Colorado School of Mines – RESEARCH COUNCIL MINUTES
May 11, 2:00-3:00 pm via Zoom

Attendees:
Voting Members: 24 total (13 needed for quorum). Quorum was not present.

<table>
<thead>
<tr>
<th>P</th>
<th>Yvette Kuiper (Chair)</th>
<th>P</th>
<th>Patrick Farrell (LB)</th>
<th>P</th>
<th>Tulay Flamand (EB)</th>
<th>A</th>
<th>Andrew Petruska (ME)</th>
<th>A</th>
<th>Emmanuel DeMoor (MME)</th>
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<tbody>
<tr>
<td>P</td>
<td>Mark Deinert (NSE)</td>
<td>P</td>
<td>Yilin Fan (PE)</td>
<td>A</td>
<td>Matthew Morgan (CGS)</td>
<td>A</td>
<td>Rennie Kaunda (MN)</td>
<td>A</td>
<td>Adrianne Kroepsch (HASS)</td>
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<td>P</td>
<td>Mahadevan Ganesh (AMS)</td>
<td>P</td>
<td>Jeffrey Shragge (GP)</td>
<td>A</td>
<td>Jim Simmons (GP)</td>
<td>A</td>
<td>John Spear (CEE)</td>
<td>P</td>
<td>Kenneth “Xerxes” Steirer (REPE)</td>
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<td>A</td>
<td>Eric Toberer (MS/PH)</td>
<td>A</td>
<td>Sumit Agarwal (CBE)</td>
<td>P</td>
<td>Mehmet Belviranli (CS)</td>
<td>P</td>
<td>Mike Wakin (EE)</td>
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Non-Voting Members:

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Special Guest(s): Walt Copan (RTT)

Welcome
Yvette Kuiper
Kuiper welcomed Councilors to the final meeting of the Spring 2022 semester. Quorum not present, voting items not addressed and completed through an online ballot.

Research and Technology Transfer (RTT) Updates
Walt Copan
The advisory board had been busy, work was done on the distribution policy on how Indirect Cost (IDC) returns are managed. The team gathered information across Mines’ IDC returns with assistance and granular data from Office of Research Administration (ORA). IDC returns are a work in progress, RTT working to avoid competition between departments and centers and exploring ways of making the process easier for faculty. RTT would like to look at future of Mines research centers and industry consortia for governance models and structure. RTT discussed use of scarce funds to provide better support for research enterprise. Sub-team had carried out a survey on support requirements and highest priorities to support proposal development and management, technical support, laboratory technology, and administrative support. A funding pool to provide a stronger base of resources for proposals, technical, and project management is in early development with continued conversations across Mines.

Feedback received from industry partners on the number of centers with similar objectives and confusion over choices. Discussion ongoing with executive leadership at Mines on larger institutes that could provide stewardship for shared resources. Ongoing efforts on space utilization; Copan thanked Research Council for continued efforts across campus. Space utilization spreadsheet in-progress; focal point on actionable space survey that can be maintained easily.

Mines Research Incentive Program (MRIP) is a work in progress, awaiting final documents. Time table has been published with nominations for candidacy being considered in June 2022. The call for July 2022 to be sent. Minor changes made to program for understandability.
- **Question** on the perception of the Foundation, Mines, and faculty on the impacts of becoming an R1 university; Copan noted the majority of impacts are positive with funding agencies seeing R1 as a sign of a serious research institution. R1 status brings additional work to the ORA team with additional audits expected.

Complimentary efforts to continue between Research Council, its subcommittees, and the subcommittees of the advisory board. RTT to consider connecting innovation and entrepreneurship programs to support faculty, graduate students, and the post-doc community. Programs like this may lead to intellectual properties, new company startups, and additional opportunities.

**Approval of Minutes** – April 13, 2022

Minutes approved through online ballot on (insert date).

**Proposed Bylaw Changes**

Council membership discussed as Bylaw change for the 2022-2023 academic year. Graduate Council suggested interdisciplinary program involvement in Council through graduate programs offering thesis-based graduate degrees. Additionally, suggestion made to invite the past Research Council chair as a non-voting ex-officio member during the fall semester following their last term to facilitate continuity.

Tabled for Councilor feedback.

**Committee Updates**

*Small Research Equipment/Instrumentation Investment (REI)*

Yvette Kuiper

Fund was established in Fall 2021 with support from RTT and the deans. Two calls expected per year. Fall 2021 funded an ultraviolet light source for photoemission studies ($14,360) PI Angus Rockett and Co-PI Xerxes Steirer; high-speed, 3D, Femtosecond Laser Micromachining Platform ($24,034) PI Jeff Squier and Co-PI Alexis Sitchler. Spring 2022 funded a robust multi-drone testbed ($25,702) PI Qi Han; composite core holder for NMR/MRI and X-ray imaging ($22,700) PI Kurt Livo and Co-PI Manika Prasad.

One-year evaluation document with recommendations has been created.

*Research Council lecture series/Research Fusion*

Jamal Rostami

Research Fusion consisted of short, five-minute presentations by faculty in an informal setting to enhance campus community and networking. A Foundation fund was established to raise funds; eight presentations held in Fall 2021 and ten in Spring 2022. Recordings of each presentation have been edited by the HIVE and posted to the Research Council website (click here). Suggestion made to advertise this opportunity in new faculty orientation.

Research Council lecture series presented by the last year’s Excellence in Research Award winners. Fall 2021 was held by Mohsen Asle Zaeem (ME) and Spring 2022 was held by Robert Braun (ME).

*Research Communications*

Yilin Fan

Committee formed to facilitate campus-wide research communications.

In Fall 2021, improvements made to the Research Facilities at Mines page (click here). Committee recommended automation of data extraction from an inventory management software to build and
update the equipment list on the website, include equipment with purchase prices lower than $50k, continue discussion on user interface design, and development of an auto-query website.

In Spring 2022, committee investigated current practices at Mines and other universities and provided revised recommendations. Implementation in progress through TeamDynamix.

**Definitions and roles of non-T/TT researchers on campus**

Committee worked with RTT, ORA, HR, and deans. Provided a matrix of all different ranks and types of research faculty on campus. Committee worked on recommendations of simplifying these different types; lengthy process due to HR language and consideration of Equal Work for Equal Pay.

ORA and RTT leading larger effort, draft document has been included.

**Strategic Instrumentation of Space**

Committee started new initiatives and addressed issues related to instrumentation and space. The committee circulated a space use inventory document for updates from departments, committee requested strategic space utilization plans but those were not completed. Some departments filled the space use inventory form differently than others, may require additional clarification and discussions during visits with departments.

Committee discussed the need for better accounting and planning for retirement and new faculty.

**Graduate Stipends**

Issue regarding graduate stipends raised by Tim Barbari in Spring 2021; stipends vary between $24k and $30k. The minimum is now $26k. Committee is a joint effort between Graduate and Research Council. Committee to continue research on stipends and living expenses at other institutions and areas, which departments pay tuition and fees, and which departments pay 0.5 FTE versus 0.67 FTE for a teaching assistant.

Councilor raised example of ME setting the minimum stipend for graduate students as $30k which had become the de facto cap on stipends. Some students in nuclear engineering were funded by national laboratories and seen as employees of the lab, receiving upwards of $55k-65k a year; the university lab was willing to maintain that level of pay but were stopped by the de facto cap due to concern of creating disparity between students.

Councilor noted some departments struggled with recruiting due to other universities offering higher salaries. Council discussed faculty with students performing research in the summer, the use of tuition and fees, and peer institution offers.

**High-Performance Computing**

Committee advised on HPC-policy related issues due to noncompliance of current policy; committee worked to facilitate communication between ORA, ITS, and the HPC community. Committee had identified sustainable path forward and has moved to a drafted implementation plan with compliance confirmed with ITS and ORA.

**Mentoring**
Committee found mentoring efforts across campus and found efforts from Research Council are not longer needed at this time.

**Work with Mines Undergraduate Research Advisory Committee (MURAC)**
Lakshmi Krishna

MURAC spearheaded by Krishna; Summer Undergraduate Research Funding (SURF) pilot program underway with expected $75k for around twenty-five students with a time commitment of around 300 hours.

**Other Business**
Kuiper thanked Councilors for continued work.

**Adjourn**
Meeting adjourned: 3:01 pm.
Next meeting: Fall 2022!