

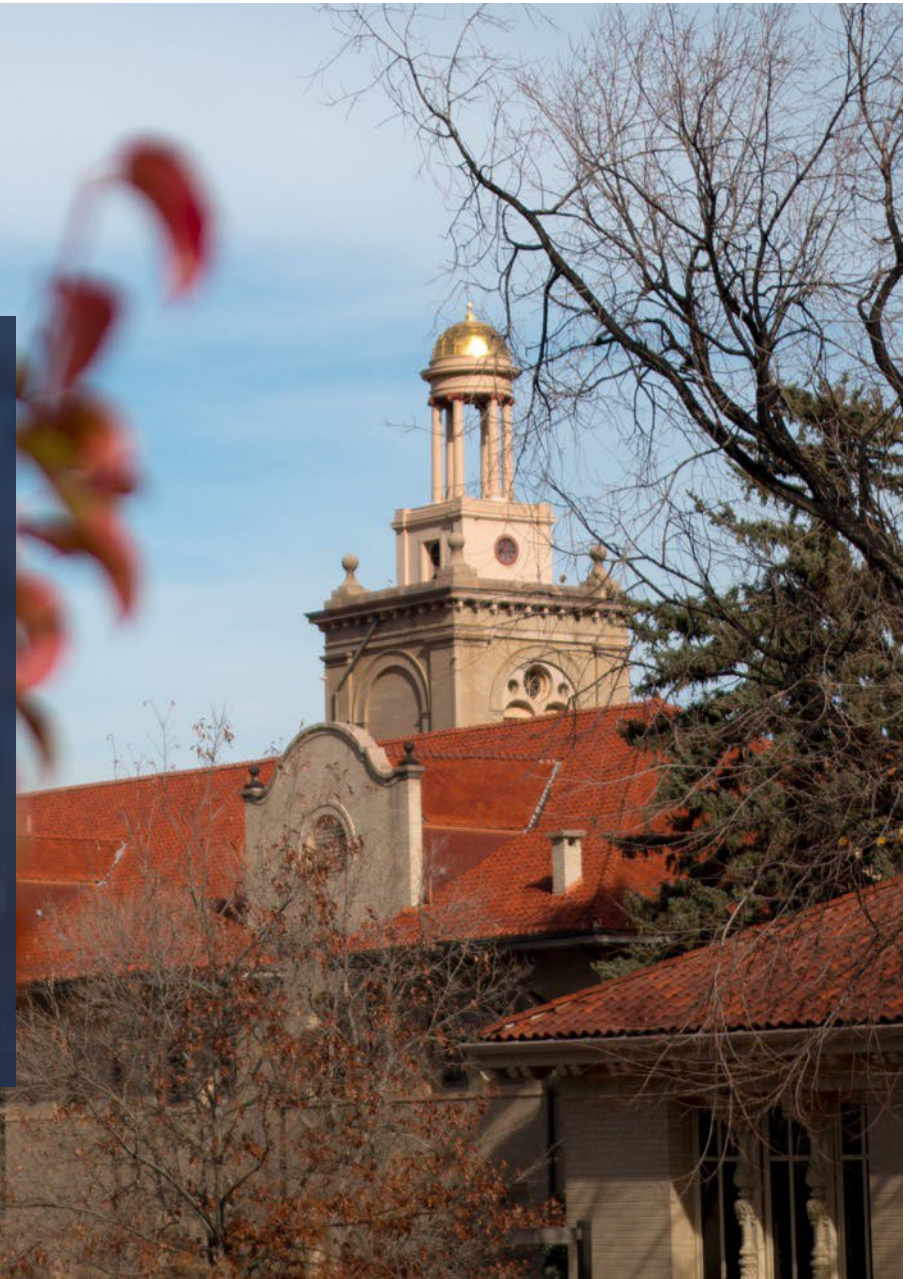


**COLORADO SCHOOL OF MINES**  
EARTH • ENERGY • ENVIRONMENT

## New Faculty Orientation August 14, 2024

Terri S. Hogue  
Dean, Earth & Society Programs

John R. Berger  
Dean, Energy and Materials Programs





# A little about Dean Hogue



B.S. Geology



M.S./Ph.D. Hydrology



Professor,  
Civil and Environmental  
Engineering



Professor, Civil and Environmental  
Engineering  
Dean, Earth and Society Programs



# More about Dean Hogue...



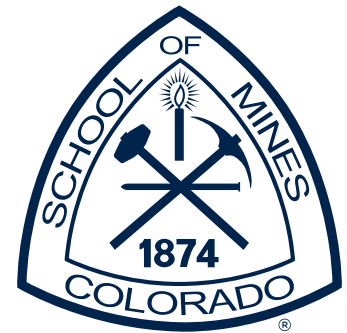
# A little about Dean Berger...



AME Department



Materials Reliability Division



Since 1994  
aP, AP, P, DH in ME



UNIVERSITY of ALASKA  
ANCHORAGE  
1 year (*on leave from Mines*)

*Academic & Research Institutions*



Fracture and Deformation Division



BSCE, MSME, PhD ME



# More about Dean Berger...



The University of Manchester



UNIVERSITY  
OF BRESCIA



OAK RIDGE  
National Laboratory



University  
of Cyprus



COLORADO SCHOOL OF MINES

MINES.EDU

# MINES: By the Numbers AY 23-24



## **7608 students**

(5852 UG, 1756 Grad w/724 PhD)  
(55% CO, 7% Int; 29%/63% W/M)

## **374 academic faculty**

(234 T/TT, 126 TF, 14 PoP's; 34%/66%W/M)

## **\$30M state investment**

(~7% of all revenue in FY23 budget)

## **\$100M research awards (R1 status!)**

## **Student Success**

(94% FTF Retention; 67%/80% 4/5-year Grad Rate;  
86% BS/85% MS/91% PhD six-month Positive  
Employment Outcomes)

# MINES: Rankings

**#1**

Best College  
in Colorado  
*Niche, 2024*

**#1**

Mines among top in nation for  
return on investment

**#3**

Best Spring Colleges  
in the U.S.  
*Forbes Magazine, 2022*

#1 in Colorado

**#36**

Public Universities

*U.S. News & World Report  
and Forbes, 2024*

#7 in US for Science Majors

#18 in US for Universities/Colleges

*U.S. News & World Report,  
2024*

**RANKED**

in Investment

*Payscale, Best Colleges,  
Georgetown University*



# Approaching 150 Years

**MINES is unique in the higher education landscape:** highly-respected locally and globally for our expertise in **earth, energy, and environment**.

Our longevity is attributable in part to our unique mission and success at:

**Producing distinctive STEM graduates.** Employers particularly value their success in teams, resilience, grit, hands-on experiences, and ability to get things done.

**Creating transformative and enduring value** through the students we graduate, the discoveries we make, and the challenges we solve for industry and society.

**Being a pioneer at the frontiers of science and engineering,** from locating and recovering earth resources, to new energy production processes, new materials, advanced manufacturing processes, environmental solutions, and space exploration.







## In 2024+ MINES will be:

A leader in educating  
STEM students and  
professionals

A preferred partner for  
talent, solutions and  
life-long learning

A great community to  
learn, explore, live and  
work in

A producer of  
differentiated and  
highly desired STEM-  
educated leaders

The exemplar for  
alumni affinity, visibility  
and involvement

Accessible and  
attractive to qualified  
students from all  
backgrounds

A go-to place for use-  
inspired research and  
innovation needed for  
challenges facing  
industry and society



# MINES@150: University-level Design Goals

**MINES@150** also includes **macro-level design parameters** that define our size in the future.

These reflect program input, review of our financial model, benchmarking and our goals.

	Fall 2023 Values	Mines@150 Aggregate Design*
Undergraduate Students	5852	6100
Masters/Non-Degree Students	1032	1900
Doctoral Students	724	900
T/TT Faculty	234	255
Teaching Faculty & Professors of Practice	140	126
Research Grants & Contract Awards	\$100M	\$100M



# Mines@150 Initiatives – CORE revisions

---

Necessary knowledge in ***Math, Science, and Computing***

Emphasis on ***wellness, business*** skills, understanding of ***global and societal contexts***

***Updated curriculum:***

*Computing/programming Course*

*Majors and career exploration*

*“Futures” course*

*Business acumen*

*Providing pathways (areas of interest)*



# “Majors Exploration”

**CSM 101.** A "college transition" course, taught in small groups... fostering connectedness to CSM, learning University resources that will allow freshmen to develop to their fullest potential at CSM.

*Adding exploration of Mines' degree programs and career opportunities.*

*Ted style talks with alumni, industry experts, etc.*

Let us know if interested in engaging!



**COLORADO SCHOOL OF MINES**



*FUTURES – students envision the future around critical issues in science and engineering. Recent themes: Global Energy, Water, Artificial Intelligence (AI), Sustainability*

*Each section has four instructors from humanities, social science and technical disciplines*

### **Learning Objectives:**

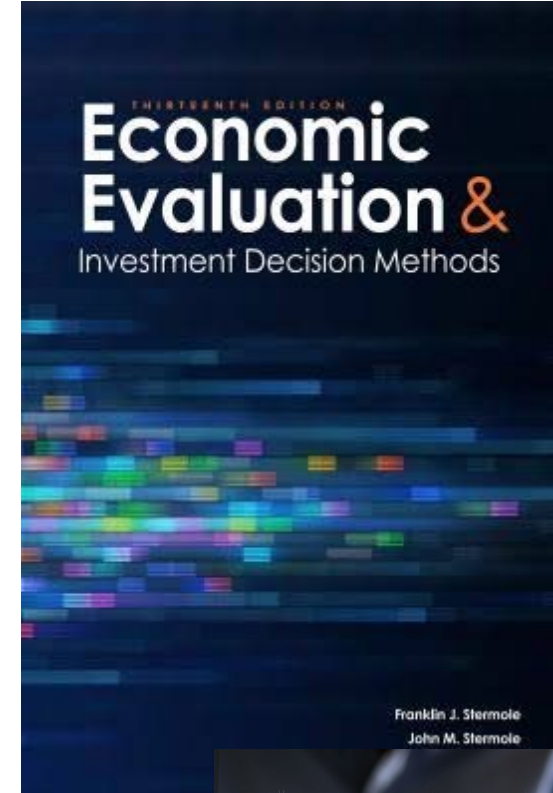
- **EXPLORATION**
- **PERSONAL VALUES IDENTIFICATION**
- **INTERDISCIPLINARY INTEGRATION**
- **BUILDING COMMUNITY & CONVERSATION**
- **DEFINING CHALLENGES & OPPORTUNITIES**
- **ENHANCING PERSPECTIVE TAKING**
- **ENGAGING A FUTURE ORIENTATION**
- **ENHANCING IMPACT POTENTIAL**

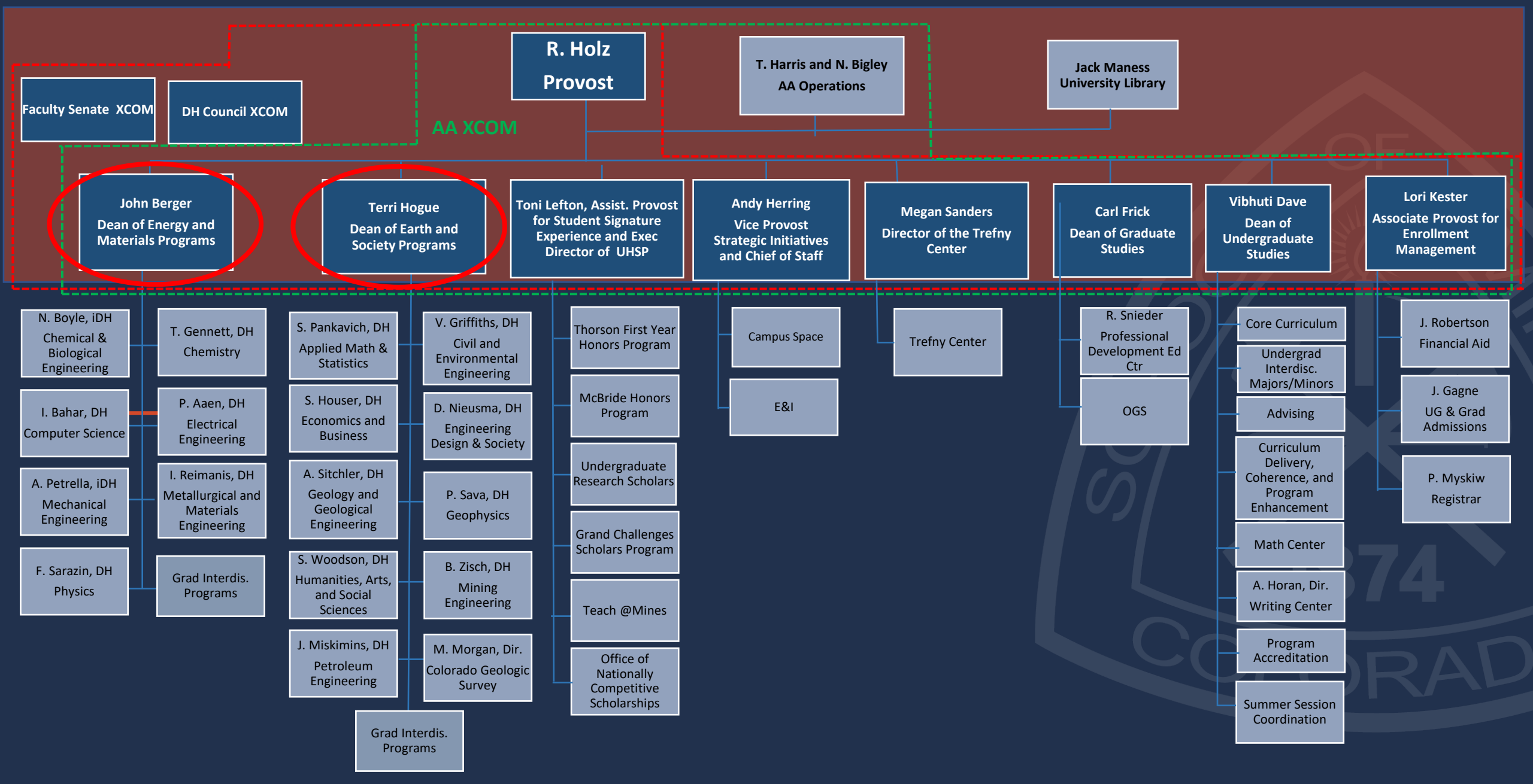
Provides students a structured opportunity to engage with events and people to gain real-world exposure and experience in areas relevant to their learning and future.



# Business@Mines

- **Engineering Economics** added as core course for all Mines undergraduates
- Regarded by many alumni as one of the most valuable classes they took at Mines
- Topics
  - Project evaluation
  - Investment decision-making
  - Discounted cash flow
  - Time value of money







# The Two Portfolios (“Colleges”)

## Earth and Society Programs (ESP)

### Dean Terri Hogue

- Applied Math and Statistics
- Civil and Environmental Engineering
- Colorado Geological Survey
- Economics and Business
- Engineering, Design, and Society
- Geology and Geological Engineering
- Geophysics
- Humanities Arts and Social Sciences
- Mining Engineering

## Energy and Materials Programs (EMP)

### Dean John Berger

- Chemical and Biological Engineering
- Chemistry
- Computer Science
- Electrical Engineering
- Mechanical Engineering
- Metallurgical and Materials Engineering
- Physics

# Fall 2023 BS Degree Program Enrollments

BS Degree Program	Headcount Fall 2023	BS Degree Program	Headcount Fall 2023
Mechanical Engineering	1769	Mining Engineering	102
Computer Science	1142	Geological Engineering	99
Chemical Engineering	493	Biochemistry	80
Electrical Engineering	428	Engineering/Design Engineering	50 + 26
Civil Engineering	330	Geophysical Engineering	69
<b>Quantitative Biosciences Engineering*</b>	<b>238</b>	<b>Business Engineering &amp; Mgmt Science*</b>	<b>68</b>
Engineering Physics	215	Chemistry	55
Environmental Engineering	182	Undecided	48
Metallurgical & Materials Engineering	150	Economics	9
Applied Mathematics & Statistics	141	<b>Ceramic Engineering**</b>	10 (New Fall 2023)
Petroleum Engineering	126	<b>Construction Engineering**</b>	7 (New Fall 2023)
* - New in Fall 2021		** - New in Fall 2023	

Fall 2023 Census Data



# The IGPs under the Deans

## Earth and Society Programs (ESP)

### Dean Terri Hogue

- Carbon Capture Storage and Utilization (CCUS)
- Data Science
- Geochemistry
- GIS
- Humanitarian Engineering
- Hydrologic Science and Engineering
- Space Resources
- Underground Construction and Tunneling

## Energy and Materials Programs (EMP)

### Dean John Berger

- Advanced Energy Systems
- Additive Manufacturing
- Materials Science
- Nuclear Science and Engineering
- Operations Research
- Quantitative Biological Engineering
- Robotics
- Quantum Engineering
- FEA Professional

## Earth and Society Programs Office

- Kamini Singha  
Associate Dean for Research  
and Faculty Affairs  
Univ. Distinguished Professor



- Deb Carney  
Associate Dean for Student Success  
and Outreach Initiatives  
Univ. Distinguished Teaching



- Cassie Glenn  
Executive Assistant



- Tracy Shepard  
Research Support



- Rachel McDonald



## Energy and Materials Programs Office

- Dan Knauss  
Associate Dean for Faculty Affairs



- Fred Sarizan  
Associate Dean for Research



- Keri Bowling  
Executive Assistant



- Cadi Gillette  
IGP Manager

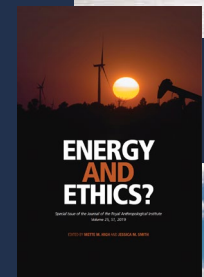


# Key foci of the Earth and Society Portfolio

ESP programs support resilient and secure communities, inform decision-making, and drive economies.

Key areas that we work on:

- Securing our energy future (global energy transition)
- Providing critical minerals and resources for the economy
- Developing more secure water supplies
- Predicting and mitigating disaster risks
- Integrating social equity and business acumen into real-world solutions



# ESP: Ongoing initiatives

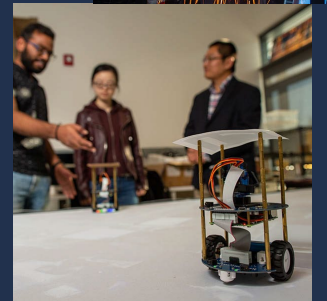
- Creating community:
  - Open Forums – meetings with faculty at “rank” levels
  - Lunches with ESP admins / “Tips and Tricks” for ESP/EMP admins
  - Dean lunches with junior faculty
  - Social hours/events
  - ESP Dean’s lecture series
- Dean’s Fellowships (both EMP and ESP) – course release and \$10k funding for Mines@150 initiatives
  - Jessica Smith (EDS) and Andres Guerra (CEE)
  - Adrienne Kroepsch (HASS) and Jack Bringardner (EDS)



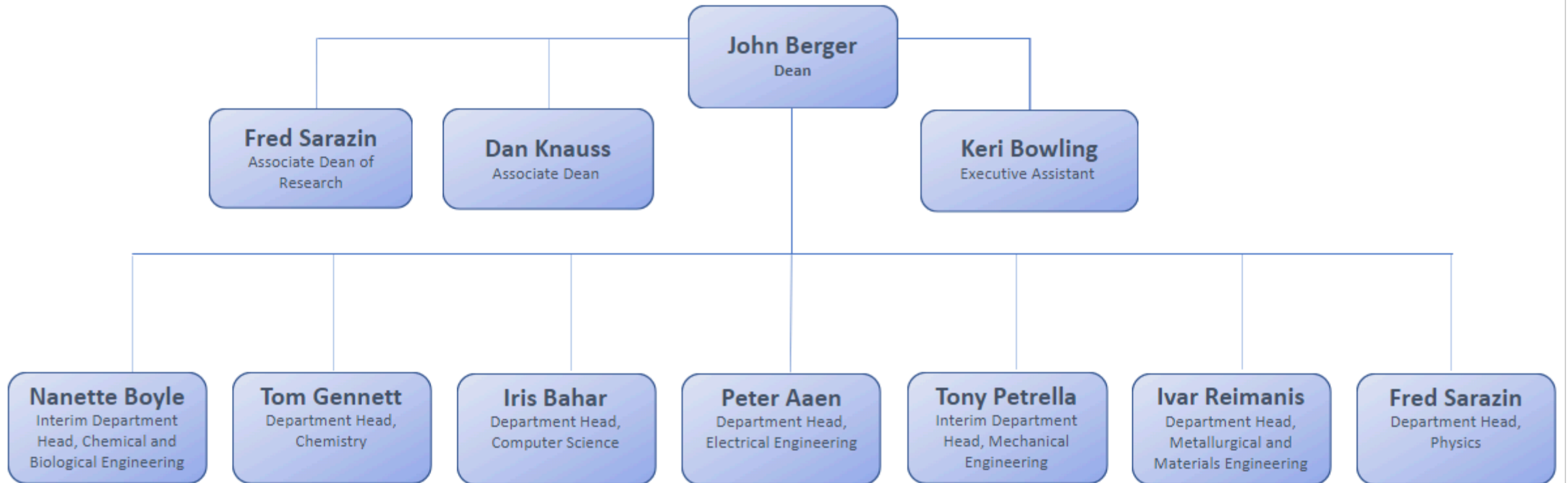
# Key foci of the Energy and Materials Portfolio

EMP programs meet society's grand challenges and help build a more sustainable future

- Generate and distribute our electricity
- Create next-generation materials and manufacturing techniques
- Advance quantum computing
- Develop virtual worlds
- Harness and distribute renewable energy
- Use big data to solve society's most pressing challenges



# Organization of EMP





# EMP: A Few Ongoing initiatives

- Creating community:
  - Open Forum – meetings with all new faculty
  - Coffee with the dean – open to all faculty
  - Social hours/events
- Development of new cross-cutting interdisciplinary undergraduate and graduate programs
- Dean's Fellowships (both EMP and ESP) – course release and \$10k funding for Mines@150 initiatives
  - Amanda Jameer (CH) – *Designing an Inclusive and Equitable Honors General Chemistry Course*
  - Leslie Lamberson (ME) *Enhancing Industry Ties and Business Acumen*



# Infrastructure: we are growing!



- Day Care Center @Mines Park – ~100 pre-K students (faculty, staff and students)
- Student Housing @Mines Park (from ~400 to ~1000 beds; including graduate students)
- New Sophomore housing at 19<sup>th</sup> and Illinois (~800 beds)
- Classroom building and garage (~1000 parking spaces; classroom wrap around; top floor for faculty offices)
- Entrepreneurship & Innovation (E&I) Hub – 3 “new” buildings: McNeil Hall, Labriola and Beck Venture Center



# Energy and Minerals Research Facility (EMRF)



South Perspective: Proposed Design



~200,000 sq. feet

Building Cost: \$250M

USGS: Energy and Minerals  
Group

Mines: Geology, Geophysics,  
and Mining Departments

Labs, faculty, student offices,  
meeting facilities

Classroom / coffee kiosks



# Questions?



<https://www.mines.edu/earth-and-society/>



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MINES**  
**@ 150 | 1874-2024**



# INFORMATION & TECHNOLOGY (IT)

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CONNECTING YOUR MINES EXPERIENCE





**IT Service Desk:**  
[it.mines.edu/service-desk](https://it.mines.edu/service-desk)

# IT Support

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## In person @ the IT Service Desk

- 156A CTLM (Next to the Computer Commons)

## On-Demand Phone Support

- 303-278-HELP

## Self-Help Online @ the Mines Help Center

- [helpcenter.mines.edu](http://helpcenter.mines.edu)
- Submit a ticket
- Chat with Blaster Bot





# Information Technology Customer Experience

**Focused on improving outcomes and the user experiences for Mines faculty, students, and staff.**

---

- Supporting the adoption and use of accessible technologies, services, and solutions to enhance teaching, learning, and business operations.
- Providing technical support and administration for Canvas, MediaSpace, Course Evaluations, digital accessibility, and more.

<https://it.mines.edu/organization/service-delivery/customer-experience/>





# On-Site Support

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- Supports all classroom technology
- Call 303-278-HELP for immediate service if need assistance with classroom tech.





# Research Computing

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- High-Performance Computing (HPC)
- Data transfer services
- High-capacity storage options to support your research and teaching goals.

<https://rc.mines.edu>

# Computer Labs

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1000+ computers available to students across campus. Mines laptops issued to employees.

- Physical and virtual lab teams
- Provide software that students and faculty need.

[it.mines.edu/campus-computing-labs/](https://it.mines.edu/campus-computing-labs/)





# Duo Multi Factor Authentication (MFA)

---

- Prevents others from logging in as you. (Even if they know your password)
- Needed to access most online services at Mines
- Available for Android and Apple mobile devices
- FOB devices available

[its.mines.edu/mfa](https://its.mines.edu/mfa)

# Office 365, Google VPN, and More

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## Productivity

- Google Drive, Google Docs, etc.
- OneDrive, Outlook
- Word, Excel, PowerPoint, etc.

## VPN

- Encrypted connection
- Remote access to restricted on-campus services

## MediaSpace

- Record & Publish Videos, Capture Lectures, Manage & Share Media.
- Interactive learning tools



# Office of Research Administration (ORA)



# Office of Research Administration

## Proposal Submission

- Team to help you build and submit your proposals
- Industry, Federal, State, Non-Profits
- Assist in transferring research projects to Mines

## Contract Review & Negotiation

- Team to review and negotiate all your research related agreements (awards, subawards, NDAs, MOUs, consortia, etc.)
- Assist you with managing federal rules & requirements as your project changes

## Award Administration

- Team to help you with the on-going financial management of your projects (expenses, financial reports, invoicing)
- Assist you with managing federal rules & requirements as your project changes

[ora.mines.edu](http://ora.mines.edu) or [ora@mines.edu](mailto:ora@mines.edu)



# Research Administration Services/Resources

## Proposals

Notify your ORA Proposal Analyst of an upcoming proposal as soon as possible but *a minimum of 2 week before deadline* for standard, single investigator projects, 4 weeks for all others.

## Award Administration

To start spending on a research project, there are 2 options:

1. Award documents have been accepted by Mines and a WorkDay worktag number is generated for you to use to start spending
2. An approved At-Risk Spending Request. If Mines has received notification your award is on its way, we can go through the At-Risk process to allow pre-award spending on something new or continued spending for incremental funding.

## Who do I work with?

PIs have a triad of ORA staff members to help them with their research proposals and projects. Your specific triad is listed on our website at <https://ora.mines.edu/home/connect/>





# Human Resources Overview

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Christine Homer

Chief Human Resources Officer





# Mines @ 150

**Be a top-of-mind and first-choice university for students, public and private partners, and faculty and staff**

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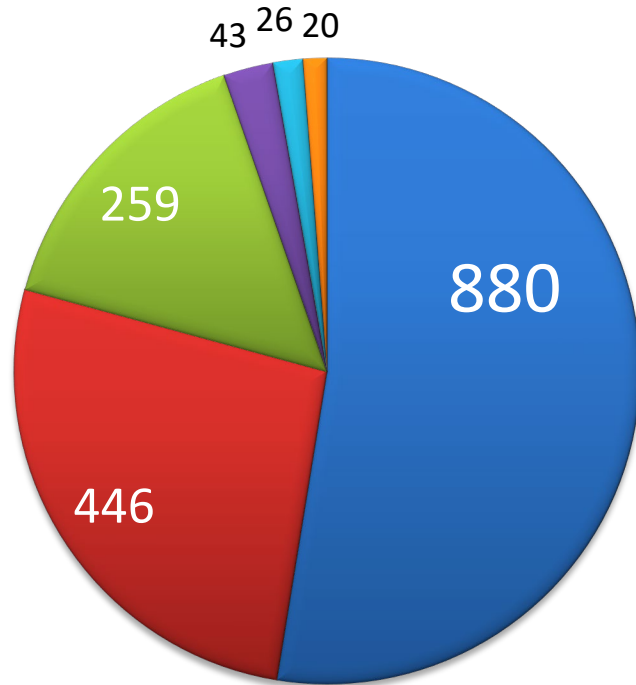
## Human Resources

- Recruit and hire the best talent
- Onboard and develop talent for current and future roles
- Develop a culture of innovation, inclusion, and belonging
- Pay all employees equitably and fairly
- Design and offer benefits to meet individual and family needs



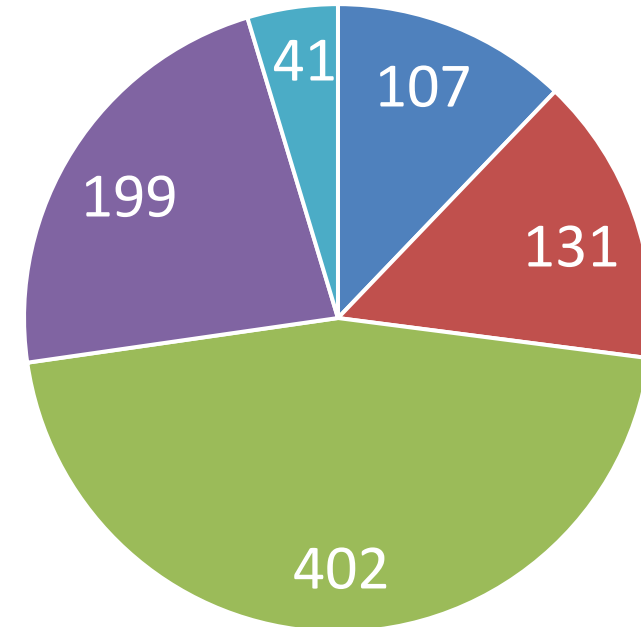
# 1674 Employees

Number Employees



- Academic Affairs
- Student Life
- Presidents Office
- Fin, Admin, Ops
- Research & Tech Transfer
- Global Initiatives

Academic Affairs



- Adjunct
- Faculty
- Classified
- Admin Faculty
- Research Faculty and Hourly



# HR Mission

- HR will be visible, trusted, accessible advisor to campus, and the employee advocate.





# Human Resources Org Chart – Aug 2024





# Mines Community Alliances

- Latine Community Alliance
- Women Community Alliance
- Black Community Alliance
- LGBTQ+ Community Alliance
- Asian Community Alliance
- Parent Alliance



# Contact Us

- [HR@mines.edu](mailto:HR@mines.edu)
  - All questions for HR
- [Benefits@mines.edu](mailto:Benefits@mines.edu)
  - Health & wellness, retirement, leaves of absence
- [Recruitment@mines.edu](mailto:Recruitment@mines.edu)
  - Open a position, ask about a position in process
- [learn\\_and\\_develop@mines.edu](mailto:learn_and_develop@mines.edu)
  - Onboarding, new employee steps
- [MCA@mines.edu](mailto:MCA@mines.edu)
  - Mines Community Alliances

[MAPS@mines.edu](mailto:MAPS@mines.edu)  
Payroll Questions





<https://www.mines.edu/human-resources/>



## HUMAN RESOURCES

HUMAN RESOURCES WILL BE A VISIBLE, TRUSTED, ACCESSIBLE ADVISOR TO CAMPUS, AND AN EMPLOYEE ADVOCATE.

WORK AT MINES

DEI&A

TOTAL  
REWARDS

PERFORMANCE  
MANAGEMENT

HIRING TEAM  
RESOURCES

LEARNING &  
DEVELOPMENT

EMPLOYEE/LABOR  
RELATIONS

CAMPUS &  
COMMUNITY  
RESOURCES



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**MINES**  
@ 150 | 1874-2024

Arthur Lakes Library



# Things New Faculty Need to Know about the Library & Museum

**Brianna Buljung**

Teaching & Learning Librarian  
Librarian

**Seth Vuletich**

Scholarly Communications

# Resources and Collections

[library.mines.e](http://library.mines.edu)

[du](http://library.mines.edu)

[Help](#) | [Off Campus?](#) | [My Account](#)

Today's Hours: 7am - 6pm | [All Hours](#)

Search the Library Catalog

SEARCH

[E-Journals](#) | [Advanced Search](#) | [Can't Find It?](#)



RESEARCH  
GUIDES



STUDY  
ROOMS



MINES  
REPOSITORY



SPECIAL  
COLLECTIONS



GADGETS TO  
GO



# Collaborate in the Scholars Hub

## Services:

- Research consultation
- Book a Librarian
- Information literacy instruction
- Scholarly publishing
- Research management

Visit us on  
the main  
floor of the  
Library



**Lisa Dunn**  
STEM Research Librarian  
[ldunn@mines.edu](mailto:ldunn@mines.edu)



**Brianna Buljung**  
Teaching & Learning Librarian  
[buljung@mines.edu](mailto:buljung@mines.edu)



**Joe Kraus**  
Research Librarian  
[jkraus@mines.edu](mailto:jkraus@mines.edu)



**Seth Vuletich**  
Scholarly Communications Librarian  
[sethvuletich@mines.edu](mailto:sethvuletich@mines.edu)



# Course Reading Lists

Create customized reading lists for your courses.

Co-locate textbooks, videos, simulations and other supplementary materials on one Canvas page.

## Features:

- Student usage data
- Use materials from the library and beyond
- Print reserves collection in the library



**Chris Thiry**

Academic Outreach Coordinator

[cthiry@mines.edu](mailto:cthiry@mines.edu)



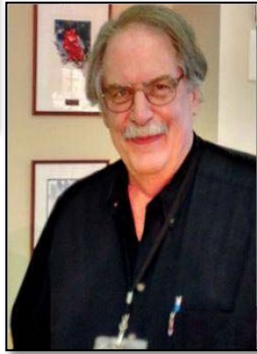
# Mines Museum of Earth Sciences

- 2,000+ minerals, fossils and artifacts on exhibit
- 50,000+ additional items housed in archives
- Largest public display of Colorado minerals in the world
- Attracts 27,000+ visitors annually
- Events and receptions open to the public and Mines organizations
- Focus on exhibits showcasing faculty & student research

*To be the leader in Earth Science exhibition and outreach, connecting the public to Mines and encouraging the pursuit of careers in STEM.*



[mines.edu/geology-museum](https://mines.edu/geology-museum)



Welcome Jack Maness - our new University Librarian!

# Thank You!

environment, health and safety



**COLORADO SCHOOL OF MINES**  
EARTH • ENERGY • ENVIRONMENT



# *Enabling a Safer U*





# Risk Assessmen





# chemical procurement





# Emergency Management

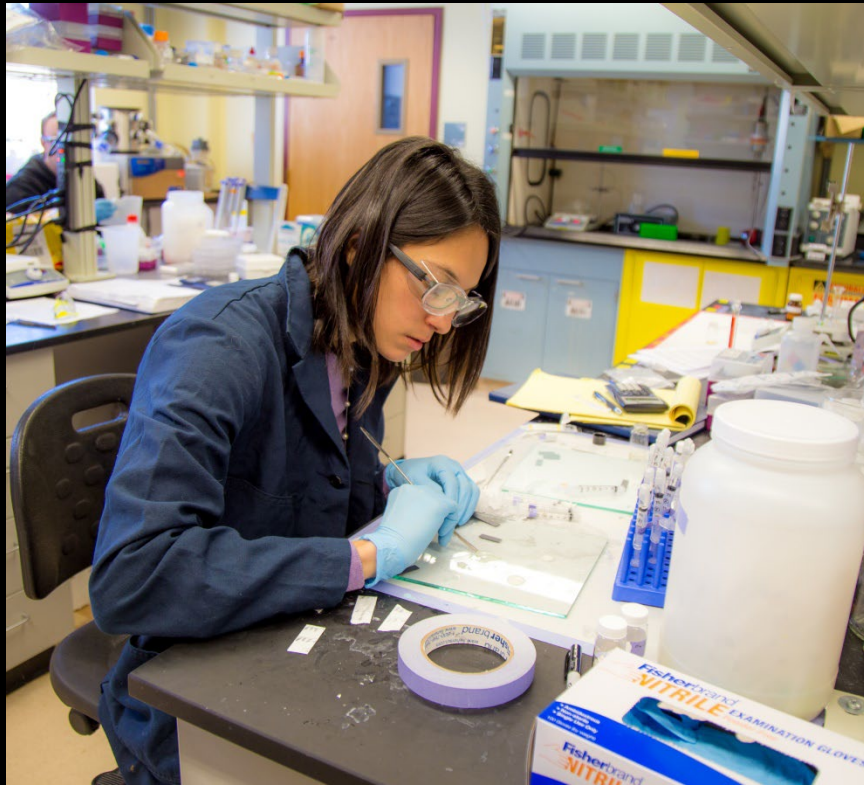
# Report Incidents

 <h2 style="margin: 0;">COLORADO SCHOOL OF MINES</h2> <h3 style="margin: 0;">Emergency Procedures Summary</h3> 		
<p style="text-align: center;"><b>ACTIVE SHOOTER — ARMED INTRUDER</b></p> <ul style="list-style-type: none"> <li><b>RUN</b> - Evacuate or flee if possible and safe. Have an escape plan. Consider all exits and windows. Distance yourself from the shooter.</li> <li><b>HIDE</b> - If flight is impossible, <b>SHELTER IN PLACE</b> — Get out of sight.</li> <li>Block entry or lock doors. Put something solid between yourself and the shooter.</li> <li>Be prepared to wait; elapsed time is a good sign.</li> <li>Wait for instructions from Law Enforcement.</li> <li><b>FIGHT</b> - As a last resort <b>TAKE ACTION</b>, and only when you life is in imminent danger. Attempt to disrupt and/or incapacitate the shooter. Act with aggression.</li> </ul>	<p style="text-align: center;"><b>FIRE or GENERAL EVACUATION</b></p> <ul style="list-style-type: none"> <li><b>FIRE</b> - Activate nearest fire alarm if not already activated &amp; call 911.</li> <li><b>Evacuate Building. This is MANDATORY for FIRE alarms.</b> Take your valuables (keys, wallets, purses, etc.) with you.</li> <li><b>DO NOT</b> use elevators. <b>DO NOT</b> re-enter the building until authorized.</li> <li>If it is safe, assist others moving from the area. If unable, notify emergency personnel of the location of any disabled or special needs persons.</li> <li>Proceed to your predetermined meeting spot.</li> </ul>	
<p style="text-align: center;"><b>MEDICAL EMERGENCY</b></p> <ul style="list-style-type: none"> <li><b>Contact 911.</b></li> <li>Render first aid if trained.</li> <li>Stay with the injured / ill person until help arrives.</li> <li>Try to gather as much information about the emergency to pass along to emergency responders.</li> <li>Learn the locations of AED's (Automatic External Defibrillators).</li> </ul>	<p style="text-align: center;"><b>BOMB THREAT or SUSPICIOUS OBJECT</b></p> <ul style="list-style-type: none"> <li><b>DO NOT</b> touch or move any suspicious device.</li> <li><b>DO NOT</b> turn switches on or off – leave them as they were.</li> <li>Evacuate the area—take your belongings with you.</li> <li><b>DO NOT</b> use cell phone or radios in area of device.</li> <li>Proceed to your predetermined meeting spot.</li> <li>If you have information regarding the incident contact Public Safety.</li> <li><b>DO NOT</b> re-enter the area until authorized.</li> </ul>	
<p style="text-align: center;"><b>SHELTER-IN-PLACE</b></p> <ul style="list-style-type: none"> <li>Lock and barricade doors.</li> <li>Turn off lights.</li> <li>Close blinds, block windows.</li> <li>Turn off radios and computer monitors.</li> <li>Keep occupants calm, quiet, and out of sight.</li> <li>Keep yourself out of sight and take adequate cover or protection (i.e. concrete walls, desks, filing cabinets).</li> <li>If not communicating with authorities turn off cell phones.</li> <li>Remain in a safe area until danger has passed or contacted by authorized personnel.</li> </ul>	<p style="text-align: center;"><b>POLICE</b></p> <p style="text-align: center;">Can be reached by calling:</p> <p style="text-align: center;"><b>9-1-1</b></p> <p style="text-align: center;">(To report any emergency DIAL 911 from any campus phone)</p> <p style="text-align: center;">From on campus: ext. 3333</p> <p style="text-align: center;">From off campus: 303-273-3333</p>	<p style="text-align: center;"><b>HELPFUL TIPS</b></p> <ul style="list-style-type: none"> <li><b>Remain Calm</b> - Those in your charge are looking to you for guidance &amp; direction. Provide assistance to others, if necessary/possible.</li> <li><b>Think Ahead</b> - Regularly run "what if" situations through your head to determine what you may do in any situation before it happens.</li> <li><b>Be Patient</b> - Response takes time. When you are waiting for response to a crisis a few minutes may feel like hours.</li> </ul> <p style="text-align: center;"><b>VISIT INSIDE.MINES.EDU:</b></p> <ul style="list-style-type: none"> <li>Publicsafety.mines.edu</li> <li>EHS-Emergency-Information</li> </ul>
<p style="text-align: center;"><b>SEVERE WEATHER</b></p> <ul style="list-style-type: none"> <li><b>Monitor local TV, Radio, and Internet.</b></li> <li><b>Be prepared to take shelter on the lowest indoor level.</b></li> <li><b>Stay away from windows; move to an INTERIOR HALLWAY.</b></li> <li><b>If outdoors, lie in a ditch or low-lying area or crouch near a strong building.</b></li> <li><b>Wait for an All-Clear before returning to the area.</b></li> </ul>		
<p><b>IF YOU SEE SOMETHING - SAY SOMETHING</b></p>		
 		

An aerial photograph of a city and university campus, likely in a mountainous region. The foreground shows a hillside with snow patches and evergreen trees. The middle ground features a dense urban area with a large university campus, including several large buildings and a red running track. The background consists of rugged, snow-capped mountains under a clear sky. The word "sustainability" is written in large yellow letters in the upper right, and the words "Reduce", "Reuse", and "Recycle" are stacked in green letters in the center.

sustainability

Reduce  
Reuse  
Recycle



Where  
To  
Find  
Us

McNeil Hall  
Coolbaugh Hall

# *Welcome to Mines!*

## Research & Technology Transfer

---

*Innovation with Impact*

Walter Copan / VPRTT

August 2024







***Mines:* An inclusive culture of excellence in research and innovation – interdisciplinary and collaborative, creating positive societal impact.**





## Your Resource for Research Development and Innovation Pathways

- Mines Research Strategy
- R&D Portfolio Development
- Major research proposals and teaming
- Innovation hubs support
- Research centers and consortia
- Federal Relations / Public Policy
- Federal Labs, Universities and Corporate Partnerships
- Research Integrity and Security / Human Subjects Research Support
- Major research instrumentation access / Shared Instrumentation Facilities
- Research communications and outreach
- Intellectual property (IP) protection - patents, copyrights, software, datasets...
- Licensing, IP contracts, New company startup agreements
- Cost share funds / Seed funding & Technology maturation funding

*Contact:*

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# The Payne Institute for Public Policy



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The Payne Institute  
for Public Policy

SAVE THE DATE:  
CRITICAL MINERALS SYMPOSIUM  
SEPTEMBER 12-13, 2024

The graphic features a dark blue background with a faint world map. On the right is a circular logo containing a pickaxe and a hammer crossed over a lightning bolt. Below the logo is an orange banner with white text.

## SCIENTIFIC, DATA DRIVEN APPROACH TO INFORMING THE GLOBAL ENERGY FUTURE

Leverages Mines' broad technical expertise throughout the energy, climate & natural resources systems to create a comprehensive understanding of future opportunities and challenges, informing policy globally



**COLORADO SCHOOL OF MINES**  
EARTH • ENERGY • ENVIRONMENT

**Mines Global Energy Future presents**  
**The New Map: Energy, Climate and the Clash of Nations**

**Daniel Yergin, Vice Chairman, IHS Markit**  
**Thursday, Jan. 21 | 9 a.m.**

Daniel Yergin, a highly respected authority on energy, international policy and economics and Pulitzer Prize-winning author, will discuss his latest book, "The New Map: Energy, Climate, and the Clash of Nations." Yergin is the proud recipient of an honorary degree from Colorado School of Mines.



Register for the event at [bit.ly/yerginzoomcast](https://bit.ly/yerginzoomcast)

Purchase "The New Map: Energy, Climate, and the Clash of Nations" on Amazon

The Payne Institute for Public Policy

**MINES** | Global Energy Future

# **RTT and ORA: *Helping Mines Faculty Achieve Sustained Research Success***

- **Mines @ R1 -- Mines research is growing**
  - Provide Mines research infrastructure, proposal development and support services to enable ongoing success
- **Relentlessly focused on making Mines better & better**
  - Research Advisory Board, Research Council
  - Shared Services
- **Making the Mines light shine brightly**
  - Research communications - telling the stories of Mines, research relevance, innovation impacts, commercial opportunities
  - Build focused outreach with policymakers, funding agencies, influencers, industry, partners, entrepreneurs, investors



# Earth, Energy, Environment, Foundations, Fundamentals & Frontiers

Mines Pillars of Research and Innovation: focus on solving the world's most critical science and engineering challenges



## Earth Exploration

**Understanding our planet & responsibly developing its resources**

Mines researchers are building a better understanding of Earth's structure, natural processes, and changing environments to predict and mitigate natural hazards, understand environmental cycles, address climate change, and locate and access critical resources with minimal impact on the planet.



## Foundations of Responsible Innovation

**Building solutions in global context**

Mines scientists and engineers integrate social, cultural, ethical, economic, policy, and environmental considerations into their work to improve our world through impactful and responsible research and innovation.

## Integrated Energy Solutions

**Powering the future**

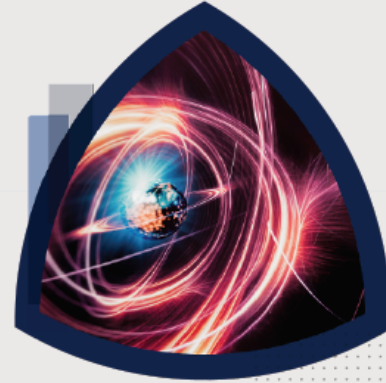
Balancing ever-growing demands for affordable, reliable, and climate-conscious energy, Mines researchers are leaders in finding solutions that reduce emissions, boost energy efficiency and storage, use alternative and renewable sources and fuels, and improve grid reliability.



## Fundamentals of Scientific Discovery

**Expanding our understanding of the world**

Researchers across Mines drive discovery and innovation by using advanced technology and computing to enhance our understanding of the matter, forces, and interactions that govern our universe.



## Sustainable Environment & Climate

**Protecting our planet**

Environmental sustainability and climate change mitigation are central to research at Mines, where scientists advance projects aimed at purifying water, soil, and air while driving cleaner energy production, resource extraction, and manufacturing practices.



## Science & Engineering Frontiers

**Pushing the boundaries of what's possible**

Mines researchers explore the frontiers and push the boundaries of science to accelerate breakthroughs in computing, robotics, space exploration, advanced materials and manufacturing, biotechnology, and beyond.

Welcome Home!

[research.mines.edu](http://research.mines.edu)



*Make it awesome*



# The Writing Center

**Allyce Horan**

Director, The Writing Center  
Assoc. Teaching Professor, HASS





# Faculty Services



**Integrating the  
Online Technical  
Communication  
Center (OTCC)**



**Designing  
course writing  
assignments**



**Teaching in-class  
communication  
workshops**



**Reviewing grant  
proposals &  
scholarly  
publications**

# Student Services

- One-on-One Appointments
- Workshops
- Graduate Writing Groups
- Thesis Writers Retreat



# Contact Information

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- The Writing Center, [writing@mines.edu](mailto:writing@mines.edu)
- To learn more about our services, visit [writing.mines.edu](http://writing.mines.edu)
- To access The Online Technical Communication Center (OTCC), visit [OTCC.mines.edu](http://OTCC.mines.edu)



# WELLNESS - FACULTY & STAFF

[Home](#) » [Employee Total Rewards](#) » [Benefits](#) » [Faculty & Staff Benefits](#) » Wellness

Mental and Emotional Wellness

Colorado State Employee Assistance Program (C-SEAP)

988 Suicide & Crisis Lifeline

Personal Care Room

Wellness Fair

# ‘They Need Us to Be Well’

The surprising recipe for building students’ emotional well-being in the classroom? Rest and joy — for professors.

By *Sarah Rose Cavanagh* | MAY 2, 2023





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Email (Required)



# Book club

Group 1: Wednesdays noon-1 PM on September 18, October 9, and October 29, led by Roel Snieder

Group 2: Thursdays from 5-6 PM on September 19, October 10, and October 30, led by Dendy Sloan

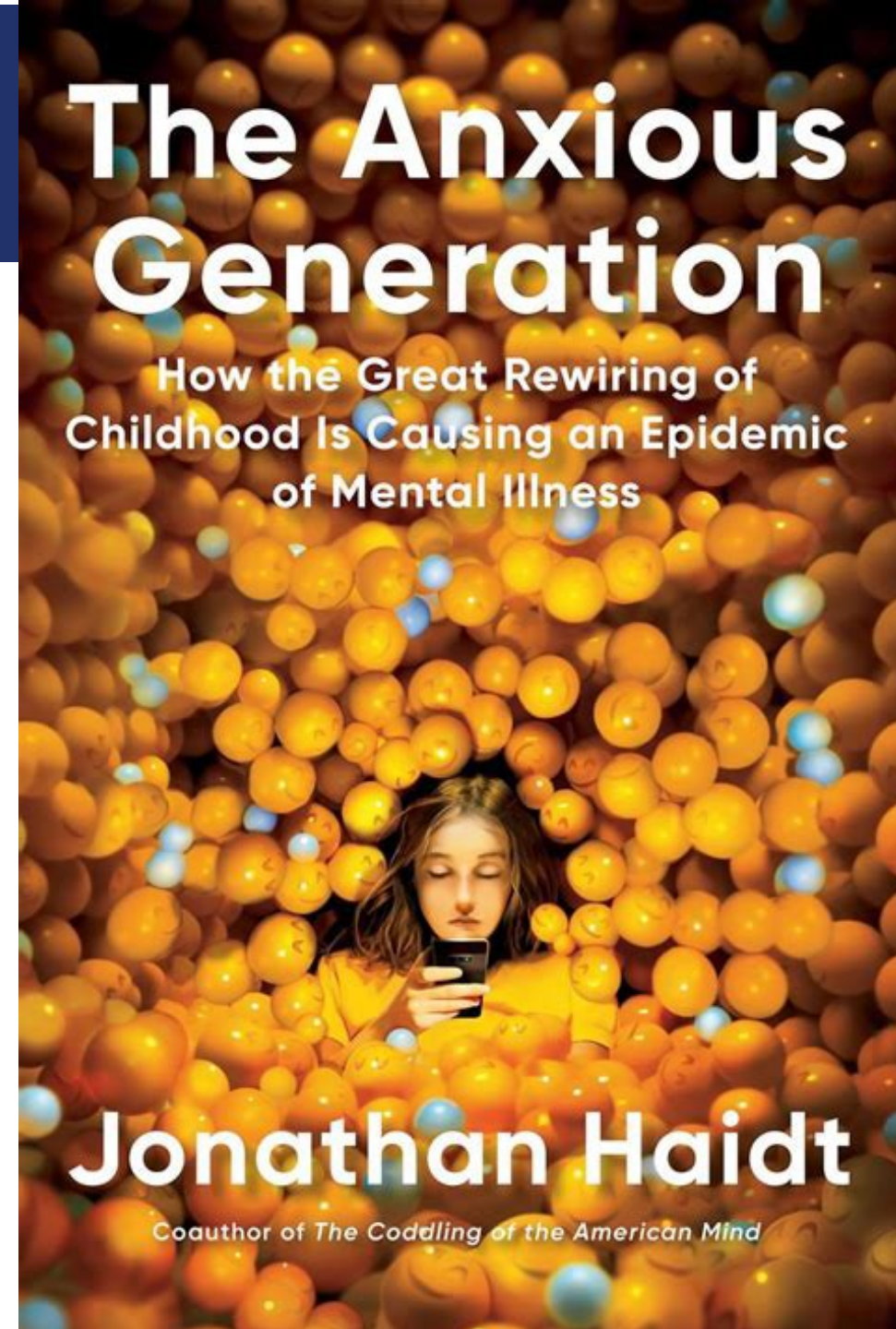
Register by sending a message to Roel Snieder ([rsnieder@mines.edu](mailto:rsnieder@mines.edu))

# The Anxious Generation

How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness

Jonathan Haidt

Coauthor of *The Coddling of the American Mind*



## Do you feel stuck or disconnected?

Does your life feel stagnant, repetitive, stressful, or without purpose?

Are you seeking to harmonize professional and personal life? Discover how to renew your life by gaining a higher perspective.

[Learn More](#)



### Meet Roel Snieder

Roel Snieder is a licensed Freedom Coach and a teacher at heart. As a scientist, he worked for many years with people who tend to live in their head, relying on their analytical thinking. Since he does coaching sessions using a video link, he works with clients world-wide.

Roel has personally experienced the process of transformation to the fullness of living from the head and from the heart. Over the years he has counseled many people in this process and developed and taught classes on *Wellness* and on *Science and Spirituality* at an engineering college. He has extensive experience coaching professionals in education, science, or engineering.

Read more about his life and how he transformed his life from a scientist to a coach. [The Art of Science](#)





## Mental Health / Suicide Prevention Trainings

As part of the Every Oredigger Initiative, Colorado School of Mines is working to establish and maintain a strong stratified campus support network of students, faculty, and staff knowledgeable about mental health and suicide and able to respond effectively to those who need help.

This tiered network includes a broad base of faculty, staff and students who are trained in resilience and active listening, as well as recognizing warning signs and becoming familiar with campus and community resources. A smaller subset of individuals on campus are trained in intervention and safety planning.

Orediggers who attend trainings that prepare them to assist someone who may be dealing with a mental health crisis or thoughts of suicide will be given a green placard to hang up in or near their office or desk. This placard is a sign to students, faculty and staff that they are a safe person who cares and can connect those in need to appropriate resources. It also indicates that they are an advocate for mental health and well-being on campus.

### Spring 2024 Training Schedule





CURIOSITY

DEEPLY LISTEN SPEAK

QUESTION UNARGUABLY BELIEFS



PLAY



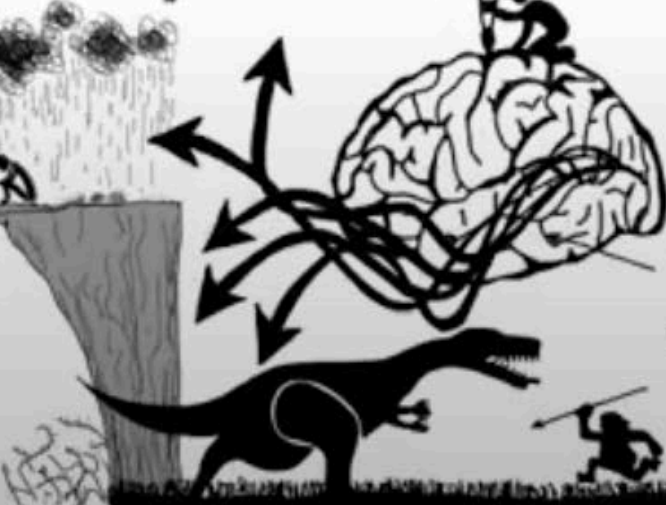
OPEN CURIOUS COMMITTED TO LEARNING



WHERE AM I?  
WINNING!

COMMITTED TO BEING RIGHT DEFENSIVE CLOSED

RIGHT MONEY ENERGY LOVE  
NOT ENOUGH SPACE  
TIME STORY



RATIONALIZE AND JUSTIFY

CONTROL

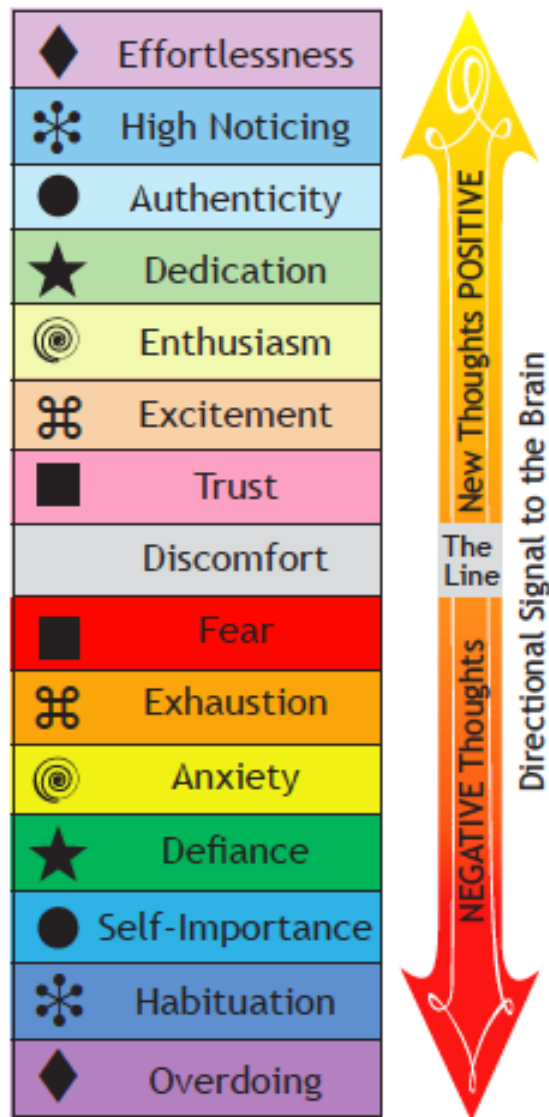
FAULT AND BLAME

GOSSIP



# SHIFT

to positive thoughts  
& powerful results



# Group conversation

1. Pick two mindsets below the line that you experience frequently.
2. Look at the corresponding mindsets above the line.
3. What pushes you below the line?
4. How can you lift yourself above the line?

# SHIFT

to positive thoughts  
& powerful results

