grade heat sources and a membrane distillation process to separate a medium concentration saline solution into low concentration (pure water) and high concentration saline solutions. These solutions are then recombined via a pressure retarded osmosis process that generates power. The project team included graduate students from the Engineering and Technology Management and Mineral and Energy Economics programs who created technical and economic models that were used to model the commercial viability of the OHE in various energy generation applications.

Jared Carbone and Ed Balistreri, Economy-Wide Modeling Panel



The U.S. Environmental Protection Agency evaluates the benefits, costs, and economic impacts of major air regulations to inform the policy process and the public of their potential economic effects. For nearly all benefit-cost analyses conducted by the EPA in support of air regulations, costs are estimated using detailed engineering or partial equilibrium sector models which are compared to benefits - also estimated using partial equilibrium models. The EPA is now evaluating the appropriate role for economy-wide modeling in informing the regulatory process.

Associate Professors Drs. Balistreri and Carbone join a group of internationally-recognized experts on economy-wide modelling serving on a special EPA Science Advisory Board subcommittee to assist the agency in this task. Among the issues the subcommittee will address are how to include the health and amenity benefits of air regulations in economy-wide models, and how the social costs and benefits of these regulations are distributed across different households and industries in the U.S. economy.

Becky LaFrancois, Geothermal Project



Colorado School of Mines, the Colorado Geological Survey, and the Colorado Energy Office are partnering on a site-specific economic analysis of low-temperature direct-use geothermal energy for the town of Rico, located in southwestern Colorado. The goal of the project, "Economic Assessment of Potential Uses of the Geothermal Resource at Rico for Consideration by Local Residents" is to work with current knowledge about the resource and develop economic models to help Rico officials identify end-use technologies and resource development pathways to attract new industries to the town. Division of Economics and Business Teaching Associate Professor Becky LaFrancois and Paul Morgan, senior geophysicist with the Colorado Geological Survey, will lead the study with assistance from Professor Wendy Harrison of the Department of Geology and Geological Engineering. The project is made possible through a combination of U.S. Department of Energy's State Energy Program and Colorado Energy Office funds.

CMI: Accelerating Innovation



Critical Materials Institute
AN ENERGY INNOVATION HUB



Professor Rod Eggert and his research group continue to provide economic perspectives on critical materials as part of the **Critical Materials Institute**, a research consortium funded by the U.S. Department of Energy, now in its third year. CMI research aims to accelerate innovation that will assure supply chains for raw materials essential in clean energy technologies — spanning basic and applied science, engineering and complementary economic and supply chain analysis.

This past semester, graduate student Braeton Smith and Eggert published the paper, “Multifaceted Material Substitution: The Case of NdFeB Magnets, 2010-2015” in *JOM*, the member journal of the Minerals, Metals and Materials Society. This paper documents the various types of substitution that occurred in these rare-earth

magnets and associated technologies following the significant increase in rare-earth prices in 2010-2011. These magnets are important to high-efficiency motors in advanced vehicles and wind turbines. Other graduate students are studying the economics of co-production (Brett Jordan), supply chains for lithium (Sul-Ki Lee) and rare earths (Max Brown), recycling of lithium batteries (Jose Hofer), and the geographic location of clean energy manufacturing (Haeyeon Kim).



Braeton Smith

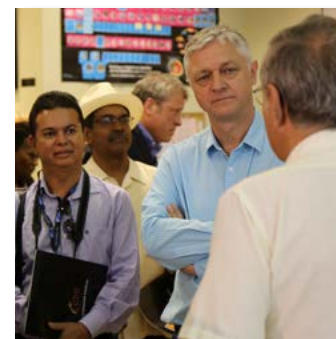


Rod Eggert, Alex King, Bruce Geller and Paul Johnson

February 3-4, Mines hosted the CMI Winter Meeting with more than 90 attendees from the Ames, Idaho, Lawrence Livermore, and Oak Ridge national laboratories, as well as the U.S. Department of Energy, Iowa State, Purdue, University of California-Davis, University of Tennessee, Yale, and of course, Mines. The main event was the first CMI conference highlighting research by postdoctoral associates and graduate students, with more than 40 presentations by young researchers from across CMI, including five from the Division of Economics and Business, and 15 from Mines overall. The conference began with remarks from Mark Johnson, Director of DOE’s Advanced Manufacturing office, and CMI Director Alex King. A highlight of the meeting was a reception in the Geology Museum at which Mines President Paul Johnson dedicated a new exhibit on critical materials.

CMI Hosts Visitors from Rare Earths Summit

On June 16, 2016 the Critical Materials Institute hosted more than 50 visitors from around the world who attended the Argus Americas Rare Earths Summit in Denver. Mines Senior Vice President, Tony Dean, presented an overview of research at Mines, Geology’s Professor Thomas Monecke discussed rare-earth geology, and Rod Eggert provided highlight’s of his group’s economic research on critical materials. The visitors toured the Geology Museum, as well as laboratories of the Kroll Institute for Extractive Metallurgy (KIEM) where they learned about Mines’ research aimed at improving methods for extracting and recovering rare earths from ore deposits, industrial wastes and end-of-life products.



Special thanks to the CMI/EB graduate students who led tour groups through the labs: Jose Hofer, Sul-Ki Lee, Brett Jordan, Haeyeon Kim, and Braeton Smith, as well as the KIEM graduate students who hosted the lab tours in Hill Hall: Victoria Vaccarezza, Dylan Everly, Thomas Boundy, Hunter Sceats, and Brett Carlson.

ETM Program Grows and Changes

The Mines graduate program in **Engineering and Technology Management** reflects on the 2015-2016 academic year as a year of growth. The program grew to more than 50 students in the Master of Science program for the fall of 2015. Enthusiastic entering students included recent graduates from institutions such as Georgia Tech, Purdue, UCLA and of course, Mines.



In addition, the 2016-2017 academic year will bring some exciting updates to the ETM program. Revised core courses will include Business Analytics and Project Management, courses many companies recruiting our ETM students say are essential for success in today's dynamic organizations. New co-curricular components of the program will emphasize personal digital branding, professional communications skills, leadership, and entrepreneurship.

The ETM program continues to provide graduates the experiences, skills and knowledge required to excel in fast-moving, high growth, technology-based organizations. **Learn more at ETM.Mines.edu.**



Communications Guest Speakers

As part of the ETM communications curriculum, two communications experts conducted workshops and seminars for the ETM students this year.

Raul Alvarado presented two seminars, "Listening and Communication Strategies for Success" and "Managing Your Life and Career Vision." Alvarado retired from Accenture, a global management consulting, technology services, and outsourcing company after 33 years of service. At Accenture, he was the Global COO for Products

Practice. Alvarado graduated with a BS in Chemical and Petroleum Refining Engineering from the Colorado School of Mines.

Kristen Swisher presented two workshops, "Unlocking the Power of Social Media: Enhancing Your Online Brand and Connecting Beyond the Screen" and "Interviewing Strategies: How to Land Your Dream Job." Swisher is a lecturer in business communications at the University of Colorado. Her areas of expertise include presentation skills, networking, interviewing, and business communication. As a former professional athlete with Team USA, Swisher is passionate about connecting young professionals with potential employers and providing them with tools to excel in the workforce.



Engineering Grand Challenges

Mines launched a new themed living community focused on the National Academy of Engineering's 14 Grand Challenges. The Division of Economics and Business' Mark Mondry was the sponsoring faculty behind the effort. Approximately 30 students were selected for the inaugural community from the 2015-2016 entering class. The students lived together and participated in special curriculum and programming related to innovation and entrepreneurship.

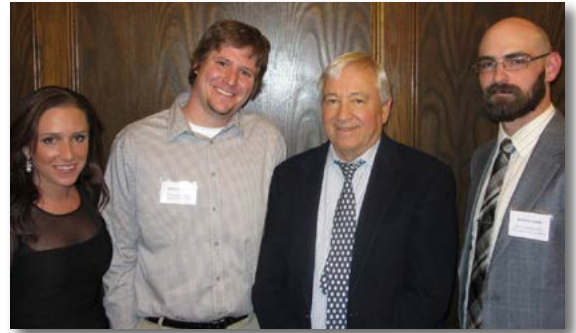


Learning the Ropes

ETM students participated in an intensive two-day economic evaluation workshop the first week of the semester, and participated in a full day leadership ropes course in the second week. In the third week of the semester, the ETM students attended a separate workshop focused on professional presentation skills.

MEE: Training the Next Generation of Market Analysts

The **Mineral and Energy Economics** program is moving forward, training the next generation of mineral and energy market analysts. Our students continue to hear good news regarding employment with summer internships for the 2016 cohort at Woods MacKenzie, Platts/Bentek (two students), Center for a New Energy Economy, Mantucket Capital, Efficio Consulting, and Morgan Stanley. The U.S. Association of Energy Economists Networking Banquet in November was a big success. MEE students received valuable insight from the Payne Institute for Earth Resources Distinguished Lecture speakers Adam Sieminski, current Energy Information Administration Administrator, and Thomas Petrie, chairman of Petrie Partners.



Jacquelyn Pless, Matt Doyle, Guy Caruso, and Braeton Smith



Mines USAEE Chapter Hosts Second Annual Banquet

The Mines Chapter of the U.S. Association for Energy Economics hosted the 2nd annual Rocky Mountain Energy Economics Banquet at the Denver Athletic Club on November 19.

The event was a huge success with about 90 participants, including Mines students and faculty, as well as a strong industry presence. The banquet provided the opportunity for attendees to participate in a networking reception, dinner, and a presentation by guest speaker Guy Caruso, former administrator of the U.S. Energy Information Administration. Caruso is currently a senior advisor in the Energy and National Security Program at the Center for Strategic and International Studies and has more than 40 years of energy experience, with particular emphasis on topics related to energy markets, policy, and security.

This year's event was sponsored in part by GE Ecomagination, The Payne Institute for Earth Resources, and the Joint Institute for Strategic Energy Analysis. The 3rd annual Rocky Mountain Energy Economics Banquet will take place October 2016 at the Denver Athletic Club.

PhD Graduate Spotlight



BA Economics and Political Science, University of Vermont (2009), MS Mineral and Energy Economics, Mines (2014), PhD Mineral and Energy Economics, Mines (2016)

PhD graduate **Jacquelyn Pless** will join the University of Oxford in August 2016 as a postdoctoral researcher. Her research explores integration of renewable energy into power systems, focusing on public spending and policy instruments that accelerate technological progress and the adoption of new electricity system technologies in the context of decentralized power generation and consumption.



BE Petroleum Engineering, Institut Teknologi Bandung, Indonesia (2007), MS Mineral and Energy Economics, Mines (2013), PhD Mineral and Energy Economics, Mines (2016)

PhD graduate, **Fadli Rahman** has joined the Boston Consulting Group as a consultant and works closely with clients (private and public businesses and organizations) to understand their issues, develop key strategic, substantial and pragmatic advisory, and collaborate to transform client potential into performance.



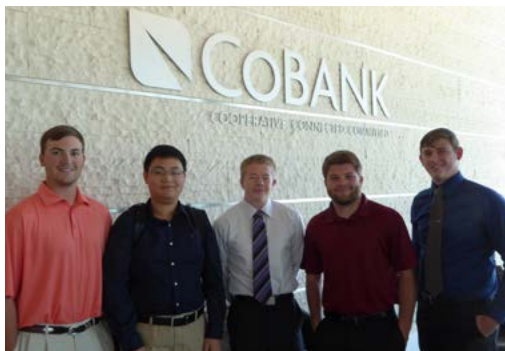
BA Economics, University of Alaska-Anchorage, PhD Mineral and Energy Economics, Mines (2016)

PhD graduate, **Michael Redlinger** is a commercial analyst for the state of Alaska, Department of Natural Resources, Division of Oil and Gas. His work focuses on maximizing Alaska's value in state oil and resources by providing economic analyses and supplying economic expertise for policy, legislative, and regulatory decisions.

A Unique Undergraduate Program

Mines' Bachelor of Science in Economics program is unique. Our students have practical tools that they can apply in a wide range of jobs. We saw some of the diverse paths our students took in a panel of recent economics graduates we hosted in November. Four economics alumni met with our current students and shared how they use their Mines economics degree in their jobs in energy, insurance, finance, and government. Our thanks to Ana Ochoa (2012), Nick Van Gundy (2013), Jim Soiland (2011) and Lisa Martinez-Templeton (2013). We also visited businesses and government agencies during our summer field session to see how our alumni put economics into practice.

Please email kmartin@mines.edu if you would like to share your story with our undergraduate students.



Summer Field Session Highlights

Summer field session is one of the unique experiences in which all Mines students participate. In the Division of Economics and Business, the summer field session exposes students to a variety of career opportunities available for someone with a degree or interest in economics through on-site visits. Over the course of this summer's session, the economics students had an opportunity to visit with seven companies from a variety of industries to hear about some of the projects that were being undertaken. They also learned about the different career paths taken by the people working in those companies.

Some of the highlights of this summer's field session included a tour of the energy trading floor at Xcel Energy; meeting with a panel of 10 economists at Level 3 Communications; learning about the gold market and investment decisions at Newmont Mining; exploring the world of a small software development firm specializing in energy markets at Yes! Energy; enjoying lunch with Mines alumni on the 14th floor roof deck at DaVita; engaging with economists from the Knowledge Exchange Division at CoBank; and exploring natural gas markets with Platts Analytics. In addition, the students

attended an interactive workshop on job searches that included one-on-one meetings with staff in the Mines Career Services center to review cover letters and resumes.

If you or your company are interested in sharing your experiences with our students, or if you have internship or job opportunities, please contact Dr. Becky Lafrancois, blafranc@mines.edu, or Dr. Scott Houser, shouser@mines.edu. Our students love hearing about the exciting things our alumni are doing.



Outstanding Undergraduate: Kownoon Her

Our Outstanding Undergraduate Award was presented to Kownoon Her this year, whose understanding of mathematics and statistics led her to study economics. She hopes her future holds more exposure to operations research applications and plans to eventually return to school for operations research. She advises incoming students not to underestimate the importance of soft skills. "Acquiring technical skills is a part of college, but being a critical thinker and communicating your knowledge is a part of life," she says.

Student Spotlight: Stephanie Berry



After teaching science in elementary and middle school for six years, Stephanie Berry, Director of Women in Science, Engineering and Mathematics, discovered a desire to pursue a technical career. Though it meant moving her husband and three children to Colorado, she chose to enroll in the Mineral and Energy Economics program because it was an ideal place to get economics expertise and business acumen. The risk paid off. During her first year of work as a graduate student in the WISEM office, she earned a reputation for hard work that led to her promotion to director.

Berry believes her degree will advance her career at WISEM even further. She'll use it to look at past data and practices to increase recruitment and retention of female students at Mines. She also knows that her MEE degree will give her the technical and business skills necessary for a wide variety of careers.

When asked to share advice for those considering a degree in MEE, Berry had plenty to offer. She recommends finding a study group and meeting individually with the amazing professors in the Division of Economics and Business. "I had many moments where I thought I might be out of my league, but I've been able to get support from classmates and professors who helped me succeed."

Spring 2016 Award Winners

Students

Hubert and Sarah Risser Award in Mineral and Energy Economics was presented to Andrew Gulley and Jacquelyn Pless. This award recognizes outstanding academic and co-curricular performance.

William Jesse Coulter Award in Mineral and Energy Economics was presented to Michael Redlinger.

The **Joe Eazor Outstanding Graduate Award** was presented to Joseph Corder.

Jerome and Rebecca Broussard Family Award for Academic Achievement in Engineering and Technology Management was presented to Matthew Hamilton and Melinda Krebs.



Jacquelyn Pless, Melinda Krebs, Joseph Corder, and Matthew Hamilton (not pictured: Andrew Gulley and Michael Redlinger)

Faculty

Engineering and Technology Management Excellence in Teaching Award was presented to Teaching Associate Professor Mark Mondry.

Mineral and Energy Economics Excellence in Teaching Award was presented to Professor Graham Davis.

Outstanding Undergraduate Economics and Business Professor Award was presented to Teaching Associate Professor Scott Houser.



Graham Davis, Mark Mondry, and Scott Houser

Thank You July 2015 - June 2016 Contributors and Supporters

Contributions from our alumni and friends truly make a difference. These gifts fund student recognition events, scholarships, faculty research efforts, outreach activities, computer software, and the opportunity for students to attend professional conferences. We sincerely appreciate your continued commitment to the Division of Economics and Business.

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