

MINES
@ 150 | 1874-2024



New Faculty Orientation

FACULTY CLASS OF

2024-25

August 13-16, 2024

New Faculty Schedule of Events

	TUESDAY 8/13 (Marquez 108)	WEDNESDAY 8/14 (Marquez 108)	THURSDAY 8/15 (Marquez 108/Marquez 122)	FRIDAY 8/16
Time	Orientation to Effective Teaching for New Faculty	New Faculty Orientation		
8:30 – 9:00	Light Breakfast	Light Breakfast	Light Breakfast	Campus Conference M Climb (Encouraged if able, meet at the Faculty/Staff tent outside the ORC at 7:30 am for coffee and doughnuts and do the second wave @ 8:30 am Colorado School of Mines: 2024 Faculty & Staff M-Climbers Sign Up Campus BBQ <i>Kafadar Commons</i> (11:30-1:00 pm) Faculty Senate Welcome and New Faculty Introductions <i>Bunker Auditorium</i> (1:00-2:00 pm) Fall Faculty Conference <i>Bunker Auditorium</i> (2:15-3:15 pm) Faculty Social & Poster Session <i>Green Center Lobby</i> (3:15-5:00 pm)
9:00 – 10:00	Overview of Effective Teaching at Mines <i>Trefny Center Staff</i> (10-minute break 9:50 – 10:00)	Welcome, Cohort of 2024! <i>Kamini Singha & Roel Snieder</i> (15-minute break 9:45-10)	Institutional Equity <i>Sareen Lambright Dale, Carole Goddard & Kristin Moulton</i> (15-minute break 9:45-10)	
10:00 – 11:00	Active and Inclusive Classrooms <i>Trefny Center Staff</i> (10-minute break 10:50 – 11:00)	Overview and Vision of the Mines Community <i>Terri Hogue and John Berger</i> (15-minute break 10:45-11)	Diversity, Inclusion and Access <i>Kate Youmans</i> (15-minute break 10:45-11)	
11:00 – 12:00	Feedback and Assessment <i>Trefny Center Staff</i>	Services & Support <i>Andrew Moore & Peter Estacio: IT, Johanna Eagan: ORA, Christine Homer: HR, Brianna Buljung & Seth Vuletich: Library, Barb O’Kane: EHS, Walt Copan: VPRIT, Allyce Horan: Writing Center</i>	Workshops (two options): 1) Mines Online: Sam Spiegel 2) Promotion and tenure: Andy Herring & Kamini Singha	
12:00 – 1:00	Lunch and mingle	Lunch and mingle	Lunch and mingle	
1:00 – 2:00	Faculty/staff headshots <i>Spruce Treehouse near Spruce Hall</i> (1:00 – 3:30) <ul style="list-style-type: none">We need to have these to provide to the Board of Trustees with your formal bio so this is why we set up a special time just for you ☺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	Student Panel: Mines Undergraduate & Graduate Students Share <i>Colin Terry + Carl Frick – Moderators</i> (runs until 2:15; 15-minute break 2:15-2:30) Wellness in the Mines Community <i>Roel Snieder, Colin Terry (2:30-4:00)</i>	1) Building a meaningful service portfolio: Alexis Sticher 2) Applying for external funding to launch your research career: Walt Copan, Lisa Kinzel, Johanna Eagan & Kip Findley (15-minute break 1:45-2)	
2:00 – 3:00			1) Entrepreneurship and innovation: Zack Bennett & Victoria Bill 2) Being and finding mentors: Matt Siegfried (15-minute break 2:45-3)	
3:00 – 4:00			Wrap Up: What will you bring to Mines? <i>Roel Snieder & Kamini Singha</i>	
3:30 – 5:00	Campus Tour **			
5:00 – 6:00	Reception **			

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



COLORADO SCHOOL OF MINES

NEW FACULTY WELCOME RECEPTION

**YOU & YOUR PARTNER
ARE INVITED!**

Mix and mingle with the incoming
Faculty Class of 2024

Refreshments will be served

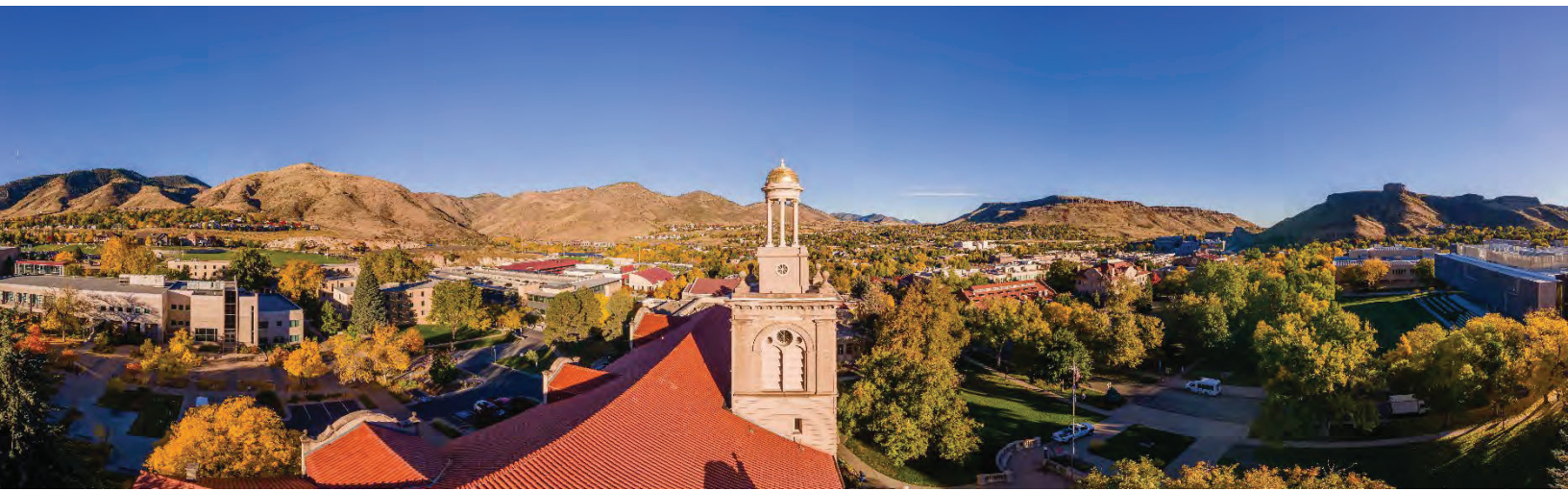
RSVP: Friday, August 2nd

Tuesday, August 13th

5:00 – 6:00 pm

**Marv Kay Stadium –
Blaster Room**





2024 Fall Faculty Conference

After the M-Climb and Campus BBQ, we will introduce all the new faculty members followed by the Fall Faculty Conference where Senate will highlight some exciting accomplishments from last year and goals for this year. We will also collect input from the audience on other topics for Senate to consider. We will then close the afternoon with a faculty social hour with posters highlighting some growing initiatives on campus. And of course, we will have snacks, desserts, and drinks (including beer and wine) while you enjoy meeting up with your new colleagues and kicking off the Fall semester.

Schedule of Events

7:30 am

M Climb coffee and donuts
Meet at the ORC along Elm Street

8:30 am

M Climb, second 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

1:00 pm – 2:00 pm

Faculty Welcome and New Faculty Introductions
Bunker Auditorium

2:15 pm – 3:15 pm – Fall Faculty Conference

Bunker Auditorium

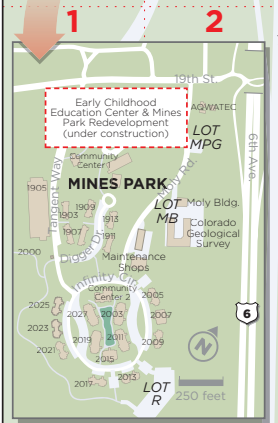
3:15 pm – 5:00 pm – Faculty Social & Poster Session

Green Center Lobby (outside of Bunker Auditorium)

Campus Map 2024



COLORADO SCHOOL OF MINES



Destinations

1600 Jackson Street	H10	Grounds Shop	G9	Unit Operations Lab	H7
Admissions (in Starzer Welcome Center)	J6	Guggenheim Hall	F6	University Honors and Scholars	H6
Alderson Hall	H7	Hill Hall	F8	U.S. Geological Survey	H5
Alumni Office (in Starzer Welcome Center)	J6	Human Resources (in Guggenheim Hall)	F6	Wellness Center, W. Lloyd Wright Student	I4
Beck Venture Center	I9	Infrastructure and Operations	F6	Women in Science, Engineering and Mathematics (WISEM)	I6
Berthoud Hall	G6	International Programs (in Green Center, 2nd floor)	inset		
Blaster Card Office (in Elm Hall)	I6	Intramural Fields	F-G-H-I	Athletics	
Bookstore (in Student Center)	G5	Kafadar Commons	G7	Harold M. & Patricia M. Korell Athletic Center	C4-5
Brown Hall	H6	Library, Arthur Lakes	F6	Jim Darden Baseball Field	B2
Center for Academic Services & Advising/CASA	I4	Labriola Innovation Hub	E5	Lockridge Arena (in Student Recreation Center)	H5
Center for Technology and Learning Media/CTLM	K4	Lock Shop	E-F-5	Mary Kay Stadium at Harry D. Campbell Field	B-C4-5
Central Storage and Receiving	K4	Marquez Hall	G-8	Softball Field	B1
Chauvenet Hall	F7	McNeil Hall and Parking Garage	E-F-5	Steinhauer Fieldhouse	E6
Colorado Geological Survey (in Moly Building)	inset	Mines Market Dining (in Elm Residence Hall)	I5	Stermole Soccer Stadium	B3
Colorado Geological Survey	E7	Intramural Fields	inset	Stermole Track & Field Complex/Crouch Field Events Complex	C2-3
CoorsTek Center for Applied Science and Engineering	G7	Multicultural Engineering Program (in Coolbaugh House)	H5	Volk Gymnasium	E6
Early Childhood Development Center (under construction)	inset	Music Program	K4		
Earth Mechanics Institute/Drilling Lab (EMI)	E4	Outdoor Recreation (in Student Recreation Center)	H5		
Engineering Hall Annex	F8-9	Periodic Table Food Court (in Student Center)	E-F-5		
Environmental Health & Safety	E-7	Public Safety/Police	E-F-5	Residence Life	
Facilities Management (FM) (in Moly Building)	inset	Starzer Welcome Center - Campus Tours and Information	J7	1750 Jackson Street	I10
Foundation (in Starzer Welcome Center)	E5	Stratton Hall (SH)/Stratton Commons	F7	Aspen Hall Advising Center	I4
General Research Laboratory (GRL)	D-E4	Student Activities Office (in Student Center)	G5	Bradford Hall	F5
Geology Museum	E5	Student Center, Ben H. Parker	G5	Elm Residence Hall and Mines Market Dining	I6
Geophysics	E4-9	Student Outreach and Support (includes Disability Support Services)	I5	Maple Hall	F5
Green Center: Bunker Auditorium and Friedhoff, Metals and Petroleum Halls	G8	Student Recreation Center	H5	Mines Park	inset
		Title IX	I6	Morgan Hall	F5
				Randall Hall	G5
				Spruce Hall	I-J6
				Thomas Hall	F5
				Weaver Towers	I-J5

*under construction



COLORADO SCHOOL OF MINES

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 X7588B** 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 12-16, 2024.

FREE FACULTY HEADSHOTS – 8/13/24@ 1:00pm

Headshots will take ~5-10 min/person. Attire is up to you or your department.

- **Headshots** will be taken in the **Spruce Treehouse (atrium on the 1st floor of Spruce next to Zime)** beginning from **1:00pm – 3:30pm on Tuesday, August 13th 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 (kluzecyj@mines.edu) a photo/headshot to accompany your formal biography for the Board of Trustees.

The [Mines Office of Communications and Marketing](#) is happy to offer free professional headshots.

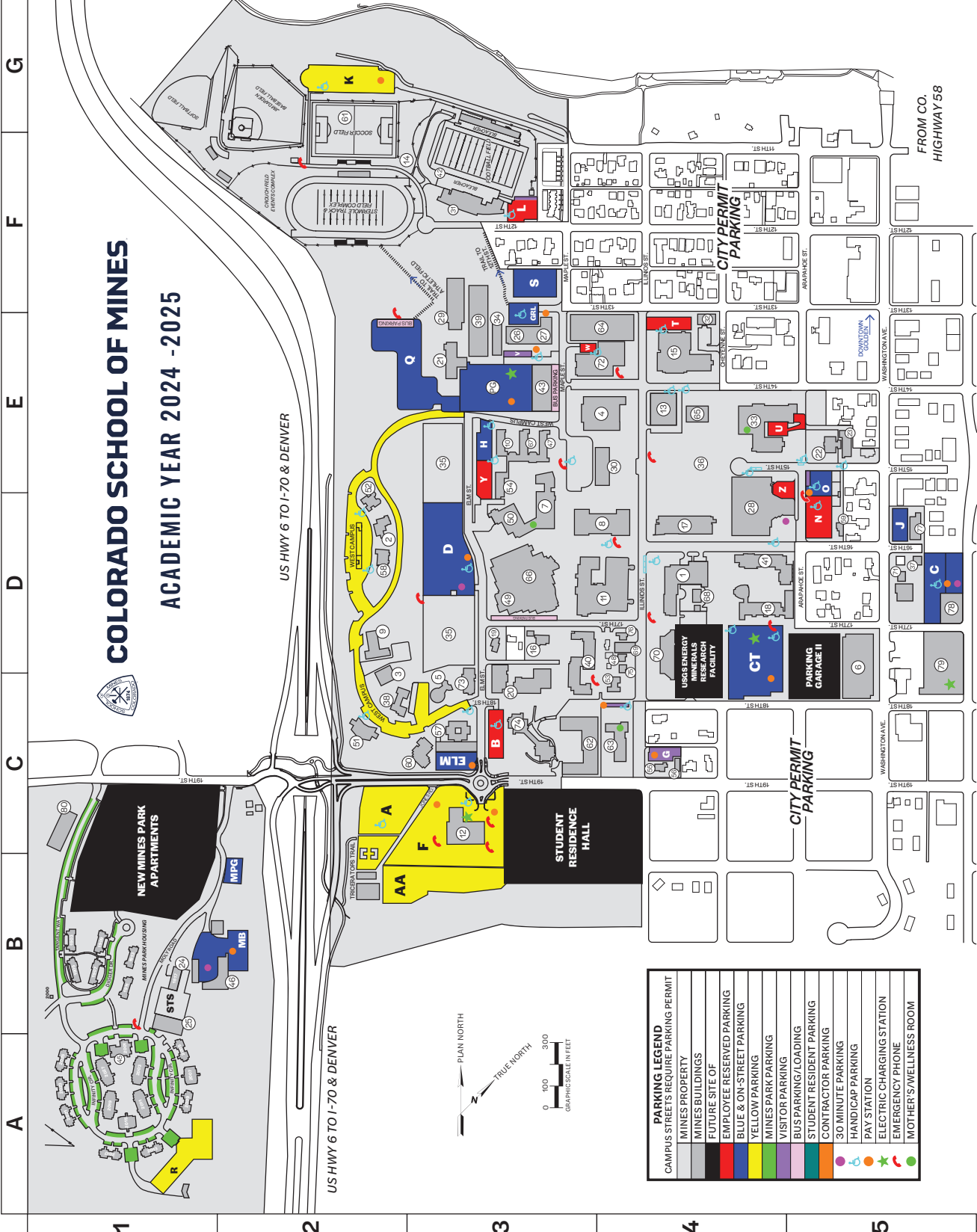
Campus Tour – 8/13/24@ 3:30pm

We have scheduled a campus tour for you and your guests that you will be bringing to the New Faculty Reception beginning at 3:30pm. Please plan to meet your tour guides at the Starzer Welcome Center to begin your tour by 3:20pm. You will end the tour at **Marv Kay Stadium in the Blaster Room** where we are holding your welcome reception.

New Faculty Welcome Reception – 8/13/24@ 5:00pm

To welcome you to campus and to the Mines community we have a New Faculty Welcome Reception planned. This will be held at **Marv Kay Stadium in the Blaster Room @ 5:00pm**. Please remember to wear your name badge that you were given on Tuesday morning in orientation.

BUILDING	BLDG. NO.	LOCATION
MCCORMICK HALL	1	D-4
ALPHA PHI SOCIETY	2	D-2
ALPHA PSI OMEGA FRATERNITY	3	D-2
ARTHUR LAKES LIBRARY	4	E-4
ASBEN HALL	5	C-3
BECK CENTER	6	D-5
BETA KAPPA BETA CENTER	7	D-3
BETHA THETA FRATERNITY	8	D-4
BROADFOOT HALL	9	D-2
BROWN HALL	10	E-3
BROWN HALL	11	D-4
CHAUVENET HALL	12	C-3
CENTRAL RECEIVING & STORAGE AND MUSIC PROGRAM	13	E-4
CLEAR CREEK ATHLETIC COMPLEX	14	FG-1/2/3
COOLBAUGH HALL	15	E-4
COORSTEK	16	D-3
COORSTEK	17	D-4
CTLM	18	D-4
CTLM	19	D-3
DISABILITY SUPPORT SERVICES	20	C-1
EARLY CHILDHOOD EDUCATION CENTER	21	E-3
ELM HALL & MINES MARKET	22	E-5
EM DRILLING LABORATORY	23	E-5
ENGINEERING HALL	24	B-1
ENGINEERING HALL ANNEX	25	B-1
FACILITY MANAGEMENT SHOP 1	26	B-1
FACILITY MANAGEMENT SHOP 2	27	E-3
GENERAL RESEARCH LAB - GRL	28	D-4
GEOLOGY USE/UM	29	E-3
GREEN CENTER	30	E-4
GLUCENNE HALL	31	F-3
HAROLD & PATRICIA MORELL ATHLETICS CENTER	32	E-4
HEATING PLANT	33	E-4
HILL HALL	34	E-3
INNOVATION SHOPS	35	D-3
INTRAMURAL FIELDS	36	E-4
KAFARAR COMMONS	37	D-5
KAPPA ALPHA THETA FRATERNITY	38	O-2
KAPPA SIGMA FRATERNITY	39	O-3
LABRORA INNOVATION HUB	40	D-3
MAPLE HALL	41	D-4
MARQUEZ HALL	42	F-3
MARY KAY STADIUM	43	B-1
MCNEEL HALL	44	B-1
MINES PARK COMMUNITY CENTER #1 - UNDER CONSTRUCTION	45	A-1
MINES PARK COMMUNITY CENTER #2	46	B-2
MOU BUILDING	47	E-3
MORGAN HALL	48	D-4
OFFICE OF INSTITUTIONAL EQUITY & TITLE IX	49	D-3
OUTDOOR RECREATION	50	D-3
PARKING GARAGE I	51	D-3
PERIODIC TABLE FOOD COURT	52	D-2
PHI GAMMA DELTA FRATERNITY	53	C-4
PHI SIGMA FRATERNITY	54	C-4
PRESIDENT'S RESIDENCE	55	C-4
RANDALL HALL	56	O-4
ROTC	57	O-3
ROTC TRAILER	58	D-2
SIGMA ALPHA EPSILON FRATERNITY	59	D-5
SIGMA CAPPA SOCIETY	60	C-3
SIGMA XI (2ND FLOOR)	61	O-2
SIGMA PHI EPSILON FRATERNITY	62	C-3
SOCCER COMPLEX	63	C-4
SURFACE HALL	64	E-4
STRAPER WELCOME CENTER	65	E-4
STENHAUER FIELD HOUSE	66	D-3
STRATTON HALL	67	D-3
STUDENT RECREATION CENTER	68	D-4
THOMAS HALL	69	D-4
UNIT OPERATIONS LAB	70	D-4
UNIVERSITY HONORS & SCHOLARS PROGRAMS	71	D-5
US GEOLOGICAL SURVEY USGS	72	E-4
VETERANS ALLIANCE	73	C-3
VOUK GYMNASIUM	74	D-4
WALLOD WRIGHT STUDENT WELLNESS CENTER	75	D-4
WEAVER TOWER	76	D-4
WOMEN IN SCIENCE ENGINEERING & MATHEMATICS (WISEW)	77	D-5
WRITING CENTER	78	D-5
WYOMING MINES OFFICE SPACE	79	D-5
WYOMING MINES OFFICE SPACE	80	D-5
WYOMING MINES OFFICE SPACE	81	D-5
WYOMING MINES OFFICE SPACE	82	D-5
WYOMING MINES OFFICE SPACE	83	D-5
WYOMING MINES OFFICE SPACE	84	D-5
WYOMING MINES OFFICE SPACE	85	D-5
WYOMING MINES OFFICE SPACE	86	D-5
WYOMING MINES OFFICE SPACE	87	D-5
WYOMING MINES OFFICE SPACE	88	D-5
WYOMING MINES OFFICE SPACE	89	D-5
WYOMING MINES OFFICE SPACE	90	D-5



COLORADO SCHOOL OF MINES

ACADEMIC YEAR 2024 -2025

PARKING LEGEND	
CAMPUS STREET'S REQUIRE PARKING PERMIT	
MINES PROPERTY	
MINES BUILDINGS	
FUTURE SITE OF	
EMPLOYEE RESERVED PARKING	
BLUE & ON-STREET PARKING	
YELLOW PARKING	
MINES PARK PARKING	
VISITOR PARKING	
BUS PARKING/LOADING	
STUDENT RESIDENT PARKING	
CONTRACTOR PARKING	
30 MINUTE PARKING	
HANDICAP PARKING	
PAY STATION	
ELECTRIC CHARGING STATION	
EMERGENCY PHONE	
MOTHER'S/WELLNESS ROOM	

FROM CO.
HIGHWAY 58

COLORADO SCHOOL OF MINES

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
- [Board of Trustees](#): 303-273-3280
- [Budget and Planning](#): 303-273-3064
- [Business Services for Infrastructure and Operations](#): 303-273-3330
- [Campus Events](#): 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
- [Communications and Marketing](#) (public relations, newsroom)
- [Compliance and Policy](#): 303-384-2546
- [Continuing and Professional Education](#): 303-384-2690
- [Controller's Office](#): 303-273-3166
- [Copy Center](#): 303-273-3202
- [Counseling Center](#): 303-273-3377
- [Disability Support Services](#): 303-273-3297
- [Distribution & Mail Services](#): 303-273-3267
- [Diversity, Inclusion & Access](#): 303-273-3146
- [Energy and Materials Programs Portfolio](#): 303-384-2620
- [Environmental Health and Safety](#): 303-273-3316
- [Facilities Management](#): 303-273-3330
- [Finance, Administration and Operations](#): 303-273-3240
- [Financial Aid](#): 303-273-3301
- [Food Services](#): 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
- [Infrastructure and Operations](#): 303-273-3330
- [Information & Technology Solutions](#) (formerly Computing, Communications & Information Technologies): 303-384-2345
- [Institutional Research](#): 303-273-3383
- [Internal Audit](#): 303-384-2504
- [McNeil Center for Entrepreneurship & Innovation](#)

COLORADO SCHOOL OF MINES

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](#)
- [Public Safety](#): 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
- [Student Life](#): 303-273-3231
- [Student Recreation Center](#): 303-273-3513
- [Student Wellness Center](#): 303-273-3377
- [Sustainability Office](#): 303-384-2413
- [Title IX](#): 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
- [Career Center](#): 303-273-3233
- [Center for Academic Services and Advising \(CASA\)](#)
- [Counseling Center](#): 303-273-3377
- [Disability Support Services](#): 303-273-3297
- [Financial Aid](#): 303-273-3301
- [Office of Graduate Studies](#): 303-384-2551
- [International Student and Scholar Services](#)
- [Library](#): 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

COLORADO SCHOOL OF MINES

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](#)
- [Computer Science](#)
- [Economics & Business](#)
- [Electrical Engineering](#)
- [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](#)

COLORADO SCHOOL OF MINES

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

Public Safety:

Normal Hours	303-273-3333
After Hours	303-980-7300 Jeffcom Dispatch (Non-Emergency)
Pat Bahl	303-513-9126 Sergeant
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](#)



COLORADO SCHOOL OF MINES

Student Wellness Promotion

WHO WE ARE

Student Wellness Promotion conducts programs to help Mines students build and access the tools needed to stay well during college and beyond. These activities and trainings promote holistic student well-being and address issues of community health and wellness.

BETSY'S FRIENDS: PEER EDUCATION

Student Peer Educators are a crucial part of our team. They promote safe, healthy behaviors and relationships through innovative outreach, programs, and workshops. Look for them around campus!



WHAT WE DO

- New CSM202 well-being course
- Annual events like Fresh Check Day & Sexual Wellness Fair
- Suicide prevention trainings
- Workshops on topics like stress management or resilience
- Blaster Boxes filled with helpful tools and resources
- Alcohol & substance abuse prevention
- YOU@Mines

Our department has something for every Oredigger to help understand the issues and use practical skills to promote your own well-being. We support faculty and staff so that they can in turn support their students' holistic well-being to positively impact their academic success.

FACULTY CONNECTIONS

Attend a suicide prevention training. Teach a section of CSM 202. Request a workshop for your class when you need a sub. Connect students to Peer Listeners. Reach out to us with additional ideas! Together, we will create a positive culture of well-being that recognizes the difficulties that college brings while also equipping students to thrive.



[MINES.EDU/STUDENT-WELLNESS](https://mines.edu/student-wellness)



Student Life @ Mines | Contact Information

Student Outreach and Support (SOS)

This is for students who are struggling with academic, personal, family, mental, and physical health and well-being 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
- <https://www.mines.edu/student-life/community-standards/>. Phone: 303-384-2766

Athletics:

- NCAA Varsity Athletics, Intramurals, and Club Sports. Directory: <https://minesathletics.com/staff-directory>
- Athletics student support/liaison – Dixie Cirillo. Contact: dcirillo@mines.edu.

Career Center

- Career Advising, Job Search Assistance, and “Don’t Cancel Class” workshop requests: [Workshop Request Form - Career Center \(mines.edu\)](#)
- Contact: careercenter@mines.edu Phone : 303-273-3233

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 assistance or consultation on student concerns):

- Contact: <https://www.mines.edu/counseling-center/> or Phone: 303-273-3377

Student 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: excusedabsence@mines.edu. Phone: 303-273-3350

General Student Life Support:

- VP of Student Life Suite, 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, jbriggs@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. *After hours: JeffCO Dispatch will send Mines PD to assist.*
- Non-emergency assistance Contact: publicsafety.mines.edu. Phone: 303-273-3333

Raise Your Hand:

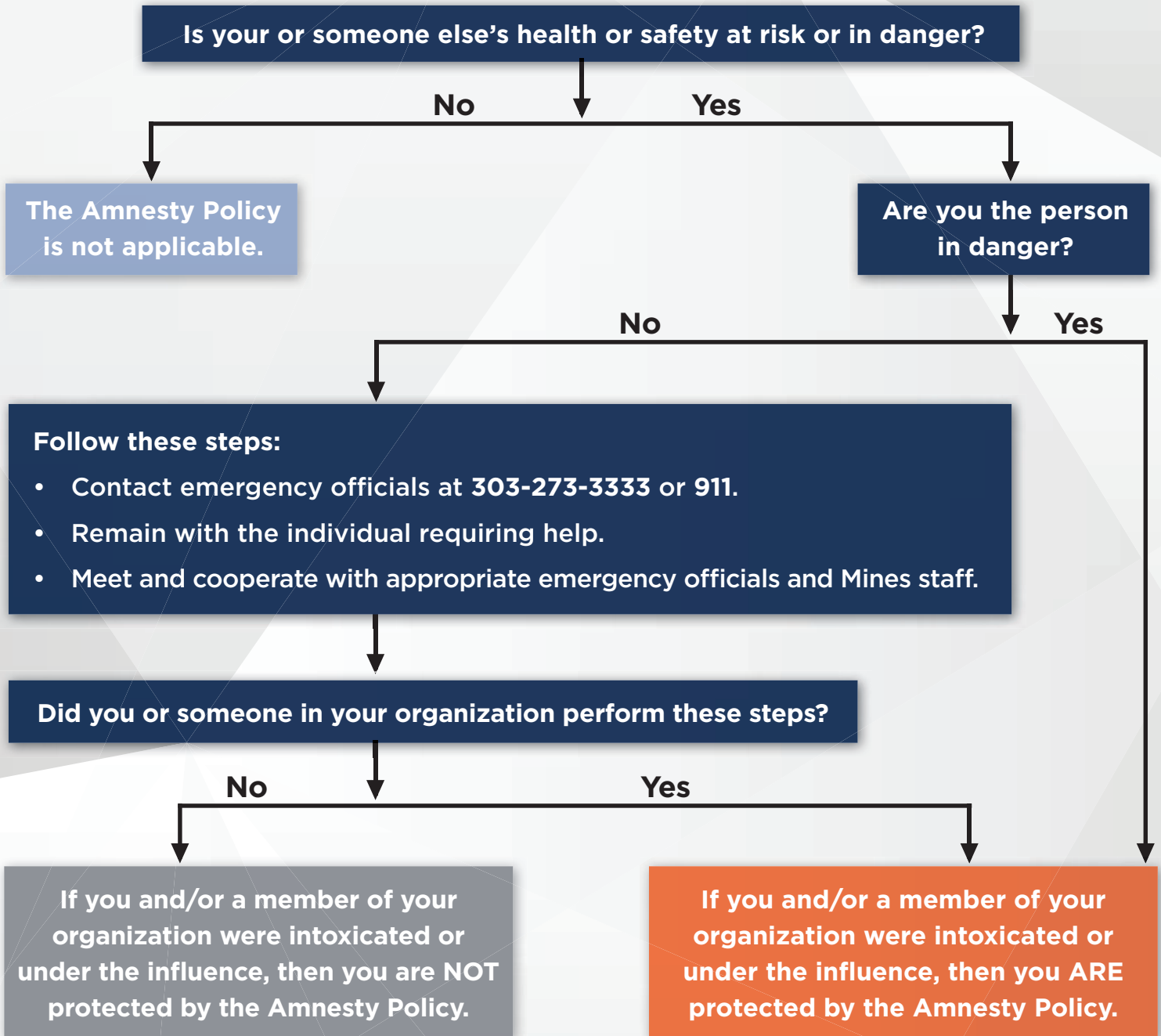
- Unsure where to go? “Raise Your Hand,” and we’ll assist! <https://www.mines.edu/student-life/raise-your-hand/>

Retroactive Withdrawals, Excused Absence Questions or Concerns, General Student Academic Concerns:

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

AMNESTY POLICY for Health & Safety

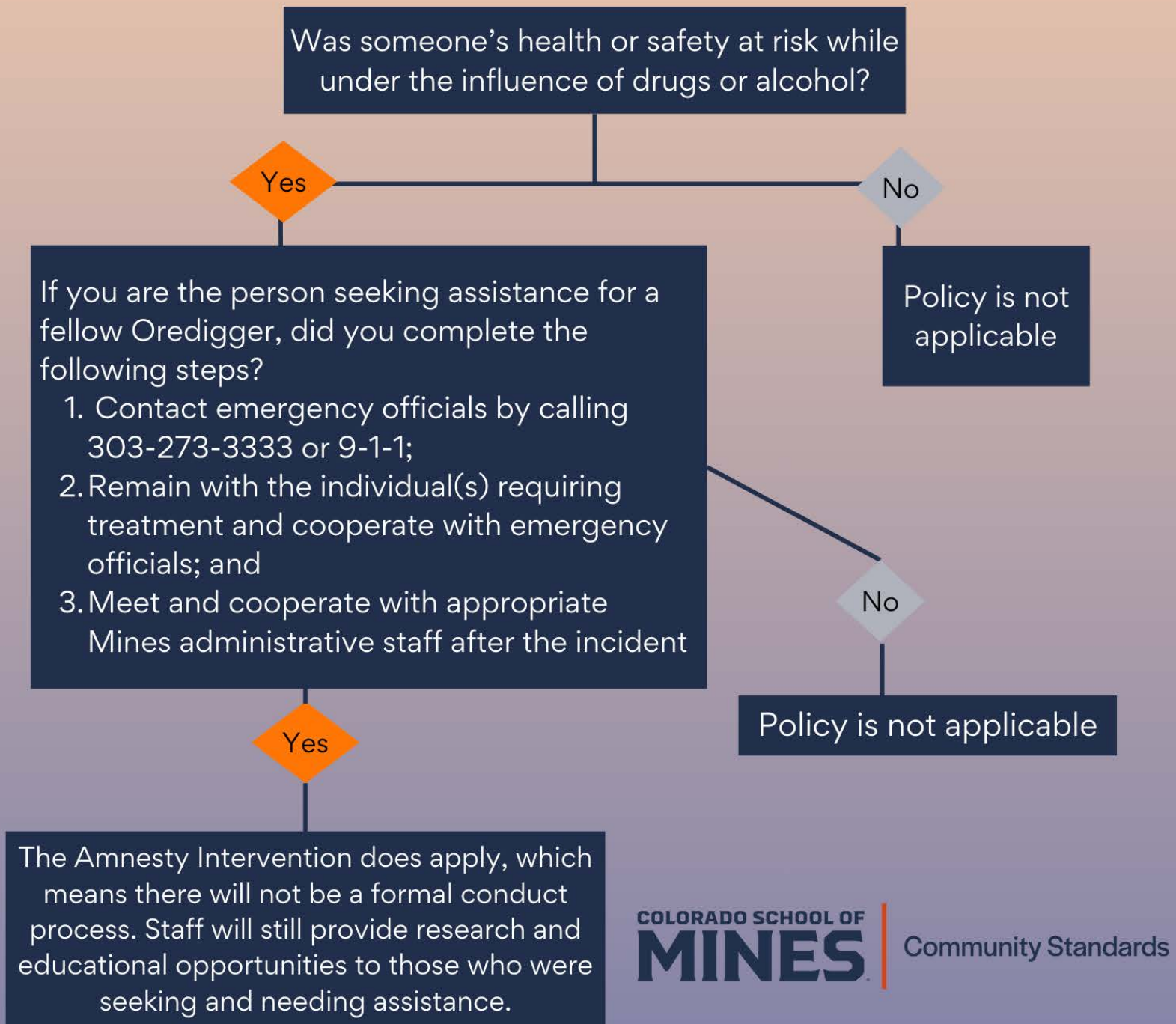
Signs of alcohol or prohibited substance emergency: confusion or disorientation; vomiting; irregular pulse, depressed breathing; inability to stay conscious; cold, clammy, or blue tinged skin/lips; lack of physical coordination; slurred speech; dilated pupils or bloodshot eyes; and shakes or tremors.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



**COLORADO SCHOOL OF
MINES**

Amnesty for Health & Safety Intervention

The Amnesty Intervention Policy exists to encourage students to seek help in an medical or mental emergency, or when someone has been the victim of a violent crime; and are fearful for getting referred to the Student Code of Conduct process for inappropriate alcohol and/or drug use. This chart provides a visual representation for how to get help yourself or for a fellow Oredigger, and avoid a disciplinary record.



Examples of and reasons for this Amnesty Intervention include: Drug or alcohol overdose, when someone has been the victim of sexual misconduct or hazing while also personally partaking in the use of drugs or alcohol, and other situations where a barrier in the way of asking for support and reporting concerns is the fear of the conduct process.

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.

Want to talk to someone at Mines?

Yes

No

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

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



COLORADO SCHOOL OF MINES

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



BENEFITS OFFICE HOURS

Monday - Thursday 11 a.m. - 1 p.m.

We offer in-person or virtual counseling by appointment only. If you are unable to make these days/times, please email us at benefits@mines.edu and we will work to accommodate you.

Link:

Benefits Office Hours Scheduling

For Benefits Questions:

Please review total rewards page prior to appointment.

Total Rewards Page

For Leave Questions:

Please review leave policy page prior to appointment.

Leave Benefits Policy Page

Classified?

Please visit the state of Colorado employee website for benefits and leave information prior to appointment.

Colorado Employee Website

Sign Up with us today using the link provided or QR code shown here!



Ways Orediggers can engage with MINES DI&A



FOUNDATIONAL

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



INTERMEDIATE

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



ADVANCED

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

<p>Try an Inclusion Icebreaker at your next meeting</p> <hr/> <p>Review Equity Resources</p> <hr/> <p>Join a Mines Community Alliance (MCA)</p> <hr/> <p>Attend campus DEIA events</p>	<p>Collaborate with a student organization through WISEM or MEP</p> <hr/> <p>Participate in departmental DEIA Council</p> <hr/> <p>Attend workshops at the annual Celebration of DEIA</p>	<p>Join the Mines DEIA Council</p> <hr/> <p>Submit a DEIA Award nomination</p> <hr/> <p>Apply for a Community Grant</p> <hr/> <p>Introduce yourself with your pronouns, include in email signature</p>	<p>Incorporate DEIA best practices in candidate reviews & selection</p> <hr/> <p>Promote Hiring Excellence</p> <hr/> <p>Join a department/unit diversity committee</p>	<p>Become an Ambassador, Advocate, Fellow or MCA Chair</p> <hr/> <p>Incorporate DEIA best practices in grants and proposals</p> <hr/> <p>Include DEIA in performance management</p> <hr/> <p>Lead a K-12 outreach activity</p>	<p>Use the Inclusive Classroom Checklist</p> <hr/> <p>Advise a student organization</p> <hr/> <p>Facilitate a workshop at the annual Celebration of DEIA</p>
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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 Diversity, Inclusion & Access



Kelly Olson

Associate Director



Heather Houlton

Program Manager - Research Analyst



Dr. Andrea Borrego

Program Manager - Equity and Inclusion



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



KELLY OLSON

DI&A Associate Director

303-273-3146
knechtel@mines.edu



SUMMER APPLGATE

SWE Advisor

303-273-3146
summer_applegate@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.



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

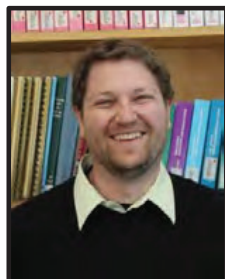
9. Consult on Research

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

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



ENVIRONMENTAL HEALTH & SAFETY

Here for a safer U

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

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



CHEMICAL PROCUREMENT

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.



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

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



Information Technology (IT)

Reference Guide for New Mines Faculty

IT Service Desk

In-Person Support: 156A CTLM Building (Next to the Computer Commons)

Phone Support: 303-278-HELP (4357)

Self-Help/Online Support: helpcenter.mines.edu

- Submit an IT help ticket or access online knowledge base articles.

my.mines.edu

my.mines.edu/ is the Colorado School of Mines single sign-on (SSO) portal, providing faculty, students, and staff access to most online services at Mines without the need to log into each one individually.

- Mines account management & password changing (required every 6 months).
- Access to Office 365, Canvas, Banner, Zoom, Workday, and much more!

Log into my.mines.edu with your Mines username and password.

Information Technology Customer Experience (ITCX) Team

- Focused on improving outcomes and the user experiences for Mines students, faculty, and staff.
- Supporting the adoption and use of accessible technologies, services, and solutions to enhance teaching, learning, and business operations.

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

On-Site Support Team

Supports all classroom technology at Mines.

- Call 303-278-HELP (4357) for immediate support.



Research Computing Team

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

Website: rc.mines.edu

Computer Labs

Campus teaching computer labs are undergoing a transformation as we free up physical space for emerging needs.

- 1000+ computers available to students across campus.
- Labs Provide software faculty and students need for lessons and coursework.

Website: 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 upon request.

Website: it.mines.edu/mfa/

Virtual Private Network (VPN)

- Increased online security.
- Remote access to protected on-campus services.

Search for “VPN and Global Protect” at helpcenter.mines.edu



Welcome to the HIVE!

The HIVE is a part of
Mines Online
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

<https://olfaculty.mines.edu/hive/>

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 & Learning, 8 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	2023
Pre-Production Planning Meetings	21	37	68	47	34	48	37
Voiceover Recordings	11	27	103	23	16	51	32
Green Screen / Lightboard (new in 2021) Equipment Checkouts	96	62	133	20	7 / 9	59 / 24	60 / 11
Filming of a Lecture, Seminar or Other Special Event on Campus	3	33	82	39	19	16	13
Number of Students, Faculty, Staff, and Students We Have Worked With	14	69	19	11	10	16	10
Completed Videos	180	183	226	241	237	224	213
Video Views	389	435	600	932	1143	936	1021
	29,000	53,000	49,000	131,000	167,000	191,700	147,000

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: 303.273.3904

Email: jeremiah.bellile@mines.edu

Website:
<https://olfaculty.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 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.

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.

Contact [Disability Support Services](#) if you need support for students with disabilities.

Strategy	Examples	Have tried	Want to try	
Create a welcoming environment				
Examine assumptions.	1. Reflect on your assumptions about students. What stereotypical notions do you hold about some student groups or backgrounds?			
Establish an inclusive environment for all students.	2. Include a syllabus statement that fosters an inclusive learning environment (use the latest Mines syllabus template from Trefny, see the bottom of this document for example text that you might add on fostering an inclusive classroom).			
	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.			
	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.			
Reduce anonymity.	7. Ensure that your TAs or graders are applying these tips, too.			
	8. Know and use preferred names and pronouns.			
Model inclusive language, behavior, and attitudes.	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).			
	10. Avoid using masculine pronouns for students, e.g. “Hey guys”			
	11. Provide context when using idioms, metaphors, pop culture references, etc.			
Incorporate multiple and diverse examples, resources, and perspectives.	12. Use language that acknowledges and values different experiences/perspectives.			
	13. Identify whether certain perspectives are missing or underrepresented in course materials.			
	14. Use examples/illustrations across multiple domains and/or representing a variety of perspectives and populations			
Establish, communicate, and reinforce norms and expectations for interactions, participation, and engagement.	15. Include materials, readings, and images that reflect contributions and perspectives from groups historically underrepresented in the field.			
	Add Structure			
	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			
	18. Communicate expectations for participation and engagement early and often.			
	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			
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.				

Strategy	Examples	Have tried	Want to try
Add Structure			
Establish, communicate, and reinforce norms and expectations	23. Ensure that leadership and roles for teams and group work are shared/rotated and clearly defined.		
	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 strategies.	25. Use a variety of teaching strategies, such as active learning strategies.		
	26. Provide alternative means for contributing to the discussion (e.g. clickers, poll everywhere, comments submitted on notecards).		
Encourage a growth mindset/ Acknowledge that failure and struggle are a part of learning			
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 helps students to improve.	32. Promote fairness and transparency by sharing the criteria (rubrics) by which you use to evaluate students' work.		
	33. Provide constructive and encouraging feedback on how to improve comprehension or performance. Examples include		
Encourage students to utilize resources	34. Help students learn about and encourage all to take advantage of academic assistance resources; e.g. tutoring via CASA. Not all students are aware of or comfortable seeking out campus resources.		
	35. Reduce the stigma of office hours and encourage students to take advantage of out of class support: routinely remind students of the times, encourage them to schedule a meeting if they aren't available during office hours, consider requiring students to come to office hours, be welcoming when students come.		
Work to refine and improve your teaching practices			
Set up processes to get feedback on the course climate.	36. Ask a colleague or Trefny staff to observe your teaching and provide feedback.		
	37. Participate in workshops (e.g. Trefny Center) or conferences (e.g. ASEE) to learn new teaching strategies and improve your teaching.		
	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.		

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

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. 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. 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. Request an ECF!



GRANT SUPPORT: Looking for support on your proposal? We can consult or collaborate on several components of grant proposals: the assessment/evaluation plan, the design of educational activities, and the education research component. We can also serve as an external evaluator!

INDIVIDUAL CONSULTATIONS:

- Do you have questions about teaching and learning? Contact a Faculty Developer (facdev@mines.edu) to explore your questions and brainstorm ideas.



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

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 or 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/>



Applying for External Funding to Launch your Research Career

Kip Findley – Professor, Metallurgical and Materials Engineering
Johanna Olson – Director, Office of Research Administration
Lisa Kinzel – Director, Research Development

<https://research.mines.edu/>
<https://ora.mines.edu/>

1

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Welcome to Mines!

Fantastic community to perform world class research and education



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A brief background

COLORADO SCHOOL OF MINES | Advanced Steel Processing & Products Research Center



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Our goal: Do impactful, fundable research and effectively educate students in the research process

- Impactful – Can be disseminated in high quality venues, others want to use and build from it, establishes new opportunities...
- Fundable – Funding agencies/industry/labs have a clear justification to support it and invest in Mines
- Educate Students – Students are the primary and most important “product” of the university



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A few topics

- Establishing a research direction
- Proposal Writing
- Resources
- Project Execution



Establishing Research Directions

- Everyone starts at a little different place...
- Build off your strengths (don't try to be everything to everyone)
- Identify a few core areas where you want to build strengths
 - Can be more competitive in “hot” areas if you make time to build strength, but...you have to invest time strategically



Look for opportunities to build a foundation

- Young investigator grants
- Mines internal opportunities
- Local opportunities, e.g. NREL
- Graduate fellowships – “free” students
- Foundation grants
- Partnerships on multi-PI proposals



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Monitor the opportunity areas – internally and externally

Alyssa Von Lehman Lopez
To: researchannouncements

Research Development News
June 7, 2024

National Science Foundation Update
To: Kip Freiley

U.S. National Science Foundation
Udrnal Dalai <udalai@NDIA.ORG>

NSF Regional Innovation Engines
Document Number: nsf24565

NSF Gen-4 Engineering Research Centers (ERC) – Due 9/3/2024

DOE Nuclear Energy Fiscal Year 25 Distinguished Early Career Program – Due 8/14/2024

NSF Gen-4 Engineering Research Centers (ERC) – Due 9/3/2024

DOE FY 2024 Continuation of Solicitation for the Office of Science Financial Ass (FAP) – Open deadline

DoD DEVCOM Army Research Laboratory Broad Agency Announcement for Fo Research – Updated Topic List

***NEW* NIST Notice of Intent: Manufacturing USA Institute Competition: Artificial Intelligence for Resilient Manufacturing – Anticipated June 2024**

***NEW* DOE Notice of Intent: FY2024 Batteries & Electrification FOA – Anticipated July/August 2024**

[EXTERNAL] Reminder: FY25 DoD Budget Priorities Webinar starts in 1 hour

Continue reading on NSF.gov

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Develop Strategic Partnerships

- Find programs with program managers who are willing to communicate, e.g. listen to your ideas, evaluate white papers, provide feedback
- Industry connections – Mines has a strong reputation for industrially relevant research
 - e.g. NSF GOALI, SBIRs, direct industry funding
- Use service opportunities to your advantage
 - Conference symposia organization, department seminar series
 - Workshop organization
 - Mines and external outreach



Steel Applications for CCS and CO₂ Transport Summary of Critical Themes and Discussion

Workshop date: September 22, 2022
Workshop location: Colorado School of Mines



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Identify and utilize resources

- What are the department and university P&T expectations for funding development? (positive trajectory) – smaller piece of pie that includes scholarship, leadership and education
- Learn from early career proposal success in department/program or external connections
- Get to know the campus community for potential partnerships
 - Be visible and contributing
- Be strategic with conference participation



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Identify and utilize resources

COLORADO SCHOOL OF MINES | Trefny Center

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.

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

EDUCATION RESEARCH
Further data-driven instruction and education research.

COMMUNITY
Foster a collaborative, learning-centered teaching community.

Research Development Resources

From proposal support and funding opportunities to crowd-funding for multidisciplinary research equipment, faculty can find a full range of research development resources on this page. Please note that RTT Research Development support services differ from ORA support services, discover these differences by downloading the [PDF: Research Grant Proposal Mt. Climb for PIs](#) below. For questions about Research Development Support at Mines, contact us at RTT@mines.edu.

DIVERSITY, INCLUSION AND ACCESS

WELCOME
At Mines, we're all about individuality, and we place a high value on out-of-the-box thinking. After all, that's how we make scientific breakthroughs and develop game-changing ideas. By providing support services and resources through the diversity, inclusion and access (DIGA) initiative, we aim to nurture this thinking and work towards a more inclusive and equitable campus environment for students, staff and faculty alike. Please contact DIGA with any questions you have about Mines DIGA, what it means to you, your department or office and how you can be a part of making Mines an inspiring and inclusive place for every Oreographer.

DIGA GOALS

- Attract, retain and graduate a thriving and diverse student body
- Attract, retain, develop and promote a thriving and diverse employee community
- Cultivate an inclusive campus culture that promotes and celebrates inclusion and achievement
- Inspire shared responsibility participation and accountability for DGA efforts across the Mines community

Mines is a small campus – develop positive relationships with the contributors

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Proposal Writing

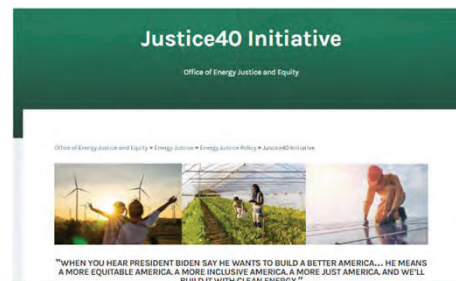
- Be prepared – doing proposals at the last minute usually results in lower quality and stretches staff thin
- Read FOA carefully – highlight key aspects/words/phrases
- Take time to build in thoughtful partnerships
- Make the reviewers feel **smart** (easy to digest) and **excited** with the innovation and impact
 - Find resources to review proposals including those with less familiarity with the topic
 - Palatable graphics

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Broader Impacts/Other Components

- Make plans that are doable
- Incorporate expert resources where necessary
- Make a clear connection to the proposal
- SMART goals



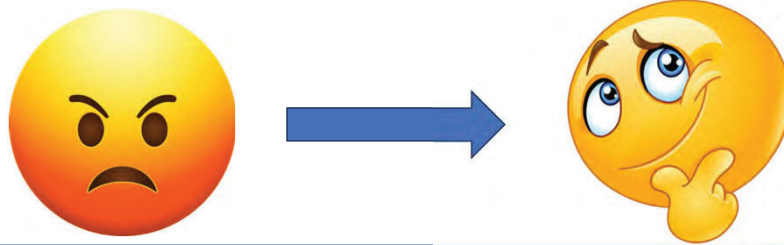
Project Execution

- Every department/program has a different way to handle administrative support
- Consider planning to support full degree plan of student
- Work with ORA through contracting and with questions, e.g. changing allocations in spending
- Work with VPRTT on Export Controls issues
- No-cost extensions are often utilized
- Write milestones in a way that they are achievable



Other

- Serve as a proposal reviewer/panelist to get exposure to what reviewers pick on
 - Also a good opportunity to network with program managers
- For declined proposals, read feedback, get irritated, revisit later to digest how to positively address reviews



**Good luck, enjoy the position,
and feel free to reach out!**

kfindley@mines.edu



MINES
Research Grant Proposal M Climb for PIs

8 Close Out, Report & Publish
 • Complete reporting and compliance requirements (Responsible Conduct of Research, Training, ISS requirements, Conflict of Interest, etc.)
 • Notify CRA (and RTT support, if used)
 • CRA finalizes agreement and sets up index
 • Reassemble team and file

7 Implement
 • Notify CRA (and RTT support, if used)
 • Prepare for resubmission? Look for a new opportunity of class, or both

6 Notification
 • CRA must have all final proposal documents by 9 am on the day of the deadline
 • CRA will submit all proposals by sponsor deadline (all declines that occur after 5pm will be submitted by 5pm)
 • Take a break

5 Take a break

4 Prepare Proposal & Budget
 • Notify CRA of confirmed intent to apply (CRA Policy: PIs must notify CRA of intent to submit at least 2 weeks prior to the deadline)
 • CRA will submit all proposals by sponsor deadline (all declines that occur after 5pm will be submitted by 5pm)
 • Project management preparation: set up checklist, timeline and shared workspace, lock off your team and make a plan to complete proposal
 • Work with CRA to prepare budget and supplementary documents/forms
 • Prepare project description or technical outline
 • Prepare non-technical documents (CRAA, Community Benefits Plan, etc.)
 • Send drafts out for peer review
 • Review, revise and finalize all documents

3 Submit Proposal
 • Take a deep dive into the solicitation
 • Notify CRA of your intent to apply even if still tentative
 • Determine if pre-proposal is required and if CRA needs to submit
 • Form questions for CRA, RTT and Program Officer/Sponsor if applicable
 • Build your team
 • If applicable, apply for an RTT seed grant
 • Identify potential peer reviewers

2 Organize Team & Resources
 • Talk with your leadership and colleagues to understand if funding opportunities are a good fit for everyone - is there capacity, expertise, technical support, a cooperative angle?
 • If it's a fit, you're grant ready!

1 Find Funding for Idea
 • Explore funding opportunities (resources on RTT website, Pivot, RTT newsletter, agency websites and listserves, and email from colleagues)
 • If cooperate or foundation funding notify Mines Foundation

Pre-Proposal 1 yr. - 3 mths. - 1 yr. - 3 mths. - 1 yr. - 3 mths.

Proposal Preparation 3 mths. - 6 mths. - 9 mths.

Post Award 6 mths. - 9 mths. - 1 yr. - 3 mths.

PIs
ORA
RTT

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Finding Funding

Research@Mines > Support > Find Funding will link you to various ways to find funding opportunities. Pivot, RTT weekly newsletter and links to targeted opportunities.

RESEARCH ANNOUNCEMENTS NEWSLETTER

Find more RTT seeded proposals of interest. Submit your business idea to the Mines research announcements newsletter. Receive a report for all current funding opportunities available on our website. It is provided daily to the selected email addresses. Please contact RTT@mines.edu

NEWSLETTER

TARGETED OPPORTUNITIES

EARLY CAREER	ENERGY	OPEN BAI
GRADUATE STUDENT	GENOCHENKES	HONORIFIC AWARDS
POSTDOCTORAL FELLOWSHIPS	RESEARCH INSTRUMENTATION	LIMITED SUBMISSION
LABOR COLLABORATIVE	SUSTAINABILITY	ABSTRACTS
	EDUCATIONAL OUTREACH & DIVERSITY	DARPA

Welcome, Lisa

My Funding Opportunities

My Profile & Groups

Tips & Resources

We are MINES ALUMNI FOUNDATION

Colorado School of Mines Foundation – Corporate and Foundations Relations team will help you find private foundation funding.
 Zach Lynott - zlynott@mines.edu

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Proposal Types

Research Development (RD)

Supports large, interdisciplinary, and/or strategic funding opportunities such as:

- NSF Engines
- ERC, EFRC
- Early Career
- NSF MRI
- Tech Hubs
- NSF MRSEC

Office of Research Administration (ORA)

Helps with ANY type of proposal

- Federal (NSF, DOE, DOD, NASA)
- Industry
- State
- Research Program Transfers
- Subcontracts/Subawards under a prime recipient
- Philanthropic Organizations (American Chemical Society, Bill & Melinda Gates Fdn)

! Involve ORA and RD early in proposal discussions! We can help with proposal timeline planning, sponsor negotiations of SOW, budgets, cost share, etc.



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Research Development

Support for large, strategic funding opportunities

- Facilitate file sharing workspace
- Provide a checklist of proposal components
- Shell documents for the project description and other narrative components
- Boilerplate language for non-technical components
- Toolkits to support your Broader Impacts and Diversity, Equity and Inclusion sections
- Connections with others on campus
- Graphic design support for figures and charts
- Non-technical review of drafts for compliance and responsiveness to the solicitation
- Editing review of drafts for persuasive language, length, and grammar
- Organize a red team review
- *Intellectible*, artificial intelligence (AI) tool to support proposal writing



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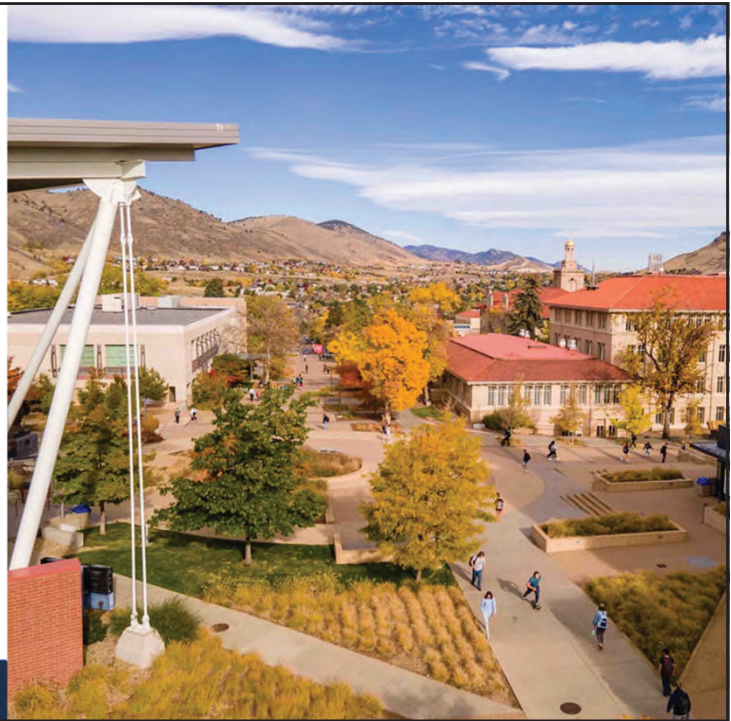


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Office of Research Administration

Support for all proposals

- Review the solicitation/RFP for required documents
- Prepare all cost and budget documents – compliant with school and sponsor policies
- Manage cost share requests
- Complete and/or prepare letters of support or commitment, other compliance documents
- Review technical documents to align with solicitation/RFP
- Assist with other ancillary documents including biosketch, current & pending, etc.
- Facilitate questions between proposal team and all sponsor types
- Manage subcontract interactions
- Review and respond to draft agreements including NDA's and teaming agreements
- Submits all proposals on behalf of Mines



ORA Research Proposal - Resources

ORA offers an abundance of resources on our website to help with your proposal.

Title	Categories	Tags
NSF Safe & Inclusive Working Environments Plan	NSF, Proposal	Template
TSA Cost Agreement	Award, TSA	Agreement, TSA
TSA Fixed Agreement	Award, TSA	Agreement, TSA
TSA Justification	Proposal, TSA	Proposal, TSA
TSA Scope of Work	Proposal, TSA	Proposal, TSA
Small Business Subcontracting Guidance	Award, Proposal	Guidance
TSA Determination Form	Proposal, TSA	Proposal, TSA
Research Compensation	Award	Guidance
NIH Checklist - Form C	Agency, NIH	Checklist
Non Disclosure Agreement_Multi Party	Award	Template
Budget - All Sponsors (with cost share)	Proposal	Budget, Cost Share, Federal, Non-Federal
Disclosures by Federal Agencies Regarding Foreign Collaborations	Proposal	Guidance
Procurement Guidance	Award, Proposal	Guidance
Non Disclosure Agreement_Unilateral	Award	Template
Non Disclosure Agreement_Bilateral	Award	Template
DISA Diversity Initiatives for Proposals	Proposal	Guidance
DARPA Young Faculty Award (YFA) Checklist	DARPA	Checklist
Proposal Submission Procedures	Proposal	Policies
Technical Report Template	Award	Technical, Template

- Agency specific checklists
- SOW
- Agreement
- Budget & Justification
- Diversity, Inclusion & Access
- Facility Write-Ups
- Data Management Plans
- Mentoring Plans

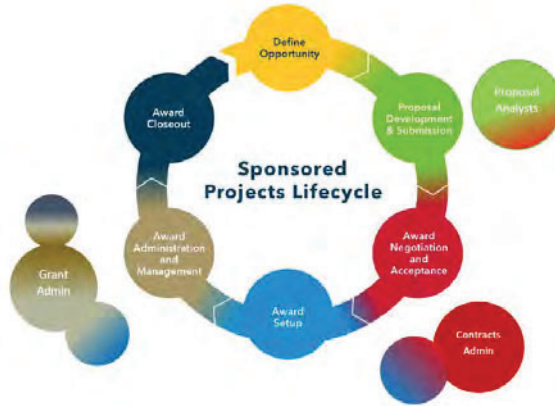


Contract & Research System - CRS

My Mines > Staff > ESM CRS (Contract & Research)



CRS allows Mines users and ORA to start proposals, request at-risk spending, route and certify requests, see funded and non-funded agreements, and so much more! All relevant documents for a research project are stored in CRS.



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Research Pillars and Researcher Network



Earth Exploration
Understanding our planet & responsibly developing its resources



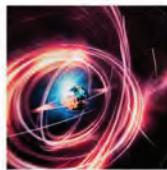
Integrated Energy Solutions
Powering the future



Sustainable Environment & Climate
Protecting our planet



Foundations of Responsible Innovation
Building solutions in global context



Fundamentals of Scientific Discovery
Expanding our understanding of the world



Science & Engineering Frontiers
Pushing the boundaries of what's possible

Research at Mines is organized within our **Research Pillars**, which can be found on our website: research.mines.edu

The **Researcher Network** is a searchable webpage where Mines researchers and their associated pillars and focus areas can be found.

This feature is designed to enable anyone – students, peers, and potential collaborators – to find and connect with Mines researchers based on their areas of expertise and research interests.

Please fill out our researcher survey to be included in the Researcher Network:



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Welcome to Mines! Please reach out to us with any questions.

**Research and Technology
Transfer (RTT)**

<https://research.mines.edu/>
Lkinzel@Mines.edu

**Office of Research
Administration (ORA)**

<https://ora.mines.edu/>
Jeagan@mines.edu



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Have a great semester!



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MINES**

Research and
Technology Transfer

Innovation with Impact

Research at Mines is organized within our Research Pillars, which can be found on our website: research.mines.edu



The Researcher Network is a searchable webpage where Mines researchers and their associated pillars and focus areas can be found.

This feature is designed to enable anyone – students, peers, and potential collaborators – to find and connect with Mines researchers based on their areas of expertise and research interests.

Please join the researcher network by filling out our researcher survey.

You can find the survey on our Researcher Network webpage research.mines.edu/researchers under the “Join the Researcher Network” button or by scanning the QR code to the right.





Research and Technology Transfer



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Research & Proposal Development
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Shared Instrumentation Facility

Why use a shared facility?

SIF provides central access to nine core facilities, 40+ instruments and 10 technical experts, all designed to advance your research.

Discover more, discover faster, *create a better future!*



Access advanced equipment



Receive expert support



Design your experiments



Develop new ideas



Save time & money



Achieve your research goals



Learn more at mines.edu/shared-facilities



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Providing Access to Experts & Instrumentation

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*

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

Optical & Electrical Surface Characterization

CARY 5G UV-VIS Spectrometer
 Four Point Probe/ Electrical Probe Station
 FTIR Spectrometer/Ellipsometer
 HL5500 Hall Effect Measurement System
 Janis SHI-4-2 Cryostat
 Solar Simulator
 WOOLLAM M-2000 Ellipsometer

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

Nanofabrication

Class 1,000 Clean rooms
 ABM UV Mask Aligner
 AUTO GLOW 200 Reactive Ion Etcher
 KARL SUSS MJB3 UV400 Mask Aligners
 NANYTE Beam UV - Laser Lithography
 Plasma-Preen System
 RAITH VOYAGER E-Beam Lithography System
 Spin Coater/Hot Plate
 ULVAC-RIKO MILO-5000 Rapid Thermal Annealer
 Diffusion Furnace
 High Temperature Furnace
 Vacuum Furnace
 Wet & Dry Oxidation Furnaces
 TPT hb05 Wire Bonder

Thin Film Deposition

AJA Sputtering System
 AJA UHV Multi-Technique Deposition System
 ANGSTROM Thermal Evaporator
 High Temperature Thermal Evaporator
 Semicore Sputtering System
 Tabletop Gold Sputter Coater

Water Quality Analysis

DR-6000 Hach
 Shimadzu TOC-L Total Carbon Analyzer
 Thermoscientific Dionex ICS-900

X-Ray Photoelectron Spectroscopy*



Mass Spectrometry

CAMECA APT LEAP 4000X SI IONTOF TOF-SIMS.V*
 SCIEX 5500 Triple Quad
 SCIEX X500R QToF
 THERMO SCIENTIFIC Orbitrap Exploris 240

X-Ray Diffraction & Computed Tomography

PANALYTICAL Empyrean Modular X-Ray Diffractometer*
 PANALYTICAL X'Pert Pro X-Ray Diffractometer
 ZEISS Versa 520 XCT*

* Instrument has in situ capabilities

Meet the Team

Our experts are happy to meet with your research groups, provide assistance with grant proposals, conduct individual consults or present technical talks. Submit your requests on our website:

[Mines.edu/Shared-Facilities](https://mines.edu/Shared-Facilities)



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Alex Liethen

Liquid Chromatography Mass Spectrometry Manager
aliethen@mines.edu



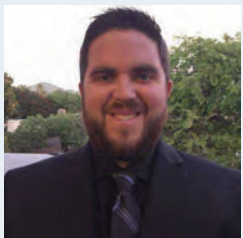
Alex Dixon

Nanofabrication, Surface Characterization & Thin Film Deposition Manager



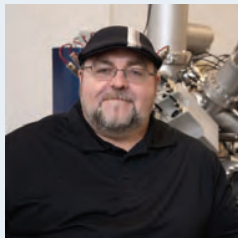
Xerxes Steirer

X-Ray Facilities Manager



Nathan Fennel

Mechanical Testing Coordinator
nfennell@mines.edu



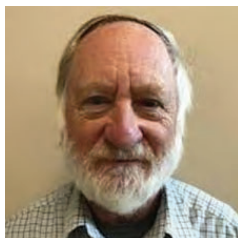
Michael Walker

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Garrison Hommer

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Gary Zito

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

[Mines.edu/Shared-Facilities](https://mines.edu/Shared-Facilities)

Instruments by Location

COORSTEK

BASEMENT LEVEL - 001 SUITE

KEYENCE VHX-5000	001-C
PANALYTICAL EMPYREAN X-RAY DIFFRACTOMETER	001-C
ZEISS VERSA X-RAY MICROSCOPE	001-C
ENVIRONMENTAL X-RAY PHOTOELECTRON SPECTROSCOPY	001-D
CAMECA LEAP 4000X SI	001-F
FEI HELIOS NANOLAB 600I FIB/SEM	001-J
IONTOF TOF-SIMS.V	001-K
RAITH VOYAGER E-BEAM LITHOGRAPHY SYSTEM	001-M
TESCAN S8252G RAMAN SEM/FIB	001-M
FEI TALOS F200X TEM/STEM	001-P

BASEMENT LEVEL - 040

ANGSTROM THERMAL EVAPORATOR	040
CLASS 1000 (ISO 6) CLEANROOM	040
DIGITAL INSTRUMENTS AFM	040
FTIR SPECTROMETER/ELLIPSOMETER	040
HALL SYSTEM	040
JANIS CRYOSTAT	040
NANYTE BEAM UV – LASER LITHOGRAPHY	040
PHENOM SEM	040
PROFILOMETER	040
UV-VIS SPECTROMETER	040
WOOLLAM M-2000 ELLIPSOMETER	040
TABLETOP GOLD SPUTTER COATER	040-B
AJA SPUTTERING SYSTEM	040-B
JA UHV MULTI-TECHNIQUE DEPOSITION SYSTEM	040-B
PLASMA-PREEN SYSTEM	040-B
SEMICORE SPUTTERING SYSTEM	040-B
ABM UV MASK ALIGNER	040-C
SPIN COATER/HOT PLATE	040-C

2ND FLOOR

6.7 kN ELECTROMECHANICAL LOAD FRAME	240
HIGH TEMPERATURE SERVOHYDRAULIC LOAD FRAMES	240

ALDERSON HALL

ASYLUM MFP-3D SCANNING PROBE MICROSCOPE	463
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COOLBAUGH HALL

2ND FLOOR

DR-6000 HACH	237
SHIMADZU TOC-L TOTAL CARBON ANALYZER	237
THERMOSCIENIFIC DIONEX ICS-900	237

3RD FLOOR

SCIEX 5500 TRIPLE QUAD	325
SCIEX X500R QTOF	325
THERMO SCIENTIFIC ORBITRAP EXPLORIS 240	325

GRL -GENERAL RESEARCH LAB

SOLAR SIMULATOR	231
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HILL HALL

1ST FLOOR

100 kN ELECTROMECHANICAL LOAD FRAMES	150
MTS EXCEED E22 IMPACT TESTER	150
SERVOHYDRAULIC LOAD FRAMES	151
FATIGUE MACHINES	160
DSI GLEEBLE 3500-GTC	173
JEOL JSM-7000F FIELD EMISSION SEM	176-E
WITEC LASER CONFOCAL RAMAN MICROSCOPE	177
FEI QUANTA 600I ENVIRONMENTAL SEM	178-A
FEI TECNAI T12	178-C

3RD FLOOR

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Recommendations for Research Advisor/Advisee Interactions and Expectations

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.

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., in-person 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.

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.

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.

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 Elm St.
- **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://coloradocrisiservices.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

Launching Your Academic Career at Mines

(all classes in Berthoud 106)

Workshop 1 (August 28, 12-1:30): Expectations for Promotion and/or Tenure: Publishing Your Research

- Research expectations at Mines for teaching and tenure lines
- Data on what makes a “quick starter”
- Tips for writing
- Writing for the right audience

Workshop 2 (Sept 11, 12-1:30): Setting Up Your Research Group & Developing Its Brand

- Developing a “powerful group”: mentoring and advising students
- Tips for working with graduate students: what is/is not your job
- Setting guidelines for students
- Working on an a national/international reputation and a “brand identity”
- Representing yourself outward: web presence and the good, bad and ugly of social media

Workshop 3 (Sept 25, 12-1:30): Grant Writing Tips and University Finances for Faculty

- Setting research objectives and writing compelling proposals
- Tips for getting federal and industry funding
- Should you meet your program officer?
- The Mines budget: where does money come from and go to?
- Types of university funds
- What are indirect costs and how they are used at universities



Launching Your Academic Career at Mines

(all classes in Berthoud 106)

Workshop 4 (Oct 9, 12-1:30): The Sustainable Professor

- Service work — how it helps and how it fits into your effort
- Time management and saying no gracefully
- The Want-To-Do, Need-To-Do Conundrum
- Realistic goal setting
- Finding time for yourself by establishing your absence
- Thinking of yourself in multidimensional space

Workshop 5 (Oct 23, 12-1:30): Networking, Finding Mentors, and Managing Personalities

- How to identify (multiple) mentors
- Figuring out expectations of others
- Managing up
- The principles of shared governance
- Effective listening and communication
- Dealing with bullies or difficult colleagues
- People you need to know: the Board of Trustees; the President and Provost; Faculty Senate

Workshop 6 (Nov 6, 12-1:30): Working on Your Dossier (Start Now!)

- The tenure and/or promotion process timeline
- What goes into your dossier
- How to write your statements
- Promotion letters — how they are selected, how to cultivate writers, what to avoid
- Intangibles
- Promotion myths and FAQs

Lunch will be provided, and each week is somewhat independent such that folks can attend as they are able. If you need to arrive late/leave early for teaching, etc. that is no problem also.

Questions/comments? Contact Kamini – ksingha@mines.edu



COLORADO SCHOOL OF MINES

Launching Your Academic Career at Mines

(all classes in Berthoud 106)

Learning objectives below:

Overall course goal: Increase retention rates and promotion and/or tenure success rates for new faculty at Mines.

This will be accomplished by working with faculty to:

1. Develop a strong promotion packages:

- explain Handbook/Procedures manuals
- identify characteristics of successful candidates
- summarize characteristics of good external letter writers
- start working on dossier materials

2. Enhance research, teaching and professional productivity:

- develop a professional growth plan
- schedule time to write
- identify growth areas for your teaching
- describe what gets grants funded
- develop an elevator pitch for your research
- identify service expectations
- develop a mechanism for saying 'no' that resonates
- set guidelines for working with students
- develop tools to more effectively with others
- find ways to build support networks/cohorts

3. Identify procedures, supports, and structures at Mines that can help advance your career:

- identify campus resources & where to go for help
- identify characteristics of mentors that might work for you
- identify who makes decisions on campus
- describe the basics of money at a university
- "demystify" academia
- put a value on your personal time



Mentoring at Mines

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:

- 1) 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 listserv 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/>



Mentoring at Mines

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 (rsnieder@mines.edu) 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/>



Mentoring at Mines

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



Mentoring at Mines

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 (rsnieder@mines.edu) or Kamini (ksingha@mines.edu) so we can help try to find someone with you



Mentoring at Mines

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*



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How to be a Good Academic Citizen: The Role and Importance of Service in Academia

Heather L. Pfeifer

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How to be a Good Academic Citizen: The Role and Importance of Service in Academia

Heather L. Pfeifer

Although graduate students and new faculty members are told that service is an important and necessary part of academe, many are warned not to take on too many service commitments because doing so will interfere with their scholarship and teaching. Consequently, many graduate students and junior faculty members come to perceive service as both less meaningful and less important to their careers. Unfortunately, this attitude is detrimental because many service activities can help enhance professional development, facilitate professional connections, and strengthen one's scholarship and teaching. This essay provides a framework for graduate students and junior faculty to use to help develop a strategic service agenda early in their career that will help advance their professional goals.

Introduction

Everyone who pursues a career in academia knows there are three domains on which they will be evaluated: their research, their teaching, and their service. The amount of weight assigned to each category will vary, and will depend on the type of institution at which they choose to work (e.g. Research I, comprehensive, teaching, etc.). Typically, most universities and colleges will expect the majority of a faculty member's time to be devoted to his or her research and teaching, with a lesser amount of time devoted to service. In fact, many new faculty members are cautioned that "no one ever gets tenure for doing service." In addition, although new faculty members are told that service is an important and necessary part of their jobs, they are warned not to take on too many service commitments because doing so will interfere with their scholarship and teaching (Ward, 2003). Consequently, they come to perceive service as both less meaningful and less important to their careers (Finkelstein et al., 1998; Holland, 1997, 1999; Ward, 2003).

As a result of this perception, most graduate students and new faculty members receive advice from their mentors and senior faculty about how to build

their research and teaching portfolios, but are given very little guidance on how to develop a service portfolio (Bensimon, Ward, & Sanders, 2000; Boice, 2000). Consequently, most graduate students and new faculty members have a general understanding of what it means to be a “good scholar” or a “good teacher,” but do not understand what it means to be a “good academic citizen.” This lack of understanding is reinforced by the fact that there is no uniform definition for service within academe, and its role in higher education has not been clearly defined (Boice, 2000; Ward, 2003). Moreover, most universities do not provide clear guidelines regarding the expectations for service for faculty, nor do they clearly articulate how it will be evaluated (Lynton, 1995; Ward, 2003).

This lack of clarity about the expectations of service has led many graduate students and new faculty members to undervalue its importance and perceive it as a “necessary evil” that one has to endure (Ward, 2003). Similarly, they hesitate to engage in any meaningful service early in their careers because they believe it will impede their progress toward tenure and promotion (Ward, 2003). Unfortunately, this approach is detrimental to graduate students and new faculty members because building an intentional and strategic service agenda can, in fact, lead to opportunities that will enhance professional development. Moreover, many types of service activities can greatly enhance one’s scholarship and teaching, as well as facilitate one’s professional connections. Thus, contrary to the advice they have received, graduate students and new faculty members should not put service on the back burner at the beginning of their academic careers. Instead, they should formulate a service agenda that will lend coherence to their teaching and research agendas and that will help them establish their standing within the professional field.

This essay provides an overview of the different types of service activities graduate students and new faculty members may participate in within their academic institution, their professional field, and the community at large. It also addresses how service may complement and enhance one’s teaching and scholarship. Finally, it provides a framework for graduate students and new faculty members to use to help develop a strategic service portfolio that will help them advance their career goals.

What is Service?

In the broadest terms, academic service is defined as:

applying one’s knowledge, skills, and expertise as an educator, a member of a discipline or profession, or a participant in an institution to benefit students, the institution, the discipline or profession, and the community in a manner consistent with the missions of the university and the campus. (University of Miami of Ohio, 2010, p. 1)

In simpler terms, it means engaging in activities that allow you to share your expertise and skills with others that will result in the betterment of your university, your profession, or the community at large. Given the breadth of this definition, there are a multitude of roles and activities faculty can choose from to help build their service portfolio.

Types of Service

There are three primary categories in academic service: (a) service to the institution; (b) service to the discipline or profession; and (c) community engagement (aka outreach) (Ward, 2003). Each type offers different opportunities to expand and enhance one's knowledge and skills, as well as to share one's expertise with others. A brief description of each category is provided below, along with a few examples of specific activities or roles in which one might choose to participate.

Service to the institution involves "activities associated with generating, transmitting, applying, and/or preserving knowledge for the benefit of audiences internal to the university" (Fear & Sandman, 1995; p. 117). As we all know, academic communities are comprised of many programs, departments, schools, colleges, and administrative units. To function properly, the institution and each of its individual units must rely upon help from its members. Such help may include the sharing of a member's expertise on governance, or his or her assistance with activities that help to sustain or strengthen the institution's academic endeavors (University of Miami of Ohio, 2010). In other words, the university is reliant upon its faculty to be good "institutional citizens" (Fear & Sandman, 1995). Institutional service can be completed at the program (or department) level, the college level, or the university level. A few examples of the different activities one might participate in within each level are provided in Table 1.

Institutional service affords a junior faculty member several opportunities. These include the opportunity to gain more knowledge about institutional and disciplinary affairs, and the opportunity to get to know his or her colleagues within the division and within other units on campus (Ward, 2003). Both of these experiences are beneficial to a junior faculty member on two levels. First, many of these activities can help broaden their professional skills related to academic oversight (e.g. program review, accreditation, academic appeals, and faculty evaluation) and to institutional governance (e.g. budgeting, strategic planning, and administrative hiring) (Finsen, 2002). Both of these are required skill sets for any individual who aspires to transition into an administrative role (e.g. chair of department, dean, etc.) later in his or her academic career.

The second benefit of participating in institutional service is that many of the activities will involve a cross section of the faculty from across the university. This allows a new faculty member to introduce him or herself to the academic

Table 1 Types of service activities by institutional level

Program/Department	College	University
<ul style="list-style-type: none"> • Participating on (or chairing) a search committee • Advising students • Assisting in program-level assessment activities • Serving as an appointed or elected administrator of an academic unit (e.g. program director) • Serving as faculty advisor to a student organization • Participating in pre-and post-tenure reviews of faculty • Serving as member (or chair) of a thesis or comprehensive exam committee • Coordinating professional development activities for students 	<ul style="list-style-type: none"> • Serving on (or chairing) a college-level governance committee • Participating as an elected member of faculty governance (e.g. College Senate) • Participating in curriculum review and development • Participating in academic appeals • Participating on (or chairing) a search committee • Assisting in college-level assessment activities • Participating on a promotion and tenure committee • Assisting in college-level strategic planning • Coordinating professional development activities for junior faculty 	<ul style="list-style-type: none"> • Participating as an elected member of faculty governance (e.g. University Senate) • Assisting in the development or assessment of general education requirements • Serving on (or chairing) a university-level governance committee • Assisting with student disciplinary hearings • Participating on search committee for administrative hire • Representing the university at a special event hosted on campus or in the community • Developing or assisting with new campus initiatives • Serving on (or chairing) a taskforce or workgroup to address an issue facing the campus community • Serving as the university's representative on a civic organization board

community, and to begin to develop relationships with their colleagues, particularly with senior faculty. This is important because some of these relationships may evolve into mentor/mentee relationships. As such, the senior faculty can help the new faculty member navigate campus politics, and provide him or her counsel on how to strengthen his or her portfolio for promotion and tenure.

Service to the discipline involves activities that support or enhance the quality of the disciplinary or professional organizations to which one belongs (University of Miami of Ohio, 2010). Within the discipline of criminal justice, there is a wide range of professional organizations that graduate students and faculty members may join. Some attract a broad international or national

audience, while others focus on smaller and more discipline-focused audiences. Many of them offer free or discounted memberships to graduate students. Similarly, many offer free access to select academic journals to all of its members. A sample list of the different criminal justice professional organizations is provided in Table 2.¹

In this day and age of “it’s not just what you know, but who you know,” networking is an invaluable asset to career advancement. Membership in a professional organization affords one the opportunity to interact and connect with colleagues from other institutions who share similar research interests (Boice, 2000; Ward, 2003). Thus, when deciding which professional organization to join, one should look for those that align with one’s research agenda.

Most associations rely on members to assist with their administrative workloads. As a result, there are many opportunities for graduate students and junior faculty members to participate. Some examples of the different types of disciplinary service opportunities are provided in Table 3. Obviously, some of these activities will require significantly more time than others. Therefore, graduate students and junior faculty members should look for opportunities that are time-limited, such as chairing a panel at one of the annual meetings, serving on an ad hoc committee, or reviewing manuscripts for one of the professional journals. As one becomes more established in the professional field, one should then begin to pursue some of the larger service roles within these organizations (e.g. serve as an appointed or elected officer, serve on the editorial board of a professional journal, etc.). The important thing to remember is being actively engaged in service within one’s discipline will afford one the opportunity to demonstrate one’s professional knowledge and expertise, as well as one’s leadership skills. Those experiences may help open doors to new collaborative partnerships, as well as to future job opportunities (Boice, 2000; Ward, 2003).

Community engagement (i.e. outreach) refers to activities that are designed to contribute to the public welfare beyond the university community (Ward, 2003). More specifically, it “describes [the] collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity” (New England Resource Center for Higher Education, [NERCHE], n.d.; para. 3). Thus, community engagement focuses on how one can utilize one’s knowledge and expertise to resolve “real world” problems in the community (Boyer, 1996; Fear & Sandman, 1995; Kellogg Commission on the Future State & Land-Grant Universities, 1999). Some of the different types of service activities that embody community engagement are highlighted in Table 3.

1. For a more inclusive list of professional organizations associated with criminal justice, please go to the ACJS website at http://www.acjs.org/pubs/167_2105_13933.cfm

Table 2 Sample list of criminal justice professional organizations

International	National	Regional (affiliates of ACJS)	Discipline-specific
<ul style="list-style-type: none"> • Australian and New Zealand Society of Criminology • South Asian Society of Criminology and Victimology • European Institute for Crime Prevention and Control (affiliated with United Nations) • European Society of Criminology • Canadian Criminal Justice Association • World Society of Victimology • Alliance of NGOs on Crime Prevention and Criminal Justice 	<ul style="list-style-type: none"> • Academy of Criminal Justice Sciences • American Society of Criminology • National Criminal Justice Association • Justice Research Statistics • Law and Society Organization 	<ul style="list-style-type: none"> • Midwestern Criminal Justice Association • Northeastern Association of Criminal Justice Sciences • Southern Criminal Justice Association • Southwestern Association of Criminal Justice • Western Association of Criminal Justice 	<ul style="list-style-type: none"> • International Association of Chiefs of Police • International Association of Women Police • National Association for Court Management • American Correctional Association • American Probation and Parole Association • National Institute of Corrections Information Center • International Corrections and Prisons Associations • American Academy of Forensic Sciences • National Organization for Victim Assistance • National Partnership for Juvenile Services

(Continued)

Table 2 (Continued)

International	National	Regional (affiliates of ACJS)	Discipline-specific
			<ul style="list-style-type: none"><li data-bbox="303 236 360 489">• National Association of Youth Courts<li data-bbox="369 189 426 489">• The Center for Research on Organized Crime

Table 3 Types of external service activities

Service in a professional organization	Community engagement (Lynton, 1995)
<ul style="list-style-type: none"> • Serving as an appointed or elected officer • Serving on a standing or ad hoc committee • Organizing a panel or workshop for the annual meeting • Chairing a panel or workshop at the annual meeting • Serving as the editor of a professional journal or newsletter • Reviewing manuscripts for a professional journal • Assisting in the development of professional or academic standards 	<ul style="list-style-type: none"> • Consulting with a private, public, or non-profit organization to help identify ways to enhance their efficiency or effectiveness • Participating in collaborative initiatives involving schools, civic agencies, and organizations • Assisting agencies in evaluating a specific policy or program • Giving a presentation to the public to educate them on a specific topic or issue • Facilitating trainings or coordinating non-credit instructions to help meet continuing education needs of an agency • Serving as an expert witness or testifying before legislative committees • Serving as a subject matter expert for the media

Community-engaged service has become increasingly important over the past three decades as the level of public support for higher education in general has diminished, and the level of public funding for state institutions has similarly declined (Boyer, 1990, 1996; Hiltzik, 2015; Hirsch & Weber, 1999; Kellogg Commission on the Future State & Land-Grant Universities, 1999; Mortenson, 2012). In particular, many people perceive universities and colleges as insular institutions that are “out of touch” and disconnected from community concerns (Cantor & Englot, 2014; Harkavy, 1999; Kellogg Commission on the Future State & Land-Grant Universities, 1999; Weisbuch, 2015). Even more disconcerting, some in the public sector have begun to openly question the value and role of higher education in today’s society (Cantor & Englot, 2014; Hiltzik, 2015). Specifically, critics of higher education assert that academics continue to live in an “ivory tower” and fail to make their research useable and understandable to the broader community, thereby fail in their public mission (Cantor & Englot, 2014; Weisbuch, 2015).

Consequently, more colleges and universities are striving to reinvent themselves into “community-engaged” institutions, whereby they become an intellectual resource and an anchor institution for their community (Cantor & Englot, 2014; Lynton, 1995; Weisbuch, 2015). This movement has gained such momentum in higher education that the Carnegie Foundation added community engagement to their classification scheme (NERCHE, n.d). Similarly, an increasing number of colleges and universities have subsequently made it an integral component of their collective mission (Lynton, 1995).

Community engagement is equally important to a faculty member's individual professional development (Cantor & Englot, 2014; Lynton, 1995). In particular, engaging in professional service activities in the community allows one to stay in touch with developments in the field. This helps to keep one's teaching and research up to date and relevant (Lynton, 1995). In particular, it provides the opportunity to incorporate more "real world" problems and best practices in the classroom and in one's curriculum. These experiences can also help uncover new research questions to pursue in one's scholarship, and facilitate partnerships that may lead to future research. Ultimately, these experiences help broaden one's knowledge and expertise in the field, and develop into a more well-rounded scholar (Lynton, 1995).

Developing a Service Agenda

When starting one's academic career, it is easy to get overwhelmed with all of the demands that are placed on one's time. Trying to find a way to balance one's research and teaching, as well as one's personal life, can be a daunting task for even the most savvy of new academics. Although many graduate students and new faculty are routinely advised to avoid engaging in too many service activities during the first few years of their career, service should not be treated as an "add-on" to one's workload or be perceived as disconnected from one's scholarship or teaching (Ward, 2003). Rather, by developing a strategic service agenda in the early stages of one's career, one can more quickly integrate into the institution and profession, as well as help create opportunities for professional development (Boice, 2000).

Graduate Students

Unfortunately, many graduate programs fail to educate students about the realities of faculty life (Ward, 2003). While most students understand the triumvirate on which they will be evaluated (i.e. teaching, research, and service), most will enter the job market inadequately prepared to successfully balance the three. Currently, most graduate programs have their students prioritize developing their scholarship portfolio (and to some degree, a teaching portfolio), but discourage them from engaging in any outside service activities (Richlin, 1993; Ward, 2003). This approach conveys the message that service commitments will compromise their ability to succeed in academe, and are not as important as either their scholarship or teaching (Ward, 2003). Many graduate students carry that attitude with them when they transition into the role of a junior faculty member (Ward, 2003).

When you sit down and talk with any doctoral student and ask him or her what their immediate goals are, the majority will tell you they want to successfully complete their degree and get a job. Given the demands of today's

graduate programs, I am not surprised that many students feel they do not have enough time to take on anything outside of their coursework and their research. Moreover, they feel it is not beneficial at this juncture of their academic career to engage in any service-related activities. I would argue, however, that engaging in a few select disciplinary service activities can help position them more competitively in the job market by enabling them to connect with academics from other institutions.

Students should be strategic when selecting which service activities to get involved in. To do this, I would advise students to base their decision on two factors: (a) their research focus and (b) the amount of time required by the activity. First, I would advise students to identify a section or chapter within one of the national or regional professional organizations that is aligned with their personal research agenda. For example, if a student is interested in re-entry programs for female offenders, he or she could join the Corrections or the Minorities and Women sections (or both) in ACJS. This connection will afford the student the opportunity to network with other scholars in the field, and may help them develop future opportunities for collaborative partnerships.

I would further advise the students that after joining the organization, they should attend the general membership meeting at the ACJS annual conference to learn about the different service opportunities within the section. Some sections will solicit volunteers to serve on one of their standing committees (e.g. awards, membership, etc.), while others may have an ad hoc project for which they need help (e.g. creating a portfolio of syllabi for discipline-specific courses, creating a social media profile for the section, etc.).

When deciding which of these activities to participate in, the student should take into consideration how much time and effort will be required to meaningfully complete the task. I use the word meaningful because you never want to commit to something and then not follow through, nor do you want to put in only a minimal amount of effort. Keep in mind that when building a professional network "it's not [just] who you know, but who knows you" (Sundheim, 2011, p. 1). Thus, you always want others to have a positive impression after working with you on a committee or a project. So, before committing to any activity, ask one of the section leaders what the expectations are for the committee members (e.g. how often do they meet, what is the charge of the committee, etc.) and what is the expected length of service? Based on the feedback you receive, you can then decide whether this is something that you will be able to meaningfully contribute to.

Similarly, disciplinary service for graduate students is very valuable. It facilitates connections with other scholars within the field, and it provides students with the opportunity to demonstrate their knowledge, expertise, and leadership skills. In addition, participating in such service activities can help the student establish a rapport with other members in the section who may then be willing to provide him or her with a letter of recommendation when he or she enters the job market. Moreover, if the student garners a positive reputation

as a result of his or her attitude and performance, he or she will be more likely to be asked to participate in other activities in the future.

Junior Faculty

Many junior faculty struggle during the first few years to find a way in which to integrate themselves meaningfully within their institution, as well as within their profession. Given the pressure to establish their scholarship record, as well as manage their teaching responsibilities, many avoid engaging in too many service commitments for fear that it will impede their professional progress (Ward, 2003). While no one wants new faculty to overextend themselves, there are strategic ways that they can integrate service into their workload so that it complements and enhances their teaching and scholarship, and so that it facilitates rapport building with their colleagues (Boice, 2000; Ward, 2003).

During the first year, most departmental chairpersons shield a junior faculty member from being assigned too many institutional service obligations. While this adjustment period is needed, it is important to help them find ways to integrate themselves into their academic unit as well as into the broader university community (Boice, 2000). To do this, I would recommend that a junior faculty member ask their department chairperson and other senior faculty members for advice about which department-level service activities would align with their workload. Many times, departments will have small, ad hoc projects (e.g. organizing a brown-bag lunch for new faculty to discuss assessment strategies) or events (e.g. hosting an open house for potential students) that the junior faculty member can assist with. By volunteering to help out, the junior faculty member can demonstrate to others that he or she is a “team player,” which will help them establish a rapport with their peers (Boice, 2000).

One of the criticisms of having first-year junior faculty members participate in service commitments is that it will impede the time he or she needs to spend on scholarship and teaching. However, the amount of time required to participate in these activities is minimal, and the benefits are great. Specifically, participating in the activities helps these junior faculty members integrate into the university community. In addition, by participating, they demonstrate from the beginning of their careers that they are willing to collaborate with their colleagues to better the department. Finally, their participation helps create the framework for collegial relationships with their peers.

During a junior faculty member’s second year, I would recommend he or she begin to attend faculty governance meetings to learn about institutional affairs and culture. Specifically, I would recommend that he or she ask the departmental chairperson to nominate or appoint him or her to one college-level standing committee (e.g. curriculum review, program assessment, work–life, etc.). This will provide the junior faculty member with the opportunity to

learn new professional skills, as well as to establish new connections with other faculty members in the college.

I would also recommend that the junior faculty member become more engaged in the professional community. Professional networks play an important role in the promotion and tenure process (e.g. the requirement of external reviews). Thus, this is a good time for him or her to work on establishing new professional connections as well as strengthening existing relationships. A few ways they can do this is to volunteer to serve on ACJS' program committee or offer to organize a panel or roundtable for its annual meeting.

The third year is the most critical year for a junior faculty member. Specifically, at the conclusion of the year, he or she will be evaluated on his or her progress toward tenure. Therefore, I would recommend that he or she strategically select a few service activities that can help enhance his or her scholarship and teaching. One strategy to accomplish this is to incorporate service into his or her teaching by developing a service learning component to their curriculum. Service learning is a "pedagogical model that intentionally integrates academic learning and relevant community service" (Rhoades & Howard, 1998, p. 1). A few examples of these types of activities might include: partnering with a domestic violence shelter and having students create a public service announcement on interpersonal violence; having students complete a needs-assessment to identify potential housing programs in the community for inmates who are going to be released back into the community; or partnering with a local middle school and having students provide after-school tutoring services.² This type of experiential learning provides students with an opportunity to engage in activities that address human and community needs in a meaningful way, while simultaneously providing the faculty member with an opportunity to integrate their teaching and service roles (Lersch, 1997; Mettetal & Bryant, 1996). In addition, such activities can help establish relationships in the community that may result in other community engagement opportunities, as well as potential research partnerships (Ward, 2003).

Another way junior faculty members can integrate service into their teaching and scholarship is through community engagement (Lynton, 1995). As described earlier in this essay, this type of service involves the sharing of a faculty member's expertise and knowledge with individuals, organizations, or governing bodies or agencies to address real-world problems, issues, and concerns (Lynton, 1995). Thus, in this context, the junior faculty member might assist an organization in evaluating one of its programs or help develop a training module for professionals to improve their competency in a specific skill. The value of this type of collaborative work is that it allows faculty to bridge the gap between theory and practice and learn how that knowledge is applied (Lynton, 1995). This in turn may help them formulate new research questions

2. For more examples of service learning projects and resources to help develop activities or courses, go to the National Service Learning Clearinghouse at <https://gsn.nylc.org>

to explore in their scholarship, and open opportunities for future research collaborations. It also can help them enhance their teaching by incorporating the lessons learned from the field, thereby helping to better prepare their students for the workforce.

In the fourth and fifth years, I would recommend the junior faculty member look for opportunities to expand his or her leadership role within the institution (e.g. chair a college-level governance committee, serve as an elected officer in faculty governance, etc.) as well as in their professional discipline. They should continue to focus on their service learning activities or community engagement initiatives, and solicit feedback from senior faculty within their department and college on how they might strengthen their teaching and research portfolios. As one's workload increases during the last two years before promotion and tenure, the key to balancing one's time will be to continue to find ways in which to integrate one's teaching, scholarship, and service roles.

Creating a Service Portfolio

One of the challenges many faculty face when trying to demonstrate the impact and value of their service is that many universities do not provide clear guidelines on how to document such activities, or specify the criteria that will be used to evaluate its impact (Ward, 2003). Unfortunately, most service activities cannot be measured in standardized units in the same manner as teaching (e.g. how many classes did they teach, how did the students evaluate them, etc.) or scholarship (e.g. how many publications do they have) (Lynton, 1995). This is because the majority of these activities "takes the form of ad hoc projects and ongoing relationships, where the beginnings and endings and intended beneficiaries of the service being provided are often much harder to define" (Lynton, 1995, p. v). Consequently, many faculty are unsure of the best way to document their service when preparing their materials for promotion and tenure. To help create a service portfolio, the following discussion outlines a framework for faculty to use. This framework will help them document their internal and external services in a manner that clearly articulates both the scope and impact of their work.

Internal Service

To document your internal service, create a running log of all committees, work groups, or projects in which you participate. For each activity, list the dates of service, specify the role you played (e.g. member, chair, supervisor, etc.), summarize the stated goal(s) or charge(s) of the committee, and describe what you specifically contributed. To supplement this report, solicit letters from other faculty who served with you on each committee, work

group, or project, and ask them to assess you on your expertise and knowledge, leadership skills, and the overall contribution you made.

External Service

To document your professional service, create a dossier. Lynton (1995) provides a general framework that you should follow to create it. According to Lynton, it should articulate the scope of your work, and the impact it has had on both your personal professional development and on the designated client. If you have engaged in multiple projects, you should compile a separate dossier for each.

The Personal Statement

The first part of the dossier should include a personal narrative that addresses the following: (a) the context of the activity (e.g. summarize the nature and needs of the client, identify available resources, and describe the environment in which the activity took place); (b) what scholarly expertise you brought to the project; (c) the goals of the activity; (d) the choice of methods and resources used to carry out the project, to track its progress, and to evaluate its outcomes; (e) an ongoing reflection statement that summarizes any unexpected or unique experiences encountered during the project, what adjustments were made, and lessons learned; (f) the impact of the work on your subsequent professional service, teaching, and research activities; and (g) a critical self-evaluation of the perceived outcomes and their implications, including any mistakes or shortcomings, and what was learned from them (Lynton, 1995, p.29).

Work Samples and Products

The second part of the service dossier should include work samples and products completed throughout the project to illustrate what type of activities you engaged in, and evidence of its impact (Lynton, 1995). For example, if you conducted focus groups as part of your service project, you could include the survey instrument you developed as well as a list of all the individuals you interviewed. Or, if you completed a training seminar for agency personnel, you could provide a copy of the training agenda and any materials you distributed to the participants. Other work samples might include diagrams of collaborative processes, a chronological chart or table that illustrates the process, a copy of meeting minutes with stakeholders, or recommendations from community partners (Driscoll & Lynton, 1999).

To demonstrate the impact of your work, you could include a copy of a final report or a summary of any data collected that illustrate any noted improvements that were made to the client's processes or performance (Lynton, 1999). Other products you could include are award letters for funding of a related project (or a follow-up project), invitations received from other agencies requesting similar services, media requests or invitations to testify as an expert witness, or policy changes or developments that occurred after the work was completed (Driscoll & Lynton, 1999).

External Evaluations

The third part of the service dossier should include external evaluations that address the quality and significance of the project (Lynton, 1999). One set of evaluations could come from feedback provided by the individuals who were the primary target of the project (e.g. those whose skills or knowledge were directly enhanced) (Lynton, 1999). This could be a survey that had them evaluate the quality of your preparation and presentation, as well as the impact the project had on them (Lynton, 1999). Another evaluation could be solicited from the project sponsor to address how well the work you completed met the stated goals and the needs of the organization (Lynton, 1999).

Two other sets of evaluations you should solicit for your dossier are letters of support from your academic supervisor (e.g. Department Chair, Dean of College) and at least one subject matter expert in your field (Lynton, 1999). The academic administrator should evaluate your work in terms of how it supports the academic mission of the university. The subject matter expert should address the originality of the processes that were utilized, the significance of the outcomes, or how the project contributes to the discipline or profession (Lynton, 1999).

Conclusion

Many individuals who pursue a career in academia labor under the assumption that service is something that is disconnected from, and less important than, teaching and scholarship. However, in reality, service can be complementary to the other two endeavors, and I would argue, is actually essential to if one is to ever become a well-rounded scholar. Service not only affords us the opportunity to share our knowledge and expertise with our students and our colleagues; it also encourages us to leave the ivory tower and engage with our community in a meaningful way.

However, in order to change the misconception about the importance of service, universities and colleges must make a concerted effort to do so. Senior faculty must do a better job of educating graduate students and new faculty about the value and importance of service, and provide them with direction on

how to incorporate it into their scholarship and teaching. Similarly, departments and colleges need to articulate and provide clear guidelines and criteria for how service will be evaluated in decisions related to promotion and tenure. And finally, senior faculty must help graduate students and junior faculty develop a strategic service agenda early in their careers, and provide guidance on the type of service activities that will enhance their scholarship and teaching. These steps will ultimately help strengthen the next generation of scholars, and will similarly help reaffirm the value of higher education in our communities.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on Contributor

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