

New Faculty Orientation

FACULTY CLASS OF 2023-24

August 15-18, 2023

New Faculty Schedule of Events

	TUESDAY 8/15	WEDNESDAY 8/16	THURSDAY 8/17	FRIDAY 8/18 * Wear your	
	(Marquez 108)	(Marquez 108)	(Marquez 108)	new Mines shirts 😊	
Time	Orientation to Effective Teaching for New Faculty	New Faculty	Orientation	Campus Conference	
8:30 - 9:00	Light Breakfast	Light Breakfast	Light Breakfast w/ Andy Herring	M Climb	
9:00 – 10:00	Overview of Effective Teaching at Mines Trefny Center Staff (10-minute break 9:50 – 10:00)	Welcome, Cohort of 2023! Kamini Singha & Roel Snieder (15-minute break 9:45-10)	Institutional Equity Sareen Lambright Dale, Carole Goddard & Kristin Moulton (15-minute break 9:45-10)	(encouraged if able, meet at the Faculty/Staff tent outside the ORC at 7:30 am)	
10:00 - 11:00	Active and Inclusive Classrooms Trefny Center Staff (10-minute break 10:50 – 11:00)	Overview and Vision of the Mines Community Terri Hogue (15-minute break 10:45-11)	Diversity, Inclusion and Access Kate Youmans (15-minute break 10:45-11)	Campus BBQ	
11:00 – 12:00	Feedback and Assessment Trefny Center Staff	Services & Support Andrew Moore & Rose Foster: ITS, Johanna Eagan: ORA, Christine Homer: HR, Brianna Buljung & Seth Vuletich: Library, Tim Sweitzer: EHS, Walt Copan: VPRTT, Allyce Horan: Writing Center	Workshops (two options): 1) Mines Online: Sam Spiegel 2) Promotion and tenure: Andy Herring & Kamini Singha	Kafadar Commons (11:30-12:30 pm)	
12:00 - 1:00	Lunch and mingle	Lunch and mingle (Marquez Atrium)	Lunch and mingle (Marquez Atrium)	New Faculty Introductions	
1:00 – 2:00	Faculty/staff headshots Kafadar Commons near the 3-prong statue (1:00 – 3:30)	Student Panel: Mines Undergraduate & Graduate Students Share Colin Terry + Tim Barbari – Moderators	 Building a meaningful service portfolio: Alexis Sitchler Applying for external funding to launch your research career: Walt Copan, Lisa Kinzel, Johanna Eagan & Corinne Packard (15-minute break 1:45-2) 	Bunker Auditorium (Green Center) (12:30-1:30 pm)	
2:00 – 3:00	 Drop-in basis (5-10 min / person depending on how busy it is) Bring a piece of paper with your full name written on it in large letters 	(runs until 2:15; 15-minute break 2:15-2:30) Wellness in the Mines Community Roel Snieder, Colin Terry +(2:30-4:00)	 Entrepreneurship and Innovation: Sid Saleh, Zack Bennett & Victoria Bill Being and finding mentors: Gabe Walton (15-minute break 2:45-3) 	Campus Conference & Expo MINES-a-palooza Friedhoff Hall (Green Center (1:30-4:30 pm)	
3:00 – 4:00			Wrap Up: What will you bring to Mines? Roel Snieder & Kamini Singha		
4:00 - 5:00		Campus Tour**			
5:00 - 6:00		Reception** Blaster Room @ Marv Kay Stadium	Campus Convocation (5:00 Lockridge Arena, Student Rec Center)		

^{**} Partner invited as well; RSVP to Kim Luzeckyj (kluzeckyj@mines.edu)



NEW FACULTY WELCOME RECEPTION

YOU'RE INVITED!

Mix and mingle with the incoming Faculty Class of 2023.

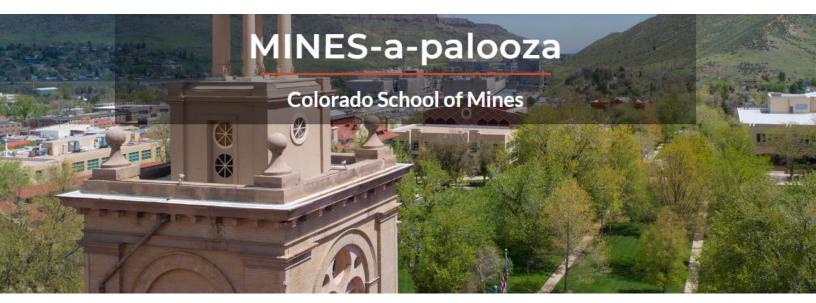
Refreshments will be served.

RSVP: Monday, August 7th

Wednesday, August 16 5:00 – 6:00 pm

Marv Kay Stadium - Blaster Room





2023 MINES-a-palooza

Join us in Friedhoff Hall for a conference expo-style event featuring posters describing Mines@150 progress, meet those leading these initiatives, and learn more about campus programs at information tables throughout.

Come reconnect with colleagues to hear about summer adventures, meet those who you may have only connected with through email or Teams, and welcome new members to the Mines Community.

Schedule of Events

7:30 am

M Climb, first wave

Meet at the faculty and staff tent outside the ORC along Elm Street.

M CLIMB SIGN-UP

11:30 am - 1:00 pm

Campus BBQ for all faculty and staff Kafadar Commons

12:30 pm - 1:30 pm

Faculty Welcome and New Faculty Introductions Bunker Auditorium

1:15 pm - 4:30 pm - Friedhoff Hall

Campus Conference & Expo – "MINES-a-palooza"

Poster session and booths – see full list of presenters below

Approximately 2 pm

President Johnson Welcome

Approximately 3 pm

Research Initiatives Overview with Walt Copan

Cake, desserts, light appetizers, beer and wine available throughout the event.



MINES-a-palooza - President's Office

Campus Map 2022-23 **COLORADO**SCHOOLOF**MINES** 10 Clear Creek Tr. 10th St. LOT Information Jim Darden Baseball Field **Emergency Phones** M Dining Pedestrian Plaza CLEAR CREEK ATHLETICS COMPLEX **GOLDEN** C C 12th St. 6 Pedestrian Walkway D D Geology Museum LOT LOT Е Ε Lab McNeil Hall LOT Q Arthur Hill Hall LOT Green ¢enter CoorsTek Center for Applied Science LOT Sigma Nu LOT G G Sorority Grounds LOT Bookstore Kappa Alpha Theta Sorority OT C Marquez Hall Unit Operati 1600 Brown Hall **GREEK** IOT HOUSING 1750 Jackson Parking Garage II Beck Venture & Classroom Center (under under construction) construction) Title IX Street WISEM Fraternity VISITOR **(**) ROTC/ Military Science 19th St. 19th St. LOT FF & Receiving Jones Rd. 1920 Jones Rd. SOUTH MINES PARK CAMPUS (see inset below) LOT AA10 6 **Destinations** H10 Guggenheim Hall J6 Hill Hall H7 Human Resources (in Guggenheim Hall) 1600 Jackson Street Admissions (in Starzer Welcome Center) Alderson Hall University Honors and Scholars U.S. Geological Survey Wellness Center, W. Lloyd Wright Student H6 17 Early Development 1813 1809 1805 Center (under construction) 1815 1807 Alumni Office (in Starzer Welcome Center) Berthoud Hall Blaster Card Office (in Elm Hall) Infrastructure and Operations International Programs (in Green Center, 2nd floor) Intramural Fields Women in Science, Engineering and Mathematics (WISEM) 16 1811 1807 **Athletics** LOT MPG Kafadar Commons Library, Arthur Lakes Lock Shop Marquez Hall McNeil Hall and Parking Garage Mines Market Dining (in Elm Residence Hall) Harold M. & Patricia M. Korell Athletic Center Jim Darden Baseball Field Lockridge Arena (in Student Recreation Center) Bookstore (in Student Center) Brown Hall Center for Academic Services & Advising/CASA H5 Center for Technology and Learning Media/CTLM Central Storage and Receiving Chauvenet Hall Marv Kay Stadium at Harry D. Campbell Field Softball Field Steinhauer Fieldhouse **MINES PARK** LOT Moly Bldg. Colorado Geological Survey (In Moly Building) Coolbaugh Hall CoorsTek Center for Applied Science and Engineering Moly Building Multicultural Engineering Program (in Coolbaugh House) Music Program Stermole Soccer Stadium Stermole Track & Field Complex/Crouch Field Events Complex Volk Gymnasium inset E7 G7 MB Colorado Geological Survey B3 C2-3 1905 1907 1911 Outdoor Recreation (in Student Recreation Center) Parking Services Periodic Table Food Court (in Student Center) Early Childhood Development Center (under construction) Earth Mechanics Institute/Drilling Lab (EMI) Engineering Hall Residence Life 1750 Jackson Street 110 G5 Engineering Hall Engineering Hall Annex Environmental Health & Safety Facilities Management (FM) (In Moly Building) Foundation (in Starzer Welcome Center) General Research Laboratory (GRL) General Research Laboratory Annex Geology Museum Aspen Hall Advising Center Bradford Hall Elm Residence Hall and Mines Market Dining President's Residence Public Safety/Police ROTC/Military Science 14 F5 15 inset 6 Starzer Welcome Center - Campus Tours and Information Stratton Hall (SH)/Stratton Commons Student Activities Office (in Student Center) Maple Hall Mines Park Morgan Hall 2023 inset F5 Geology Museum Geophysics Green Center: Bunker Auditorium and Friedhoff, Student Center, Ben H. Parker G5 Student Outreach and Support (includes Disability Support Services) 15 Student Recreation Center H5 G5 I-J6 F5 Randall Hall Spruce Hall Thomas Hall Metals and Petroleum Halls Weaver Towers I-J5 G9 Unit Operations Lab Map by Paul Horn *under construction

Please visit New Faculty Information on the Mines Academic Affairs website:

New Faculty Orientation

You will find resources to help you get started and situated at Mines!

PARKING

The parking code G2205V can be used to park in any of the yellow or blue lots on campus that have a pay station meter (shown on the attached parking map by the orange circle). This code will be good for the entire week of August 14-18, 2023.

FREE FACULTY HEADSHOTS - 8/15/23 @ 1:00pm

The <u>Mines Office of Communications and Marketing</u> is happy to offer free professional headshots.

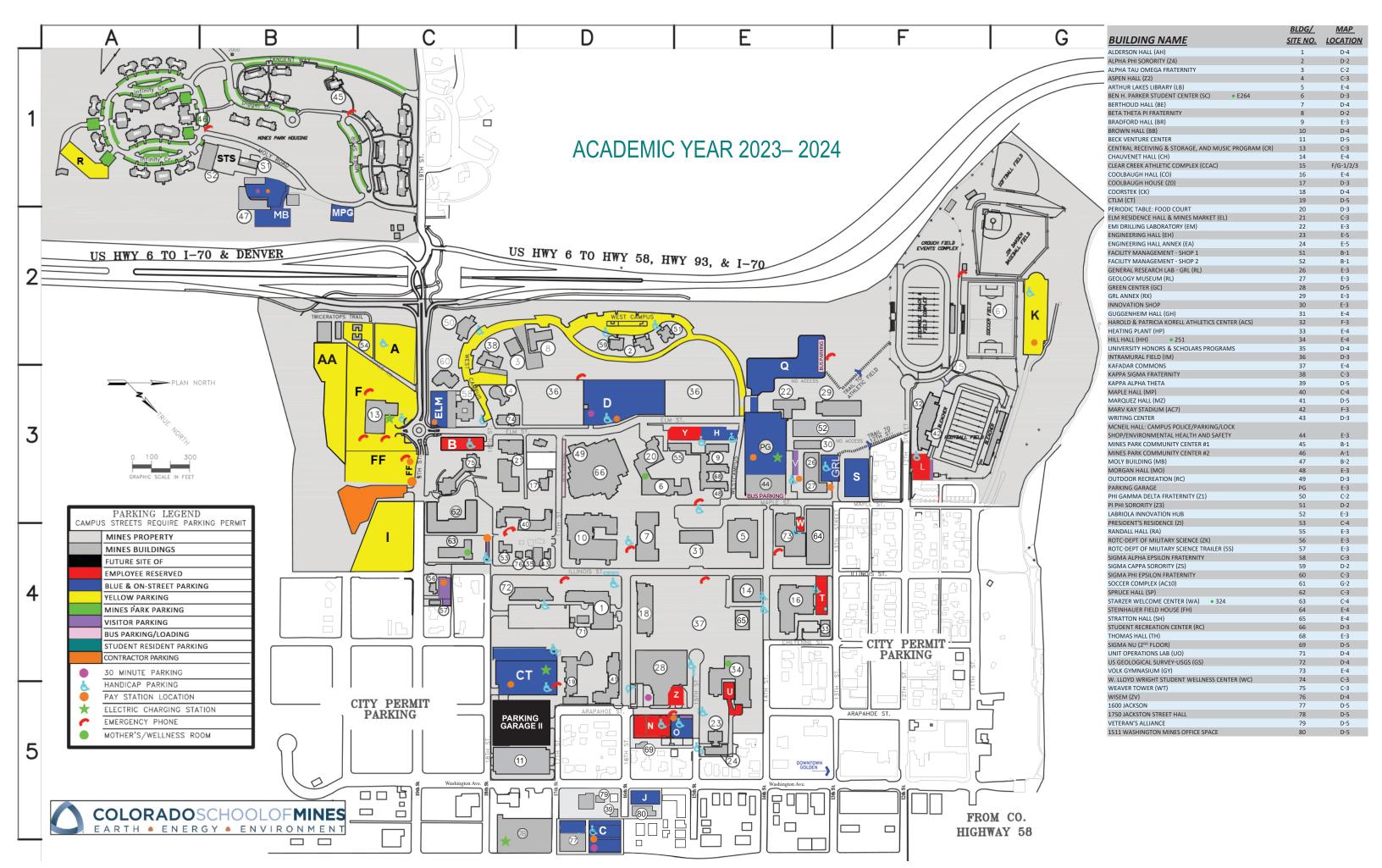
Headshots will take ~5-10 min/person.

- Headshots will be taken outdoors in the Kafadar Commons near the 3prong statue beginning from 1:00pm – 3:30pm on Tuesday, August 15th after your Orientation to Effective Teaching at Mines
- Please bring a piece of paper with your full name written on it in large letters

If you are unable to attend the session below during orientation, please send me (kluzeckyj@mines.edu) a photo/headshot to accompany your formal biography for the Board of Trustees.

Attire is up to you or your department.

Questions? Contact Agata Bogucka - abogucka@mines.edu



Contact Us: https://www.mines.edu/contact/

Administrative Departments

Academic Affairs: 303-273-3320

Admissions: 303-384-2027

Admissions, Undergraduate: 303-273-3220

Admissions, Graduate: 303-273-3247 | 800-446-9488

Alumni Association: 303-273-3275

Athletics: 303-273-3360

<u>Board of Trustees</u>: 303-273-3280
 <u>Budget and Planning</u>: 303-273-3064

Business Services for Infrastructure and Operations: 303-273-3330

• <u>Campus Events</u>: 303-869-5400

• Capital Planning and Design: 303-273-3077

Career Center: 303-273-3233

Center for Academic Services and Advising (CASA): 303-273-3081

<u>Communications and Marketing</u> (public relations, newsroom)

Compliance and Policy: 303-384-2546

• <u>Continuing and Professional Education</u>: 303-384-2690

• <u>Controller's Office</u>: 303-273-3166

• <u>Copy Center</u>: 303-273-3202

• <u>Counseling Center</u>: 303-273-3377

<u>Disability Support Services</u>: 303-273-3297

• <u>Distribution & Mail Services</u>: 303-273-3267

Diversity, Inclusion & Access: 303-273-3146

Energy and Materials Programs Portfolio: 303-384-2620

Environmental Health and Safety: 303-273-3316

<u>Facilities Management:</u> 303-273-3330

• Finance, Administration and Operations: 303-273-3240

<u>Financial Aid</u>: 303-273-3301<u>Food Services</u>: 303-273-3358

• Foundation: 303-273-3275

• Global Education: 303-273-3210

Global Initiatives and Business Development

Graduate Studies, Office of: 303-384-2551

• Green Center Reservations: 303-273-3460

Human Resources: 303-273-3250

• <u>Infrastructure and Operations</u>: 303-273-3330

<u>Information & Technology Solutions</u> (formerly Computing, Communications & Information Technologies):
 303-384-2345

• Institutional Research: 303-273-3383

• Internal Audit: 303-384-2504

• McNeil Center for Entrepreneurship & Innovation

Contact Us: https://www.mines.edu/contact/

Administrative Departments (cont.)

- Mines Administrative Processing Services (MAPS): 303-273-3166
- Newsroom (Communications and Marketing)
- Office of Design and Construction (formerly Capital Planning and Construction): 303-273-3568
- Office of General Counsel: 303-273-3325
- Parking: 303-273-3100
- President's Office: 303-273-3280
- Project Management Office
- <u>Public Safety</u>: 303-273-3333
- Purchasing: 303-273-3258
- Recreational Sports: 303-273-3513
- Registrar: 303-273-3200
- Research Administration: 303-273-3411
- Research and Technology Transfer: 303-273-3327
- Residence Life and Housing: 303-869-5433
- Student Activities, Involvement and Leadership (SAIL): 303-273-3234
- Student Health Center: 303-273-3381
- <u>Student Life</u>: 303-273-3231
- Student Recreation Center: 303-273-3513
- Student Wellness Center: 303-273-3377
- Sustainability Office: 303-384-2413
- <u>Title IX</u>: 303-273-3260
- Trefny Innovative Instruction Center
- Women in Science, Engineering and Mathematics: 303-273-3498

Student Support Services

- Advising, Center for Academic Services and Advising (CASA)
- Bursar's Office: 303-273-3158
- <u>Career Center</u>: 303-273-3233
- Center for Academic Services and Advising (CASA)
- <u>Counseling Center</u>: 303-273-3377
- Disability Support Services: 303-273-3297
- <u>Financial Aid</u>: 303-273-3301
- Office of Graduate Studies: 303-384-2551
- International Student and Scholar Services
- <u>Library</u>: 303-273-3690
- McNeil Center for Entrepreneurship & Innovation
- Recreational Sports: 303-273-3513
- Registrar's Office: 303-273-3200
- Residence Life and Housing: 303-869-5433
- Special Programs and Continuing Education: 303-384-2690

Contact Us: https://www.mines.edu/contact/

Student Support Services (cont.)

Student Activities: 303-273-3234

• Student Health Center: 303-273-3381

Student Life: 303-273-3231

Student Wellness Center: 303-273-3377

• Writing Center: 303-273-3085

Academic Departments

- Applied Mathematics & Statistics
- Arthur Lakes Library
- Chemical and Biological Engineering
- Chemistry
- Civil & Environmental Engineering
- Colorado Geological Survey
- <u>Computer Science</u>
- <u>Economics & Business</u>
- <u>Electrical Engineering</u>
- Engineering, Design, & Society
- Geology & Geological Engineering
- Geophysics
- Humanities, Arts, and Social Sciences

Interdisciplinary Programs

- Advanced Energy Systems
- Advanced Manufacturing
- Data Science
- Energy (minor)
- FEA Professional
- Geochemistry
- GIS and Geoinformatics
- Humanitarian Engineering and Science
- Hydrologic Science and Engineering
- Materials Science
- Military Science/ROTC
- Nuclear Science & Engineering
- Operations Research with Engineering
- Quantitative Biosciences and Engineering
- Quantum Engineering
- Robotics
- Space Resources
- Underground Construction and Tunnel Engineering

INFRASTRUCTURE AND OPERATIONS DIVISION (https://www.mines.edu/operations/)

303-273-3000 / 800-446-9488

Operations After Hours Contact Information and Procedures

Updated 8/4/23

The intent of these after-hours contact procedures is to get maximum service to customers on campus after 4:30pm M-F and on weekends.

Guiding Principles

There are many instances where an emergency can be handled by staff already on campus. The first responder (normally someone from custodial or the heat plant) will determine if the situation warrants being remedied immediately and if it can be remedied immediately. If the first responder determines that immediate remediation is needed but cannot handle the situation on their own, then the first responder will call other staff who can correct the issue. In the event of an emergency call 911.

First Responder Contact Information

Facilities Management Main Phone Number: 303-273-3330

*Call this number first. FM now has a cell phone that is attached to the main FM phone line. The cell phone will be answered by a custodian or another FM employee during the after-hours and weekends.

Heating Plant:

Controllers Room 303-384-2211

<u>Public Safety</u>:

Normal Hours 303-273-3333

After Hours 303-980-7300 Jeffcom Dispatch (Non-Emergency)

Pat Bahl 303-513-9126 Sergent
Dave Cillessen 303-524-2844 Commander

Additional contact information:

EMERGENCIES AND URGENT HELP

WORK ORDER

PARKING SERVICES

ACCESS SERVICES (LOCK SHOP)

NEW EQUIPMENT REVIEW & APPROVAL

OUTAGES / CONSTRUCTION ANNOUNCEMENTS

DISTRIBUTION SERVICES

SUSTAINABILITY

BUSINESS SERVICES

ENVIRONMENTAL HEALTH & SAFETY

FACILITIES MANAGEMENT

OFFICE OF DESIGN AND CONSTRUCTION

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

https://ora.mines.edu ora@mines.edu

Mines Research Basics

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 fund/index 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/ora-department/



MINES.

Research and Technology Transfer



Walt Copan Vice President of Research and Technology Transfer wcopan@mines.edu



Lisa Kinzel
Director, Research Development
Ikinzel@mines.edu



Alyssa Von Lehman Lopez Research & Proposal Development Manager avonlehmanlopez@mines.edu



Jenny Crawford Research Grant Developer (303) 384-2722 jennycrawford@mines.edu



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Electron Microscopy

FEI Helios Nanolab 600i FIB/SEM

FEI Quanta 600i Environmental SEM

FEI Talos F200x TEM/STEM

FEI Tecnai T12

JEOL JSM-7000f Field Emission SEM

PHENOM SEM

TESCAN S8252G Raman SEM/FIB*

Mechanical Testing

MARK-1- ESM 1500

MTS Alliance RT/100

INSTU-MET Renew 1125

SATEC SONNTAG Fatigue Testing System SF-1-U

DIC Fatigue Dynamics RBF-200 Rotating Bending Fatigue

DSI Gleeble 3500-GTC

MTS Exceed E22 Impact Tester

MTS Landmark 370.10

MTS Landmark 370.25

MTS 312.21 Top Actuator

MTS 312.21 Hydraulic Grips

MTS 312.21 Bending Under Tension

MTS 312.41

MTS 810 Material Test System 318.50

Extensometers

Digital Image Correction

Heater and Cooling Furnaces

Scanning Probe & Optical Microscopy

ASYLUM MFP-3D Scanning Probe Microscope

DIGITAL INSTRUMENTS Atomic Force Microscope

KEYENCE VHX-5000

D-600 Profilometer

WITEC Laser Confocal Raman Microscope

Nanofabrication

Class 1,000 Clean rooms

ABM UV Mask Aligner

AUTO GLOW 200 Reactive Ion Etcher

KARL SUSS MJB3 UV400 Mask Aligners

ULVAC-RIKO MILO-5000 Rapid Thermal Annealer

Diffusion Furnace

High Temperature Furnace

Rapid Thermal Annealer

Vacuum Furnace

Wet & Dry Oxidation Furnaces

TPT hb05 Wire Bonder

X-Ray Diffraction & **Computed Tomography**

PANALYTICAL Empryean Modular X-Ray Diffractometer*

PANALYTICAL X'Pert Pro X-Ray Diffractometer

ZEISS Versa 520 XCT*

For more detailed information on instrumentation capabilities, to request access or assistance, and view user rates, please visit:

Optical & Electrical Characterization

CARY 5G UV-VIS Spectrometer

Four Point Probe/ Electrical Probe Station

FTIR Spectrometer/Ellipsometer

Janis SHI-4-2 Cryostat

HL5500 Hall Effect Measurement System

Solar Simulator w/EQE

WOOLLAM M-2000 Ellipsometer

Thin Film Deposition

AJA Sputtering System

ANGSTROM Thermal Evaporator

Tabletop Gold Sputter Coater

High Temperature Thermal Evaporator

AJA UHV Multi-Technique Deposition System

Semicore Sputtering System

Mass Spectrometry

CAMECA APT LEAP 4000X SI

IONTOF TOF-SIMS.V*

SCIEX 5500 Triple Quad

SCIEX X500R QToF

X-Ray Photoelectron Spectroscopy^{*}



* Instrument has in situ capabilities



Meet the Team



Dave Diercks
SIF Director
ddiercks@mines.edu



Anne Steputis
SIF Administrator
steputis@mines.edu

For more detailed information on instrumentation capabilities, to request access or assistance, and view user rates, please visit:

Mines.edu/Shared-Facilities





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Garrison Hommer

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Manager & Technical Expert

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Xerxes Steirer

X-Ray Facilities Manager

& Technical Expert

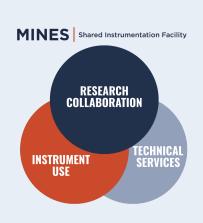
ksteirer@mines.edu



Michael Walker
TOF-SIMS Specialist
mawalker@mines.edu



Gary Zito
SEM Technical Expert
gzito@mines.edu



TOP 10 THINGS

FOR FACULTY TO KNOW ABOUT ARTHUR LAKES LIBRARY

1. Ask a Librarian

Consult with a research librarian

2. Library Catalog

Search for books, journals, maps, articles and more

3. Prospector & Interlibrary Loan

Search regional libraries via Prospector and request articles and more via Interlibrary Loan

4. Database Collections

Find all our databases in your discipline

5. Off Campus Access

Get access to library resources off campus

libguides.mines.edu/offcampusaccess

6. Partner with an Instruction Librarian

Incorporate research and source evaluation skills into your courses and assignments, contact Brianna to get started

7. Research Guides

Locate databases in your discipline and direct your students on the best places to start their research libguides.mines.edu

8. Course Reserves

Place textbooks on hold for student use or create a customized reading lists in Canvas's Course Readings. Contact Chris to get started

9. Consult on Research

Consult on author rights, research data management, and more, contact Seth to get started

10. Open Educational Resources

Adopt or create open and free educational resources in your courses to better support your learning objectives and save students money

Explore these things and more at library.mines.edu or stop by and chat with us!



Seth Vuletich

Scholarly Communications Librarian sethvuletich@mines.edu



Brianna Buljung
Teaching & Learning Librarian
bblujung@mines.edu



Chris Thiry
Academic Outreach Librarian
cthiry@mines.edu



MISSION

The Trefny Innovative Instruction Center's mission is to inspire an institutional culture that values, studies, and implements transformative teaching and learning at Mines. The Center provides leadership, consultation, resources, and programs to achieve the four areas of our mission:

TEACHING & LEARNING

Promote teaching that is intentionally designed, supportive of students, focused on learning, and reflective.

EDUCATION RESEARCH

Further data-driven instruction and education research.

UNIVERSITY LEADERSHIP

Trefny Center

Advance teaching and learning through university strategic planning, initiatives, and policy.

COMMUNITY

Foster a collaborative, learning-centered teaching community.

SERVICES WE OFFER



WORKSHOPS AND EVENTS: We offer a variety of events and gatherings throughout the year. Scan the QR code to see our upcoming events and active learning communities.



LEARNING PROGRAMS: We offer in-depth learning programs to support faculty and graduate students in improving teaching and learning. Scan the QR code to explore our offerings!



EARLY COURSE FEEDBACK (ECF): Interested in collecting student feedback midway through the semester? An ECF is a great way to hear from students about their learning experience in your course, and can give you valuable feedback in time to make adjustments during the semester. Scan the QR Code to request an ECF!

INDIVIDUAL CONSULTATIONS:

- Do you have questions about teaching and learning? Contact a Faculty Developer (**facdev@mines.edu**) to explore your questions and brainstorm ideas.
- Do you have questions about assessment or conducting classroom-based research? Contact Megan Sanders, Senior Assessment Associate, at **sanders@mines.edu**.



EDUCATIONAL MULTIMEDIA: The HIVE **H**elps develop **I**nstructional resources, **V**ideo and **E**ducational media for the Mines community through our dedicated student-employee team. Scan the QR code to learn more about how we can help you enhance your in-person and online courses.



Scan the QR code to learn more about our full range of services, including grant support, institution-level committee work, department consultations, and more!

NEW FACULTY LEARNING COMMUNITY

Overview

Are you a new faculty member at Mines? Are you interested in support and community as you teach your course(s)?

Join the New Faculty Learning Community (NFLC), an opportunity to discuss teaching and learning with colleagues from across the university throughout the academic year. During the NFLC, which meets approximately monthly, you will engage in informal discussions around teaching and learning and get support and resources to help you teach at Mines. The goals of the NFLC are to: 1) build community, 2) support new faculty, and 3) promote evidence-based teaching practices.

Who should join the NFLC?

We encourage new faculty (and those who started at Mines over the past several years) to join us! Whether you are new to teaching or have a lot of prior experience teaching, we welcome you to join the NFLC.

Why should you join the NFLC?

Our goal for this learning community is to provide support and to help set you up for success when you teach at Mines. During the NFLC, you will connect with other new faculty, reflect on your teaching experiences, share resources, build community, and engage in conversations that can help you in your own classes.

For more information and to join:

Go to https://tinyurl.com/TrefnyNFLC or scan the QR code.





Welcome to the HIVE!

The HIVE is a part of the Trefny Innovative Instruction Center at the Colorado School of Mines

At the HIVE, we can help you create instructional media to broaden the scope of who you can reach as well as deepen the impact that you can have

We have a range of resources available and look forward to working with you

Please visit our website

for more information,
FAQs, tutorials, and
to schedule an
appointment to get
started with creating
the perfect media for
your instructional
needs

References

[1] "Special Edition." Journal of STEM Education, 2010, pp. 24–25.
[2] Liu, Z. and Yuan, S. M. (2005). The construction of web-based mastery learning system.
[3] Malhotra, Nisha. "Asynchronous Video: A Powerful Way to Teach, Present, and Communicate with Students: Faculty Focus." Faculty Focus | Higher Ed Teaching & Dearning, & June 2021, www.facultyfocus.com/articles/online-education/online-course delivery-and-instruction/asynchronous-video-a-powerful-way-to teach-present-and-communicate-with-students/

The HIVE

Helps develop
Instructional resources,
Video and
Educational media





Our student employee team provides multimedia support for online, remote, and campus courses

What We Do

Enhance the use of multimedia to provide effective and efficient ways for learning by:

- Editing instructional footage
- Providing recording equipment for checkout (cameras, microphones, tripods, etc.)
- Self-service use of our two Voiceover/Screen Capture recording studios (with Camtasia software)
- Self-service use of our Green Screen Studio
- Self-service use of our Lightboard Studio
- Live filming of special events
- Providing Resources and Tutorials through our website

The Process

- Schedule an appointment for one of the HIVE Services
- Pre-Production Meeting: discuss and plan out your project needs and timeline
- Record Your Multimedia: use one of our self-service studios, check out equipment, or record via Zoom, etc.
- Upload your MP4 Footage through our Website: once received, our HIVE team will edit the audio and video, incorporating any requests you may have; please allow 1-2 weeks for editing
- Once Complete: a draft will be sent to you to review, with revisions made as needed
- Final Videos: are stored in our system for continuing access

Results

HIVE ANNUAL RECAP	2017	2018	2019	2020	2021	2022
Pre-Production Planning Meetings	21	37	68	47	34	48
Voiceover Recordings	11	27	103	23	16	51
Green Screen / Lightboard (new in 2021)	96	62	133	20	7/9	59 / 24
Equipment Checkouts	3	33	82	39	19	16
Filming of a Lecture, Seminar or Other						
Special Event on Campus	14	69	19	11	10	16
Number of Students, Faculty, Staff, and						
Students We Have Worked With	180	183	226	241	237	224
Completed Videos	389	435	600	932	1143	936
Video Views	29,000	53,000	49,000	131,000	167,000	191,700

Importance of Instructional Media

- "Multimedia-based instructional materials have been identified as an important tool for managers and students in their efforts to connect and apply classroom theory-based learning with the analysis of real world problems." [1]
- "Incorporating simulation or multimedia content into instructional materials enhances student understanding and retention." [1, 2]

Benefits of Instructional Media

- Ability to replay instructional videos to review: 51.2% of students replayed lectures 2-4 times in a case study [3]
- Ability to access instruction when it is needed, such as for review, taking notes at an individual pace, catching up, and asynchronous instruction to best fit personal schedules. [3]

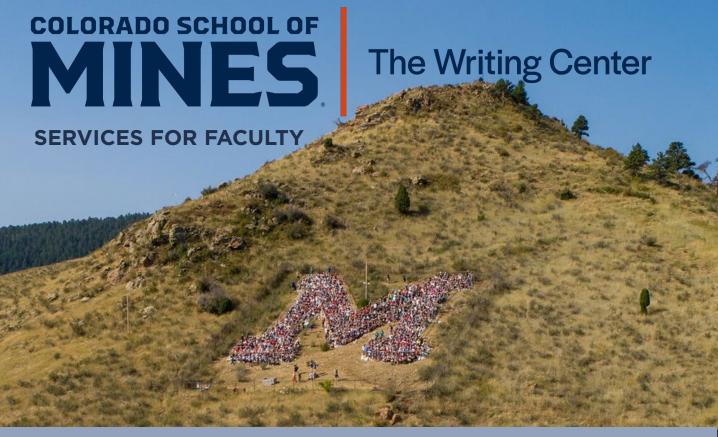
CONTACT US

Location: Green Center Room 211

Phone: (303) 384-2678 Email: sciriello@mines.edu

Website:

trefnycenter.mines.edu/hive/



The Writing Center can help you reach your pedagogical and professional goals.

We can assist you with:

- teaching in-class writing workshops tailored for your class and pedagogical style.
- planning and designing scaffolded writing assignments, write-to-learn activities and essay prompts.
- reviewing scholarly publications, proposals and reports.

Please contact the Writing Center Director, Allyce Horan, at ahoran@mines.edu with any questions!

You can also learn more about the Writing Center at writing.mines.edu.



The Writing Center

The Online Technical Communication Center (OTCC) connects students and faculty with resources to develop their oral and written communication skills in STEM.

Our resources are designed to be shared and modified by faculty to meet individual class needs.

Each resource includes an explanatory video, accompanying handout, and engaging exercise sheet.

otcc.mines.edu

Ways Orediggers can engage with MINES DI&A •••



FOUNDATIONAL

Appropriate for those looking to build on and increase their knowledge of diversity,

INTERMEDIATE

equity and inclusion.

ADVANCED

For those who are looking to increase their expertise in diversity, equity and inclusion.

Foundation level content often provides an introductory or basic understanding of diversity, equity and inclusion.

Try an Inclusion Icebreaker at your next meeting

Review Equity Resources

Join a Mines Community Alliance (MCA)

Attend campus DI&A events

Join a student organization supported by WISEM or MEP

Participate in Mines Climate Surveys

Attend workshops at the annual Celebration of DI&A Join the Mines DI&A Council

Submit a DI&A Award nomination

Apply for a Community Grant

Introduce yourself with your pronouns, include in email signature Incorporate DI&A best practices in candidate reviews & selection

Promote Hiring Excellence

Join a department/unit diversity committee

Become an Ambassador, Advocate, Fellow or MCA Chair

Incorporate DI&A best practices in grants and proposals

Include DI&A in performance management

Lead a K-12 outreach activity

Use the Inclusive Classroom Checklist

Advise a student organization

Facilitate a workshop at the annual Celebration of DI&A

Welcome to Mines!

In spring of 2019, campus published its first Strategic Plan for diversity, inclusion and access. Over 100 Orediggers contributed to its production through focus groups, council representation and town halls. As a new member to the community, you are strongly encouraged to read it and find your unique way to contribute to the 24 recommendations found within.



Strategic Plan for Mines DI&A

Meet the Team



Dr. Kate Youmans

Presidential Fellow for Access, Attainment & Diversity



Kelly Olson

Associate Director



Heather Houlton

Program Manager -Research Analyst



Serena Lewis

Administrative Coordinator

The Mines DI&A staff are located in the WISEM house, 1710 Illinois St., or reachable by emailing diversity@mines.edu.





WOMEN IN SCIENCE, ENGINEERING AND MATHEMATICS PROGRAM (WISEM)







WISEM is dedicated to promoting and supporting women in STEM. Through WISEM, Mines is committed to increasing the number of women who aspire to be future engineers, scientists and business leaders, including those who come to Mines with a goal of making the world a better place.

MISSION

To enhance opportunities, provide advocacy and implement programming for women on campus while ensuring an inclusive and equitable environment for all students, faculty and staff.

VISION

To serve as the comprehensive program for enhancing women's experiences at Mines by:

- preparing students for successful, sustainable, rewarding careers.
- equipping Mines employees with professional success and advancement opportunities.
- providing all members of the Mines community with educational opportunities and resources that contribute to an inclusive and welcoming campus environment.

SIGNATURE EVENTS

- The Continuum, an event celebrating graduating women each fall and spring
- The Chevron Lecture Series and Luncheon featuring an outstanding woman leader in science, engineering or business
- Women's History Month Luncheon and events commemorating women's accomplishments throughout history

EMPLOYEES

PROFESSIONAL DEVELOPMENT SERIES

A series of workshops and lectures for women employees on campus.

WOMEN EMPLOYEE GROUPS

Opportunities for women to build community across campus, including EMPOWER, Administrative Professionals, Teaching Faculty, Tenure/Tenure Track Faculty, AMI and the Women Mines Community Alliance.

STUDENTS

RECRUITMENT

In partnership with Mines Admissions, *Making the Connection*, sponsored by Halliburton, is a program for high school women who are accepted to Mines. The program highlights the outstanding achievements of Mines women and the diversity of STEM disciplines.

OUTREACH

Full STEM Ahead at Mines is a week-long, hands-on summer camp for middle school girls in collaboration with Baker Hughes and Mines faculty and staff.

SCHOLARSHIPS

- Florence Caldwell Achievement Program Three full tuition scholarships are awarded each year, for a cohort of 12 Caldwell Scholars.
- Sister-to-Sister Scholarship awarded to one upper-class student each year.
- Vanguard Community of Scholars Program develops leaders to solve societal problems through professional development with women faculty, industry leaders and a community service project. Program size: 120 scholars.

WOMEN PROFESSIONAL SOCIETIES

WISEM provides support and amplifies other women's student-led professional societies on campus such as:

- Association of Computing Machinery-Women
- Society of Women in Chemistry
- Society of Women in Geoscience
- Society of Women in Mathematics
- Society of Women in Physics
- Women in Chemical & Biological Engineering
- Women in Mining
- Women in MME, ML and Nuclear
- Women of Aeronautics and Astronautics

CONTACT US



ANNETTE PILKINGTON

WISEM Director

303-273-3498 apilking@mines.edu

WOMEN GRADUATE STUDENT GROUP

This community extends networking and professional development opportunities to all women graduate students through breakfast meetings, workshops and social events.

SOCIETY OF WOMEN ENGINEERS (SWE)

SWE is a student-run organization with faculty advisor support. Mines has the largest collegiate section in the nation with over 700 members. SWE provides:

- Career opportunities through Evening with Industry and Networking Reception.
- Professional development through weekly speakers, national and regional SWE conference attendance, and executive board leadership opportunities.
- Outreach through Girls Lead the Way leadership conference for high school girls, Girl Scout Engineering Day, Girls on the Rise event for middle school girls, local math and science nights and the Schlumberger Serve to Succeed outreach program.
- Scholarships SWE Scholarship in Honor of Florence Caldwell, the first woman to graduate from Mines. is awarded to 4 active SWE members.
- Mentorship SWE Peer Mentorship Program for incoming women students.
- Social and networking events allow members to build friendships within the Mines community.

For more information, visit orgs.mines.edu/swe

ALUMNI

WOMEN OF MINES ALUMNI INTEREST GROUP

WISEM Director co-chairs this group to connect alumnae to campus and support Mines initiatives.

KELLY KNECHTEL

WISEM Associate Director SWE Faculty Advisor

303-273-3146 knechtel@mines.edu WISEM House 1710 Illinois Street Golden, CO 80401



RESOURCES FOR SURVIVORS

If you, or someone you know, has experienced sexual harassment, sexual assault, or interpersonal violence (domestic/dating violence, and stalking) at any point, there are multiple options to talk to someone and access resources both on and off campus.



Wellness Center 1770 Elm Street

1. SHAPE Office 303-273-3781

Speak to a Confidential Resource Advocate. Receive support and referrals, learn about options.

2. Health Center 303-273-3381

Speak to a nurse practitioner or physician.

3. Counseling Center 303-273-3377

Speak to a licensed counselor

IT'S ON



Mines Faculty or Staff

Look for those who have the "I Believe You" badge. They have been through additional training.

Please note: Mines faculty and staff are considered mandatory reporters* and must share any reports they receive with the Office for Institutional Equity. However, the decision on how to move forward is yours.

*With the exception of the Mines Counselors, Health Center professionals, and the designated Confidential Resources.

The Office for Institutional Equity oie@mines.edu 303-273-3260

Share instances of sexual and interpersonal violence with the Office for Institutional Equity team. There are multiple options:

- **1. Make an informal report.** You have the option to just receive supportive measures.
- 2. Move forward with a formal complaint. Receive process advising as well as supportive measures.

Mines Police McNeil Hall 118 303-273-3333 or 911

Report to a police officer.

- 1. Share what happened and address any safety concerns.
- 2. You may make a report and request they not investigate.
- 3. If desired a criminal case would be opened and a detective assigned to investigate (criminal charges may result).
- *Your report and forensic evidence will be processed and retained as required by law and best practice.

Medical Attention at St. Anthony Hospital Emergency Room 720-321-4103

If you choose to get a Sexual Assault Nurse Exam, there are multiple reporting options, with medical care at each step:

- **1. Anonymous.** Kit is not tested and police receive no identifying information.
- **2. Medical.** Kit is tested and police can receive identifying information.
- **3. Police.** Kit is tested and police are notified.

Resource Options in the Local Community

Blue Bench 303-329-9922

Victim Outreach, Incorporated (VOI) 303-202-2196

Both are available 24/7.

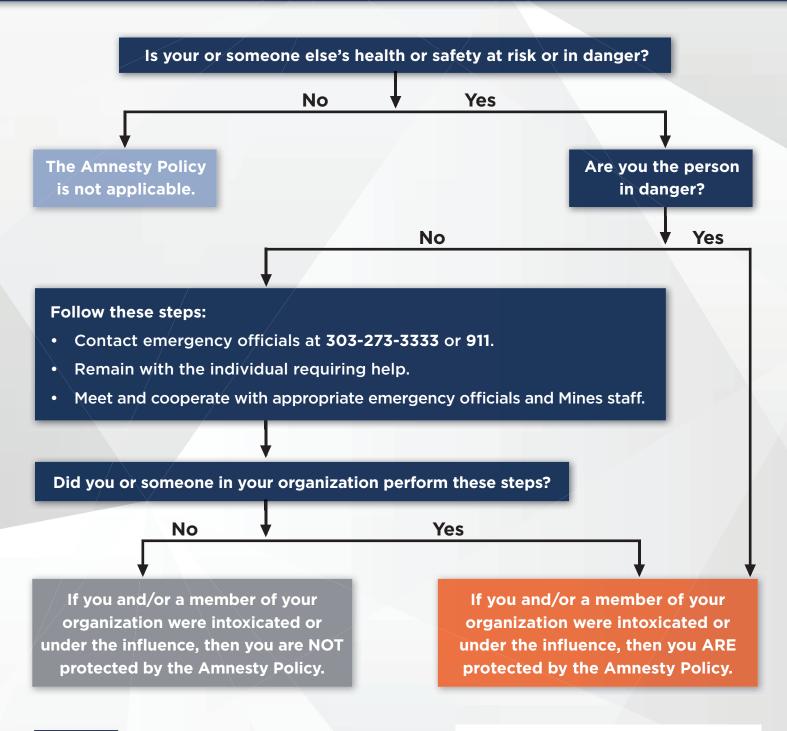
Porchlight Family Justice Center 303-271-6100

If there is an emergency, call 911. You always have the option to report online.



AMNESTY POLICY for Health & Safety

Signs of alcohol or prohibited substance emergency: confusion or disorientation; vomiting; irregular pulse, depressed breathing; inability to stay conscious; cold, clammy, or blue tinged skin/lips; lack of physical coordination; slurred speech; dilated pupils or bloodshot eyes; and shakes or tremors. (Note that this is not an exhaustive list. Please use your best judgment.)







EHS STAFF

Barb O'Kane EHS Executive Director 303-384-2561

EHS TEAM

Elisabeth Citta
Chemical Store Coordinator
303-273-3555

Haitao Dong Radiation Safety Officer 303-273-3573

Kyle Filkins Safety & Health Professional 303-273-3998

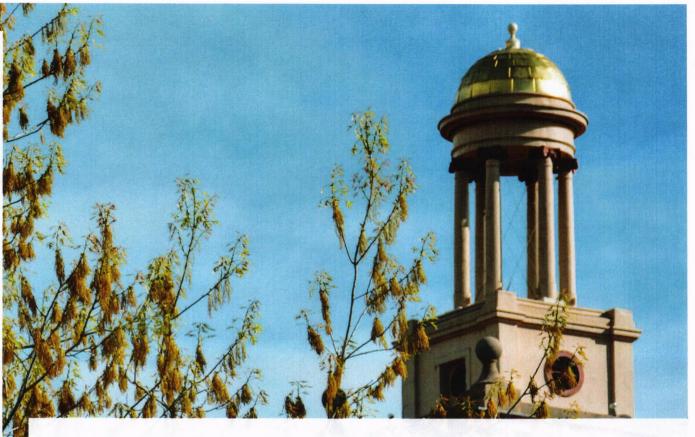
Lauren Poole Sustainability Coordinator 303-384-2413

Cory Smith
Chemical Safety Officer /
Safety Professional
303-273-3511

Tim Sweitzer Associate Director EHS 303-273-3869

> Faith Weaver EHS Technician II 303-273-3287

Adam Zeigler Health & Safety Specialist 303-273-3391



MAIN OFFICE

1400 Maple Street McNeil Hall, Suite 134 Golden, CO 80401 303-273-3316 Hours: M-F 8 a.m. to 4:30 p.m.

CHEMICAL STORAGE AND DISTRIBUTION FACILITY (CSDF)

Coolbaugh Hall Room 030 303-273-3555 Hours: M-F 9 a.m. to 12 p.m. and 1 p.m. to 4 p.m.

MINES.EDU/EHS



ENVIRONMENTAL HEALTH & SAFETY

Here for a safer U







303-273-3333

EHS SERVICES

- Hazard Evaluation & Risk Minimization
- Chemical Procurement
- Hazardous Waste Management
- Radiation Protection & Laser Safety
- Chemical Spill Response & Cleanup
- Incident Investigation and Prevention
- Environmental Compliance
- Campus-Wide Chemical Inventory
- Exposure Control Surveys



All hazardous chemicals are ordered through the EHS department and billed back to the requestor.

Commonly used research reagents are kept on hand and available for immediate pick up at the CSDF. The EHS department maintains a campus-wide chemical inventory which facilitates safe storage and material management.







EHS TRAINING

- General Lab Safety
- Hazardous Waste Generator
- Bloodborne Pathogen & Biosafety
- Radiation Safety and Laser Safety
- Confined Space Entry
- Ladder Safety
- Respirator Use and Fitting
- Machine Shop Safety
- Lockout Tagout
- Hoisting & Rigging
- And others upon request

SUSTAINABILITY SERVICES

- · Green Buildings Taskforce
- Energy Efficiency and Renewable Energy
- Surplus Property Disposal/Resale/Reuse
- Campus Recycling and E-Waste
- Sustainability Reporting (AASHE)
- Green Labs
- Hazardous Waste Reduction
- Sustainability Outreach and Consulting
- Zero Waste Events
- Environmental Assessment
- Ergonomics

EMERGENCY MANAGEMENT

- Prevention
- Planning
- Training
- Incident Response
- Code Blue Emergency Phones
- Mines Alert mass notification system (text, phone, email)
- AEDs
- · Building evacuation drills







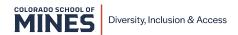
Inclusive Teaching Practices Tips and Checklist

Inclusive teaching and learning respects diversity of the students and their experiences and actively engages, includes, and challenges all students. Our students come from all over the world with different backgrounds and experiences. The practice of inclusive teaching acknowledges and challenges biases and stereotypes that can undermine students' success and sense of belonging. Inclusive teaching creates a better classroom for all learners.

This checklist includes many strategies for inclusive teaching and universal design of instruction. What practices are you trying?

Contact <u>Disability Support Services</u> if you need support for students with disabilities.

Strategy	Examples	Have	Want
		tried	to try
Create a welco	ming environment		
Examine	1. Reflect on your assumptions about students. What stereotypical notions do you hold about		
assumptions.	some student groups or backgrounds?		
Establish an	2. Include a syllabus statement that fosters an inclusive learning environment (use the latest		
inclusive environment	Mines syllabus template from Trefny, see the bottom of this document for example text that		
for all	you might add on fostering an inclusive classroom).		
students.	3. Be explicit about promoting equity and access for all students.		
	4. Respect, adhere to, and follow up (privately) on the disability accommodation letter for		
	students. Maintain confidentiality. Remember that accommodations are not advantages, but		
	a means of providing each student with full access to their education and an opportunity to effectively demonstrate what they have learned.		
	5. Accommodate students. Life happens and students are people too. Be compassionate and		
	understanding of illness, religious holidays, and other stresses. At the beginning of the		
	semester, ask your students to let you know in advance of any issues that will affect their		
	participation in class or complete assignments on time.		
	6. Ensure that resources and assistance provided both in and outside of class is equally available		
	and accessible to everyone. E.g. offer and record office hours with Zoom, post relevant		
	information for the whole class.		
	7. Ensure that your TAs or graders are applying these tips, too.		
Reduce	8. Know and use preferred names and pronouns.		
anonymity.	9. Build rapport and get to know students and their individual perspectives and experiences (e.g.,		
	greet students as they enter class, interact with students before and/or after class).		
Model	10. Avoid using masculine pronouns for students, e.g. "Hey guys"		
inclusive language,	11. Provide context when using idioms, metaphors, pop culture references, etc.		
behavior, and	12. Use language that acknowledges and values different experiences/perspectives.		
attitudes.			
Incorporate	13. Identify whether certain perspectives are missing or underrepresented in course materials.		
multiple and diverse	4.4 Has according to the state of the state		+
examples,	14. Use examples/illustrations across multiple domains and/or representing a variety of perspectives and populations to 1) help students understand the applicability of concepts in		
resources,	diverse contexts and 2) help students relate to the material.		
and	15. Include materials, readings, and images that reflect contributions and perspectives from		+
perspectives.	groups historically underrepresented in the field.		
	16. When inviting guest lecturers/visitors, include diverse contributions/perspectives.		+
	20. When mything guest recturers, visitors, medude diverse contributions, perspectives.		





Strategy	Examples	Have tried	Want to try
Add Structure		trieu	totiy
Establish, communicate, and reinforce norms and	17. Establish, use, and enforce established classroom norms that foster a positive and inclusive environment and establish ground rules for respectful interaction in the class (e.g., no interrupting, rule of 3 where you have to wait until 3 people talk before you contribute again, consider other perspectives and suspend judgment).		
expectations for	18. Communicate expectations for participation and engagement early and often.		
interactions, participation, and	19. Encourage and monitor student participation during class and activities. Be aware when a few students (or students from one group [e.g., male students]) dominate a conversation in small groups or entire class discussions.		
engagement.	20. Respond to classroom conflict/disruption promptly, consistently and respectfully.		
	21. Facilitate active listening (e.g., incorporate paraphrasing and questioning strategies into discussions).		
	22. Show respect for all questions and comments.		
Establish, communicate,	23. Ensure that leadership and roles for teams and group work are shared/rotated and clearly defined.		
and reinforce norms and expectations for group work.	24. Where appropriate for learning outcomes, use a variety of methods to assigning groups and change groups throughout the semester. While diverse teams are important, don't isolate and separate the women and underrepresented students.		
Use varied active learning	25. Use a variety of teaching strategies, such as active learning strategies.		
strategies.	26. Provide alternative means for contributing to the discussion (e.g. clickers, poll everywhere, comments submitted on notecards).		
Encourage a gro	owth mindset/ Acknowledge that failure and struggle are a part of learning	l	
Promote a growth mindset about intelligence.	27. Convey the idea that intelligence is not a reflection of fixed, natural abilities, but can change and grow over time (Dweck 2006). E.g. avoid describing student performance as a sign of natural ability (or lack of ability), avoid statements like "some people have trouble with math/writing/critical thinking."		
	28. Cultivate an environment where it is okay to make mistakes, and leverage those mistakes to improve learning. Encourage cognitive risk-taking and dignify errors.		
	29. Help students develop a growth mindset (e.g. in office hours or during feedback, identify specific areas that are challenging and help students identify strategies to improve).		
	30. Resist a single right answer. Ask students to generate and articulate multiple solutions and/or approaches to problems.		
	31. Incorporate assignments and assessments that are low-stakes in addition to high stakes exams, papers, and projects.		
Provide feedback that	32. Promote fairness and transparency by sharing the criteria (rubrics) by which you use to evaluate students' work.		
helps students to improve.	 33. Provide constructive and encouraging feedback on how to improve comprehension or performance. Examples include: a. "Wise feedback": 1) assurance that you are providing critical feedback because you have high standards 2) specific comments on where student work does/does not meet those standards, and 3) confidence that students can meet those standards (Cohen 1999, Yeager 2014). b. "Strategy feedback": identify specific areas for improvement and practice (Dweck 2012). 		





Strategy	Examples		Want
		tried to try	
Encourage	34. Help students learn about and encourage all to take advantage of academic assistance		
students to	resources; e.g. tutoring via CASA. Not all students are aware of or comfortable seeking		
utilize	out campus resources.		
resources	35. Reduce the stigma of office hours and encourage students to take advantage of out of class		
(available	support: routinely remind students of the times, encourage them to schedule a meeting if		
through	they aren't available during office hours, consider requiring students to come to office hours,		
course and	be welcoming when students come.		
campus).			
Work to refine	and improve your teaching practices		
Set up	36. Ask a colleague or Trefny staff to observe your teaching and provide feedback.		
processes to get feedback	37. Participate in workshops (e.g. Trefny Center) or conferences (e.g. ASEE) to learn new teaching strategies and improve your teaching.		
on the course climate.	38. Provide opportunities for students to reflect on the course and give feedback (e.g. an anonymous mid-semester survey) and reflect on integrating those changes into your class.		

These tips were compiled from the <u>Center for the Integration of Research, Teaching and Learning</u> (they also have an <u>inclusive</u> <u>classroom practices checklist</u>), <u>Imperial College London</u>, <u>Washington University in St. Louis</u>, <u>University of Arizona</u>, and <u>University of Michigan</u>.

Sample statement for your syllabus:

Diversity & Inclusion at Mines and in this Class

At Colorado School of Mines, we understand that a diverse and inclusive learning environment inspires creativity and innovation, which are essential to the engineering process. We also know that in order to address current and emerging national and global challenges, it is important to learn with and from people who have different backgrounds, thoughts, and experiences.

Our students represent every state in the nation and more than 90 countries around the world, and we continue to make progress in the areas of diversity and inclusion by providing <u>Diversity and Inclusion programs and services</u> to support these efforts.

In an ideal world, science would be objective. However, much of science is subjective and is historically built on a small subset of privileged voices. In this class, we will make an effort to read papers from a diverse group of scientists, but limits still exist on this diversity. I acknowledge that it is possible that there may be both overt and covert biases in the material due to the lens with which it was written, even though the material is primarily of a scientific nature. Integrating a diverse set of experiences is important for a more comprehensive understanding of science. I would like to discuss issues of diversity in our field as part of the course from time to time.

If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you. If you prefer to speak with someone outside of the course, visit the Mines counseling center. I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it.

Student Life Contact Information

Student Outreach and Support (SOS)

For Students that are struggling with academic, personal, mental, and physical health concerns.

Website: mines.edu/SOS Email: SOS@mines.edu

Academic Misconduct / Student Code of Conduct Violations:

Sam Ralston, Office of Community Standards Contact: seralston@mines.edu Phone: 303-384-2766

Athletics:

Athletics Staff Directory: https://minesathletics.com/staff-directory

Center for Academic Services & Advising (CASA):

Undergraduate Student Withdrawals, Academic Support, and Academic Advising Contact: casa.mines.edu Phone: 303-384-2600

Counseling Center (for student referrals or consultation on student concerns):

Contact: counseling.mines.edu Phone: 303-273-2250

Disability Support Services:

Contact: disability.mines.edu Email: disabilitysupport@mines.edu Phone: 303-273-2250

Excused Absences:

- https://www.mines.edu/student-life/student-absences/
- Contact: Caroline Fuller cfuller@mines.edu Phone: 303-273-3350

General Student Life Support:

> Student Center Room E240. Email: deanofstudents@mines.edu Phone: 303-273-3350

Graduate Student Withdrawals, Academic Support, and Academic Advising:

Contact: Jenny Briggs, Assistant Dean of Graduate Studies, jsbriggs@mines.edu Phone: 303-273-3461

Mines Testing Center (including proctoring exams for students with accommodations):

Contact: https://www.mines.edu/disability-support-services/ and Mines Testing Center (MTC) - Disability Support Services . Email: disabilitysupport@mines.edu Phone: 303-384-2532

Public Safety (Mines Police Department):

- ➤ In an emergency, call 911.
- Non-Emergency assistance Contact: publicsafety.mines.edu. Phone: 303-273-3333

Raise Your Hand:

➤ If a student or staff member is struggling, "Raise Your Hand" for assistance. https://www.mines.edu/student-life/raise-your-hand/

Retroactive Withdrawals, Excused Absence Abuse, General Academic Concerns:

Contact: Colin Terry, AVP Student Life, cterry@mines.edu Phone: 303-273-308



From the Graduate Council, Colorado School of Mines

This document is intended for graduate student researchers pursuing a thesis-based MS or Ph.D. (referred to as "advisees" in this document) and their research advisors (referred to as "advisors").

Academic research conducted under the direction of a faculty advisor is an opportunity for accelerated academic and professional growth. This is best accomplished by beginning with clear expectations for both the advisor and the advisee. This document, though not exhaustive, is intended to provide a framework for the advisor and advisee to discuss their expectations for a safe, supportive, and productive research advisor/advisee relationship.

Advisors and advisees should feel free to edit this document as desired, so long as all involved parties agree to its content. It is recommended that both the advisor and advisee acknowledge that they received and reviewed this document by signing it.

The Roles of Advisor and Advisee

The advisor and advisee each have unique roles in the research process.

The advisor is primarily responsible for:

- 1. Securing research funding through proposal writing.
- 2. Managing research funds and overseeing all research efforts in the group.
- 3. Mentoring advisees working under their direction. This includes providing academic advising, guidance, and resources to perform research as well as professional development opportunities.
- 4. Reviewing, editing, and approving all communication relating to the research effort, including sponsor reports, manuscripts, conference proceedings, and oral presentations.

The advisee is primarily responsible for:

- 1. Conducting research.
- 2. Sharing knowledge gained through study and experience with the advisor.
- 3. Managing their thesis project(s) and degree progress.
- 4. Effectively communicating research accomplishments through presentations, reports, and publications.
- 5. (Potentially) Serving as a teaching assistant (TA)

Both parties are responsible for ensuring that the advisee has a reasonable research project(s) to pursue and the resources needed to execute the work. The advisor may provide the initial framework for projects based on the group's central research areas, and the advisee is expected to develop independence in their work and generate and execute their own ideas. This is expected to be a continuous process that occurs throughout the length of the advisee's degree and is facilitated by the advisor.

Both parties are also encouraged to discuss early in the process expectations and interests regarding interactions with collaborators (inside and outside of Mines) and mentoring of undergraduate research assistants.

From the Graduate Council, Colorado School of Mines

Adaptations to these general roles may be necessary in some circumstances. In addition, as the advisee grows in knowledge and experience, they may take on some tasks of the advisor, like proposal writing or assisting in mentoring junior researchers.

Advisors and advisees should read and be familiar with the expectations outlined in the Graduate Assistantship Policies (https://www.mines.edu/graduate-studies/graduate-assistantship/) and Mines' Authorship Guidelines developed by the Office for Research Technology Transfer (https://research.mines.edu/wp-content/uploads/sites/85/2021/09/Authorship-Guidelines-Mines-revised.pdf).

Professional Behavior & Inclusion

Both the advisor and advisee are responsible for creating and maintaining a safe, positive, and supportive culture in the research group, the department, and on campus. This is to be accomplished with open communication, mutual respect, and non-discrimination that enables all parties to realize their full intellectual potential.

Though advisor/advisee relationships vary from formal to informal, a high level of professionalism is essential. Advisors should always be careful to keep advisee information confidential.

Academic Mentoring

The research advisor also serves as the student researcher's academic advisor. Student researchers should regularly consult with their advisor about selecting coursework to gain necessary skills for success in their research. In these discussions, the educational interests of the student should be the primary consideration. Advisors should support student efforts in balancing coursework and research responsibilities, establishing a thesis committee, thesis preparation, and other program requirements. However, it is the student's responsibility to meet academic requirements and timelines. Students should carefully study the major requirements outlined in the graduate catalog and handbook for their department and/or program. Students can also consult with their thesis committee, the Graduate Program Manager, or the Office of Graduate Studies.

Documentation

All researchers are required to maintain detailed documentation of their work. This documentation could be written or digital, as directed by the advisor. While advisees may keep personal copies, all documentation should be delivered to the advisor upon completion of the research appointment or at their advisor's request. Researchers should have access to the funded grant proposal they are supporting.

Communication

Advisors and advisees should establish and adhere to preferred means of communication (e.g., inperson discussion, email, phone, text, or other electronic formats). All parties should do their best to respect personal time by limiting text and phone calls on evenings and weekends. Exceptions may be necessary.

From the Graduate Council, Colorado School of Mines

Meetings

Advisors should schedule regular meetings with their advisees, such as group, subgroup, and one-on-one meetings. The advisor should provide expectations for the frequency of these meetings and the preferred format for research discussions (e.g., printed slides, presentations, or progress reports). Advisees should come to these meetings prepared to discuss their research progress. Advisors should also schedule regular one-on-one meetings with each advisee for academic and professional mentorship or to address topics best discussed in private.

Professional Development

It is the responsibility of the advisor to provide the time and opportunities for advisees to attend regional and/or national conferences. It is the responsibility of the advisee to produce research results worthy of conference presentation. In consultation with their advisor, advisees should select a conference best suited to showcase their research results. Advisees should seek out external funding to supplement travel costs whenever possible.

TAing

Advisees may serve as teaching assistants (TAs) for none, some, or all of their graduate work. TA roles and expectations vary depending on the advisee's funding, advisor's funding, and department. Prior to joining a group, the advisee should discuss TAing expectations with their potential advisors. Some key questions to address in this conversation are:

- How often do group members typically TA?
- Under what circumstances might someone be asked to TA more or fewer semesters?
- What is the typical workload for TAs?
- What are expectations for research progress while on TA?

Work Schedule

Successful research requires a sustained effort over an extended time period. Defining an expected workload—and even more so, a fixed schedule—is notoriously difficult in graduate work for many reasons. For example, different advisors have varied expectations; factors such as lab work operations, field site access, and equipment availability will vary among and within research groups; and advisees will have different goals and circumstances that may impact their schedules, such as caregiving responsibilities, disabilities, commuting, etc.

Advisors and advisees should have a *clear* and *honest* discussion about workload expectations *before* an advisee joins a particular group. Advisees should familiarize themselves with the group culture. Key areas to discuss are:

- Academic/professional topics such as career goals, expected number of publications during degree, expected time to degree, expectations for balancing coursework with RA/TA assignments and research progress both early and later in the degree program
- Logistical factors such as typical work week schedule, expectations/availability for working nights and weekends, requirements and/or constraints for different types of tasks in the primary work locations (e.g., lab, field, other facilities), and level of hands-off/on style of advising

It is recommended that the advisee discuss these areas with both the advisor and the current group members.

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Vacation/Time Off

All Mines students and employees receive time off during official university holidays. Additional time off should also be taken throughout the year, and the advisee should make their requests for time off to their advisor. Prior to joining a lab, the advisee should discuss with their potential advisor the expectations for vacation time per year and the process by which to request time off.

A new potential advisee may hesitate to initiate this conversation with a potential advisor in fear of appearing unmotivated. However, vacation time beyond university holidays should be expected and granted. The potential advisor is encouraged to initiate this conversation prior to taking on a new advisee. The advisee is encouraged to ask the advisor and current members of the group about vacation policies prior to joining the group.

Lab Safety

Advisors and advisees have a shared responsibility to maintain a safe working environment. Faculty should ensure students are properly trained before using equipment, conducting experiments, or visiting field sites. Students must ensure that they follow all safety protocols, understand the safety hazards of their research, and conduct their research with safety in mind. Students should reach out to their advisor and EH&S about safety precautions before beginning a new experiment. Additionally, students should not feel pressured to work in an environment that they consider to be unsafe. For more information, or to schedule safety training, consult the Mines Environmental Health and Safety website (https://www.mines.edu/ehs).

Feedback

Constructive feedback is critical to professional development. Advisors should provide timely and regular performance feedback to their advisees. Feedback should be constructive by describing specific items/tasks that were executed well or should be improved. If an advisee feels they are not receiving adequate feedback, it is recommended that the advisee schedule a one-on-one meeting with their advisor and prepare a list of specific questions on which the advisor can offer insight. Advisors are also encouraged to ask for feedback from their advisees to create a more supportive, positive, and productive environment.

Group Manuals

In addition to the discussion items and expectations listed in this document, each group is encouraged to have other standard operating procedures (SOPs) to help the group run smoothly. To ensure all important information is communicated and accessible to everyone in the group, it may be helpful to create a Group Manual that details expectations in the group, SOPs (such as ordering supplies, waste management, equipment access, field site permits or protocols), and resources (such as online tools, resources, fellowships, etc.). There are several examples of free, cloud-based, password-protected collaboration software (also called multi-user wikis) in which users can log in and easily access information and contribute new information. Examples include Nuclino and Notion.

Conflict Resolution

Advisors and advisees are required to abide by Mines Policy on Academic Integrity/Misconduct (https://catalog.mines.edu/policiesandprocedures/). This includes maintaining professionalism at all times.

From the Graduate Council, Colorado School of Mines

Mines policies include a Student Complaint Process: If a student needs to make a complaint, specific or general, about their experience at Mines, he or she should contact the Office of the Dean of Students at 303-273-3288 or studentcomplaint@mines.edu. If there is an issue related to discrimination, sexual harassment, or sexual violence, there are specific procedures that will be followed. Students may find more information on the Title IX website (https://www.mines.edu/title-ix/) or by contacting the Title IX & Equity Director at 303-273-2558.

The Graduate Program Manager, Department Head, and Office of Graduate Studies are also available to consult on any conflicts that cannot be suitably settled within the research group.

Additional Resources

Conducting research and working towards a degree can be challenging. Mines offers several resources to help. All the below resources are free for students.

- The Graduate Studies Office (https://www.mines.edu/graduate-studies/) provides policies, forms, FAQ, office hours consulting sessions, and more. Visit https://www.mines.edu/graduate-studies/graduate-assistantship/ for policies and guidelines related to this document.
- Student Outreach and Support (https://www.mines.edu/student-life/student-outreach-and-support/) provides mental health resources and options. If you are concerned for someone's wellbeing, you can also submit an online referral to the Care team.
- CASA (https://www.mines.edu/casa) provides academic advising, tutoring, academic support, and academic workshops.
- The Counseling Center (https://www.mines.edu/counseling-center/) provides mental health resources and support. Students may call 303-273-3377 for an appointment. Located in the Wellness Center 2nd floor at 1770 Elm St.
- The Health Center (https://www.mines.edu/student-health/) provides health services. Students may call 303-273-3381 for appointment. Located in Wellness Center 1st floor at 1770 ElmSt.
- The Center for Professional Education (https://www.mines.edu/cpe/resources-for-gradstudents/) provides professional development courses, workshops, and seminars as well as one-on-one support.
- Colorado Crisis Services (http://coloradocrisisservices.org) provides crisis support 24/7 via phone, text, and in person. Colorado Crisis Services is a great confidential resource, available to anyone by calling 1-844-493-8255, or texting "TALK" to 38255. Walk-in location addresses are posted on the website.

The Counseling Center, Health Center, and Colorado Crisis Services are confidential resources. The Counseling Center will also make referrals to off-campus counselors, if preferred.

In an emergency, you should call 911, and they will dispatch a Mines or Golden PD officer to assist.

By signing below, the advisor and advisee agree to the content of this document.
Advisee signature and date
Advisor signature and date

Most new faculty are looking for some sort of mentoring. Unfortunately, many university mentoring programs randomly match junior and senior faculty without much follow through or studies on efficacy. As noted by Rockquemore (2019) the word "mentoring" is vague enough that people have a variety of thoughts when they hear this term, and also that that word often is associated with matchmaking faculty rather than helping new faculty discover their needs. Here, we're going to rephrase a "need for mentoring" by allowing you to think about two key questions:

- What do I need? and
- 2) How can I get my needs met?

Here, we describe a number of possible needs, and how you might find them on campus. It's impossible and potentially unhealthy to try to have all these needs met by one person. When you shift from a person-based to a needs-based framework, it frees you from the search for "a mentor" and focuses you instead on identifying your needs and getting them met. This shift acknowledges that it's normal to have an evolving set of needs throughout your career and that those needs are most effectively, efficiently, and comprehensively met in the context of a broad network of information, community, support, accountability, and ongoing feedback.

Professional Development

Many new faculty are looking for help learning how to manage time, resolve conflicts, administer projects, organize your office space, teach efficiently, supervise graduate students, and make strategic decisions about service commitments. At Mines, you might want to look for information on this topic for both you and your students here:

- Check out the Center for Professional Development Education: https://www.mines.edu/cpe/
- Check out the library's Modern Researcher program: https://libguides.mines.edu/researcher501
- Get on the VPRTT's research listserve and participate in Mines'wide research events (contact Lisa Kinzel for information)
- Plug into the Trefny Center's teaching workshops: https://trefnycenter.mines.edu/
- Explore Percipo, a web-based monthly series focused on learning new skills and professional development:

https://www.mines.edu/human-resources/professional-development/



Personal/Emotional Support

As a new faculty member, you are in the midst of a significant identity and role transition—from graduate student (or post-doc) to professor. As a result, you may need support in dealing with the common stress and pressures of transitioning to life on the tenure track. Suggestions:

- Reach out to colleagues/friends in your department and beyond with whom you connect
- Participate in Mindful Mondays, a meditation group that meets at the library
- Take advantage of the yoga and spin classes in the Rec Center, or go to lift weights or use the pool
- Join Roel Snieder's (<u>rsnieder@mines.edu</u>) running club
- Be the positive change you want to see: this week, say thanks to five people or ask five people how they are doing, and make a genuine effort to be interested in their response
- C-SEAP (State of Colorado's confidential Employee Assistance Provider) is available to address personal problems and workplace issues. CSEAP counseling, training, and organizational development services are free-of-charge and located on campus. To make an appointment with C-SEAP on the Mines Campus, call (303) 866-4314
- Faculty enrolled in Mines' Anthem plans are covered for most counseling services. The cost depends on your plan and whether you use an in-network or out-of-network provider. Employees can check their benefits at: www.mybensite.com
 User: cheiba Password: csmines
- Through Anthem and Live Health Online, employees also have access to virtual psychology and/or psychiatry services, covered through our Anthem insurance plans. Download the Live Health Online app or visit the website: https://livehealthonline.com/
- Lastly, all employees have access to Colorado Crisis
 Services. They provide phone, text and walk-in assistance. Call 1 844-493-8255 or text "TALK" to 38255. To locate a walk-in site,
 see their website at https://coloradocrisisservices.org/

A Sense of Community

Given that most new tenure-track faculty have uprooted their lives to move to a new area, you may find yourself seeking both an intellectual and/or social community where you feel a true sense of belonging. Ways of building community include:

- Build your own community by challenging yourself to ask one colleague to lunch/coffee a month, perhaps someone that you rarely talk with
- Get a second coffee when you go to get one, and drop it at a colleague's office
- Go to a departmental seminar that is not your own
- Take time to help a student figure out their life path
- Make a conscious effort to say hi to colleagues and students in the hall
- · Nominate a colleague for an award
- Become part of the Faculty Senate
- Attend campus events and ask a colleague to go with you

Accountability

The structure of your job likely provides the least accountability for the activity that is most valued -- research, writing, and publication. To avoid getting caught up in the daily chaos, the vast majority of new faculty members need some form of accountability system for writing. Some options include:

- Start a writing group—consider reaching out to other new faculty around campus
- www.stickK.com: a website created by behavioral economists at Yale, where you set a writing goal for yourself. If you fail to reach your writing goal, you can pay a sum to a charity, or as an even stronger motivator, an "anti-charity" – an organization you really don't want to have your money

Institutional Sponsorship

You also need to cultivate relationships with people who are invested in your success at your institution. In part, these are senior faculty who are willing to use their power to advocate for your best interests behind closed doors. To build these relationships, consider:

- Reaching out to colleagues in your department and beyond with whom you connect
- Participating joyfully in departmental events, as much as you can
- Thank the staff for the things they do for you, as they can help you make your life easier



Access to Networks

Because knowledge isn't produced in isolation, it's critical for you to connect with others to discuss potential research collaborations, navigate external funding, and access opportunity structures that might not be immediately apparent to you as a new faculty member. People and places to think about include:

- New colleagues from New Faculty Orientation
- Campus-wide events throughout the school year
- Regular meetings for Teaching Faculty
- · Regular meetings for Women Teaching Faculty

Project-Specific Feedback

You will also need to regularly communicate with people who can provide substantive comments on your proposals, manuscript drafts, and new ideas. Good options here may include:

- Colleagues in your department who seem interested in your work and wellbeing
- Colleagues beyond the walls of Mines who may serve as a mentor in this capacity

Role Models

As a new faculty member, looking to other faculty members who are navigating the academy in a way that you aspire to will be critical for your development as both a faculty member and academic. Who makes a good role model? Well, that's up to you. But a few thoughts are:

- Senior colleagues in your department or beyond with whom you connect.
- Mentors from other institutions
- Think about serving as a good role model to students, too!
- If you are having trouble finding someone, reach out to Roel (<u>rsnieder@mines.edu</u>) or Kamini (<u>ksingha@mines.edu</u>) so we can help try to find someone with you



Safe Space

This applies at any career stage, but especially as a tenure-track faculty member. It's extremely important to have the space to discuss and process unique and individual experiences without being invalidated, questioned, devalued and/or disrespected. Some options include:

- Reach out to colleagues in your department and beyond with whom you connect
- If you're looking for an off-campus (non-Mines-affiliated) life coach, one local option is Katharine Lavenhagen, who focuses on life transitions: http://coachingwithkatharine.com/

The Weekly Challenge

This week, we challenge you to:

- Pause every time you feel the urge to use the word "mentor" or "mentoring" and ask yourself: What do I need right now? What's holding me back? And what (specifically) would help me to be more productive and effective?
- Go through the previous list of (some!) typical faculty needs and specify what would be helpful to you in moving forward. Don't be afraid to name your need. If you don't know how to write a successful grant, get un-stuck in your writing, or are floundering in the classroom, it's okay. Name it so you can get the help you need to move forward.
- Ask yourself: How can I get _____ (insert current need not being met)? If you don't know, state the need to someone else, and ask them to help you brainstorm how to get your needs met.
- Once you know what you need and have identified possibilities for getting it met, ask for help widely without shame, insecurity, or the belief that such a request means you are incompetent.
- Release yourself from the limiting belief that all you need is to find a single guru-like figure who will care for you, protect you, and lovingly guide you through your academic career. Repeat after me -- There is no guru. Instead, see what opens up this week for you when you replace that limiting belief with the idea that you can get your needs met from a wide variety of people and then take action in that direction.
- Be sure that you are taking advantage of whatever "mentoring" programs your department, college, and/or university offers, as well as any that may be offered by your professional organizations. They may not meet all of your needs, but they will increase the size of the network of people you can call on to assist you when you need it.

Adapted from Kerry Ann Rockquemore, PhD President, National Center for Faculty Development & Diversity From the Tomorrow's Professor Listserve





WELCOME!

