

**Colorado School of Mines
Faculty Senate Agenda
October 10, 2017 2:00-4:00 p.m.
Hill Hall, 300**

ATTENDEES:

Reed Maxwell (President), Sumit Agarwal (CBE), Tzahi Cath (CEE), Paula Farca (HASS), Vaughan Griffiths (CEE), Jeff King (MME), Heather Lammers (GSG), Jon Leydens (HASS), Paul Martin (AMS), Lisa Nickum (Library), Mark Seger (CH), Marcelo Simoes (EE), Bo Sinkler (USG), Chuck Stone (PH), Neal Sullivan (ME)

APOLOGIES: Linda Battalora (PE), Terri Hogue (BOT)

GUESTS:

Tom Boyd (Interim Provost), Carol Smith (Library), Anna Seiffert (Library), Jürgen Brune (MN), Mike Kaufman (CASE), Wendy Harrison (GE)

1. Approvals and Announcements

Approve the minutes with correction (edit to reflect Lisa Nickum as attendee not guest).

Motion to approve the one correction to the minutes: Seger, second: Martin. Approved. Unanimous.

2. Campus Update – Tom Boyd

2.1 Boyd said that the call for proposals for search firms has closed. Seven firms have submitted proposals in the search for the next provost, so Mines will be reviewing the proposals and moving forward.

2.2 Stone asked for an update on the Office of International Programs and whether or not there will be new staff hired. Boyd said there will be new staff, but he is still working on the issue.

2.3 Griffiths asks if there has been any progress with VPRTT. Harrison answered that there are discussions underway between the president and candidate of choice. Documents have been exchanged for legal services, but she does not know beyond that. Harrison said the search committee is now done with its service.

2.4 Griffith inquired about the search company for the next provost and Boyd confirmed that a bid is underway for a company. Boyd clarified that there is not an established relationship with a previous search group and a different group has been hired each time.

3. Overhead Structure and Institutes

(Guest Presenters: Mike Kaufman and Wendy Harrison)

Kaufman has prepared handouts and a presentation. He stated that he is unsure how many received the information after his meeting with department heads on September 18. Maxwell responded that the communication has been heterogeneous; some had reach discussion and others had none. Harrison said one of their objectives is to listen and she requested detailed minutes and recording of questions. Martin asked if department heads have electronic versions of the presentation, and Boyd said that he did send it out.

Kaufman said at the meeting there was a lot of discussion, some buy-in, and a request from department heads for time to discuss with faculty. The three documents include a copy of the presentation as it was given, the policy that was drafted accordingly out of the VPR office, and a list of frequently asked questions based on the feedback and discussions at the meeting.

Kaufman said that at the meeting they discussed indirect cost return and there was no change for PI's running grants through departments. However, there would be significant change for centers and institutes. There are approximately 41 centers and institutes that were initially created to provide admin support to their PI's. Chart on presentation shows some center information provided to Lisa Kinzel a few years ago, but not all 41 provided input. The amount being returned from centers to the PI ranges from 0% to 100%. Agarwal commented that his department does not agree with this understanding that the centers were created to provide administrators. Kaufman said that this is what he was told by Kinzel and Harrison confirmed that is what she remembers. Kaufman clarified by saying the intent was for research support for the centers, which includes administrative support. Maxwell commented that there has been a lot of feedback that the chart is not accurate. Kaufman reiterated that he used the numbers provided to Kinzel a few years back, and if there are centers that are inconsistent then he does not have that data.

Kaufman has circled admin support in red and partial support in yellow. He said some of the websites referenced have not been updated since the year 2000. One of their questions, was are they operating as centers or as a way of redistributing the indirect cost. 8 centers appear to provide significant or partial admin support and 33 do not. In most cases faculty rely on department resources for their support, or do it themselves. Kaufman said many appear to be centers in name but not reputation. There are indications that faculty run projects through centers where they get the best return. Kaufman said he thought the task force in Spring 2015 was supposed to take this on, but it did not happen and has been tabled since then.

Maxwell said **Bruce Honeyman took ownership of this in the VPRTT office previously, and had visited the centers to understand the day-to-day operations. He is curious why this was not done this time.** Harrison said she has not overlapped with Honeyman, and her understanding is that the work he did was tabled while Tony Dean was in office. No judgement on why that happened. Honeyman created a report, but no conclusions have been drawn from it. Harrison said the report can be surfaced. Maxwell agreed that it should be surfaced and feels there is a wide disparity in the way centers have operated over time.

Harrison agreed. Maxwell also noted that there have been past attempts to distinguish, which centers are functioning and providing real reputation to the university as centers for research. Honeyman's strategy might be valuable and need to be resumed. Harrison said they will retrieve the report and make sure to send it out.

Kaufman said proposed new policy is essentially that if you run through the department, nothing changes. The goal was to have more consistency and to provide better support to department head to provide research support for active faculty. Kaufman said 14 of the 41 centers had over \$1M in expenditures, 9 had over \$1.5M, and the remaining 18 had less than \$1M in revenue coming in or expenditures. Kaufman explained slide showing outcomes if all were spending 14.6%, which is not the case. He says if you go through a department, then you split between PI and department head. If you go through a center, the center provides research support and the department does not get the funds. In this case, Kaufman said the suggestion is that instead of getting 50%, which is 7.3%, the PI would then get 5%. They have received feedback that this compensation does not seem right. The argument is that if a center is truly functioning as a center, then there should be value added by being part of it. The alternative option would be to have someone do the administrative or research support.

Agarwal said the CBE department would like to know **what kind of research support these centers would provide? Would all contracts run through these for post-docs, graduate students, travel, etc.?** Kaufman confirmed and said his understanding is the department heads only consider travel if there is an issue with the faculty member. He said that if a center is functioning as a center, the director is also watching what faculty are doing within. Agarwal said some centers have kicked back travel requests because they claim they are not part of the approval chain. Harrison said this is good to know.

Kaufman presented the proposal from the department head meeting with no changes. He said money is not being taken away, it is being distributed between the center and PI. Kaufman said he is simply looking for consistency and does not see an issue if the centers and their PI's want to negotiate this. The attempt was to create consistency and recognize centers for functioning as centers. Kaufman said there are three criteria that must be met to receive center status. The suggested amount for a minimum level of expenditures is \$1.5M. This is because a center does not generate enough if it does not have that much revenue. The second condition is appropriate faculty alignment with centers. This means more than faculty saying they want to belong to the center because they will be paid more than through the department. External recognition of the center or institute is the third criteria. For example, the Steel Center has an established reputation in the community and not just Mines.

Kaufman provided a frequently asked questions document created based on discussion feedback from previous meeting. He said depending on the amount of revenue and research they do, some departments may not have enough to provide resources. Kaufman

mentioned that another option would be for Mines to provide a central business office for support instead.

Cath asked why \$1.5M was chosen as the qualifier rather than \$1M. Kaufman said that, at \$1M, the indirect cost return would not be enough when put towards a single person. Cath said there are other things a center has besides maintaining labs. He also noted that there are two events where a PI can decide to go to a department because they will get more money. Kaufman responded that there should be a benefit to belonging to a center.

Maxwell asked why there should be a competition between the center or the department at all. He said the admin support on campus is not adequate, and centers have to do admin work means they are backfilling for large-scale staffing problems.

Maxwell asked how many center directors Kaufman and Harrison talked to regarding the issue. He said Kaufman and Harrison are hearing from a few center directors that work hard to make ends meet with zero resources from the university after overhead return. Maxwell said to run a productive center there are 4-5 faculty working with all federally funded projects. The center puts has 2 full-time staff doing education outreach, events recognized by the Denver post and contribute to the university reputation, and put on several international conferences. This only works because they do things cheap and stretch the overhead return as far as they can. There are other center models that are money laundering operations and centers that are poor but may have private peer-reviewed funds. All have different needs. **Maxwell asked why not review each individually to eliminate ineffective operations rather than cracking down on all.** He noted that some centers offer services, like education outreach, that would never be provided by departments. This could be the deciding factor. Harrison said this is one approach and the other is based more on merit.

Maxwell asked if Kaufman and Harrison have considered how other universities manage this. He said that universities with longer more successful track records split center return and department return. PI return is the same whether you run through a center or department and there is no competing interest. Centers have a different stream of overhead return, but this comes from VPRTT's split. Then there is designation of the centers belonging somewhere, rather than the confusion that currently exists at Mines. Maxwell suggested that a lack of clarity in the process results in some centers taking advantage and some being hindered. If centers had to report and follow mandate, there might be more clarity and effectiveness.

Cath asked if there any reports of what colleges are doing with the 4%. Kaufman said he does not know of any existing reports, but acknowledges that they are needed. Cath said there should be a report of what the colleges have done with the money each year. Kaufman and Harrison clarify that there is an additional and separate 4% that gets divided amongst equipment, material, money to match, etc. Cath stated that if there is already some transparency with how the VPRTT is using the money, this should also be required of department heads.

Stone commented that as centers are getting started they should simply ask for what they need rather than depending on soft money for admin and support. He said maybe there was a lack of foresight regarding operation costs when centers were established. Sullivan added that some centers may not have a lot of income, but they help the reputation of Mines.

Kaufman said a PI can run through a department and still be part of a center that's at less than \$1.5M. Harrison also said that centers can continue to exist even if they do not get their income through VPRTT. Kaufman noted that if the center does not make more than \$500K they likely cannot provide much. (Nichole Cage) stressed that centers provide more than just a dollar value. Maxwell said some centers may be valuable, but if they are under the threshold they will go from 18% to 0%. That is a harsh message. Maxwell stated that there is not much argument that some centers raise the campus profile and some do not. However, people who have put a lot of time and effort into those centers that get funding cut are probably going to leave. Maxwell received many emails from prior junior and senior research award winners that said this sends a message that they are not valued.

King reiterated that having different return rates is going to break the backs of many centers. If faculty can get more through a department, they will go there. This is even more complicated for interdisciplinary centers. There is no consistency across what the departments provide, and a model would help. Kaufman said if someone belongs to a center that is functioning collectively with a group of people, then they are getting 14.6% and they have to decide how to do it. Maxwell noted that CREW (Center for Research, Energy, and Wind) had a huge startup and then they had a differential overhead return where they charged additional for any proposal you wrote through them. University has to think about what they want strategically. Kaufman said it is more about being consistent and fair to everyone. King said fixing the centers does not fix the uniformity problem because you do not address the department differences.

Griffiths asked for clarity around what is considered research support. King said another one rumor was that centers will need to provide a full-time admin. He asked **what happens if they do not need a full-time admin.** Harrison said the type of support is up to the center.

Cath said they have been trying to merge 6 water centers for the last 2 years. He is concerned that even if they merge they will still have to compete with departments. Maxwell said MME is in a similar situation, so talking to centers rather than looking at spreadsheets would be a good idea. Not a lot of disagreement around issues and inequities in research support and distribution of research overhead return. Thinking about how to change this is a better discussion.

King reiterated that this is premature because Mines is in the middle of hiring a new VPRTT and reorganizing with all of the Sibson teams. Might not be the right time to fix the centers. King posed that a new VPRTT who is more involved as a strong advocate may start to rectify the situation. Cath added that administration pushes to establish institutes on campus. His

question is **whether there are any incentives for centers to become institutes based on these numbers**? Harrison said she welcomes any other feedback via email.

4. Council Updates (Graduate, Undergraduate, Research)

4.1 Graduate Council

4.1.1 Simoes said graduate council had second meeting on October 4. Several course changes are proposed. He will be sharing two items that they are discussing that will eventually reach Faculty Senate. The first is a new Bioscience and Bioengineering Interdisciplinary Biology program presented by Judith Klein. Program for MS in Bioscience and PhD Interdisciplinary Bioscience. Discussion has continued and faculty can reach out to Dr. Klein directly. This will be voted on at the next meeting and then Klein will present the program to Faculty Senate.

4.1.2 Last week, Angel Abbud-Madrid and Chris Dreyer from Mechanical Engineering presented a new space resource program. This is intensive with a lot of discussion and details. Simoes said this will come to Faculty Senate before the end of the year. If anyone has questions about the new degrees they can talk to Greg Jackson or Angel Abbud-Madrid. ME would like to have online courses and they already have one course that has been developed. They are proposing that several courses in the department go online. This proposed program will include MS and PhD. For any questions on the details, reach out to Simoes or ME.

Agarwal asks if there is information on where the resources will come from. Simoes says the biology program has seen previous iterations and is more interdepartmental. He is not sure where the center for space resources will get their funding. Sullivan said the revenue would come through coursework and the target market is people working in the field. This is why they would like it to be a remote but involved program involving Zoom and Canvas. Sullivan confirmed that it is MS and PhD. He said that all current PhD students in the program are working in the field simultaneously.

4.1.3 Simoes raised concern unrelated to graduate council. He said faculty is encouraged to provide online coursework, but there is no model for delivery. He believes Faculty Senate should start discussing the model. Particularly issues around intellectual property rights and compensation. Maxwell said Mines needs to consider how other universities are handling their extensive online programming. Sullivan noted that it would be good to get input from Sam Spiegel in the Trefny Center. He also clarified that Simoes major concern is around compensation for online course content. Simoes added that department heads do not want to give full credit if faculty only manage the online course. Griffith mentioned that it might be that faculty teach less in-person courses when teaching online. King said there is a lot of ambiguity around different variations of courses (night, short, online, etc.). He said that faculty are not going to pursue those options until there is better understanding around compensation. Sullivan said he will

reach out to Spiegel at Trefny Innovative Instruction Center. Maxwell said the issue can be raised with Boyd to see if there is an organized strategy for this.

4.2 Undergraduate Council

- 4.2.1 Seger said the undergrad council had their first meeting and will meet again on October 11. At the previous meeting they mostly discussed course approval. Judith Klein formally proposed a non-department biology minor and it is scheduled to come up for vote pending no major issues. There are more concerns with the master's level than the minor. Geophysics is continuing to reimagine their curriculum. They are modifying or introducing around 20 new courses as big packages.
- 4.2.2 UGC already approved the BS Engineering program, but John Persichetti gave an update. He came to explain the registrar's concerns have been met and Boyd feels the program is ready to go. This program is now pending Faculty Senate. Maxwell said it was approved conditionally last spring. He said Faculty Senate should talk about whether or not that is sufficient given that the prior Faculty Senate did not do a good job of detailing what the conditions were and what was needed to show they had been met. Seger said Boyd confirmed that his concerns and those of the registrar had been resolved. Agarwal brought up concerns around the B exam as well as employer demand. Seger said there were surveys but something more explicit may need to be created. Agarwal raised concern that the new degree does not look as rigorous as the previous iteration with the same name. He does not think it is appropriate to use the same name when the degree has nothing to do with the original. Simoes said they are using the standard design structure from the past, but that it should be clarified what standard design stays with this engineering systems degree and what stays with traditional degrees because there is an overlapping. Simoes said he was not a voting member, but he was present when the presentation was given and it lacked detail. He remembers a promise to bring more information, but this has not been provided. Maxwell said he will follow up with Boyd and include this for discussion at the next meeting. Seger said UGC is done with program approval and will be focused on individual courses because it has gone through due process.

4.3 Research

Cath said research committee held their second meeting. Visit from Smith and Li gave presentation similar to faculty senate meeting. He will be sending research fellowship letters today. He will also send emails to faculty and students so that they'll start writing contracts. A few subcommittees have been established for research council (instrument, seminars, post doc advancement). There was also a discussion with graduate students about preparing for the next grad conference and the committee plans to continue working with them.

4.4 Faculty Oversight Committee on Sports and Athletics

Stone said committee met a week and a half ago. Stone and Brune have been interested in sports injuries during games and practice, so tried to get reports from the trainers. The idea was to have them provide data to Faculty Senate, but given their busy schedules last spring they are probably not prepared yet. Maxwell said he will reach out to Rick (?) directly. Sinkler questioned if this includes intramural in addition to varsity. Stone and Brune clarified that initial interest was varsity only, but faculty are concerned with all student sports injuries.

5. Library Committee

Farca distributed a handout to follow up on Smith's last Faculty Senate presentation regarding library initiatives and challenges. The library committee has met twice and will meet again tomorrow to discuss the survey. They decided on action plans which include condensing information to one document for readability. This will be distributed to campus for awareness. They also plan to go to departments with this document to talk about the issues. Farca said one major takeaway is that these projects and visions require an expansion of the library which was last renovated in 1977. Bold goals for the library include establishing a center for scholarly communication and a STEM business incubator that would provide business research services and multimedia conference rooms. These initiatives need faculty support.

One action item is to distribute the overview document to raise campus awareness. The second action item that will be discussed tomorrow is the included survey. Pending agreement, the survey might be distributed tomorrow. Farca said that a memo of support from the senate members would help. Griffiths noted that the summary document needs to be retitled to avoid confusion if the survey refers to it directly.

Brune said the first major concern with the new library concept has been the lack of funding. The second concern is the lack of space. The Green Center renovation threatens an extreme shortage of classroom space and creates a fear that library space will be repurposed. Some people view the library as available space which is not aligned with how faculty and students should view this.

Sinkler asked of the four goals which can be attained with renovation and which ones require expansion. Smith acknowledged that she greatly appreciates the efforts of faculty and students to create the one-page document on their own. Library faculty were only used as resources. Regarding the goals on the document, library expansion needs to happen either way. Smith presented to Faculty Senate in spring 2017, and her charted highlighted that the library FTE size is less than half the square footage of what it should be.

Martin stated that as a library support he would like to play devil's advocate and propose that faculty do not use the library anymore and the physical space is not necessary for

books. He asked how Smith would argue against that. Smith said first she agrees with both statements. Faculty do not use the library currently, but they encourage faculty to visit and witness how many students utilize the space. She also noted that faculty may not be using it because it does not meet their needs. One request has been for a proper faculty lounge where faculty could with doctoral students and engage in cross disciplinary discussion. She said a properly renovated library may draw faculty in. Smith also said it is true that they do not need as much space for books, but even with compact shelving they still need more space for students. Recent studies have shown that people learn better when they are in the company of others learning. Across campus there is an attempt at distributed spaces, but students say they still want to come to the library. Smith said foot traffic supports this as well.

King said that faculty not using the library does present a cogent question. He thinks that working with the foundation presents a challenge because they have their own list of priorities. After the Green Center, he is not sure what is next but he suspects that there may be competition. Brings back the idea that Mines does not have a central planning process. Maxwell said there has been conversation between Chris Cocallas and the Faculty Senate Executive Committee, and they are inviting him to come in and talk. He said there is effort to engage senate in what exists of a master plan on campus. Brune said Faculty Senate needs to consider that they may not use the library as much, but they still want to make it a signature experience for their students. Stone said he asked Boyd for a campus memo on all capital planning constructions projects at the last Faculty Senate meeting, but it has not been distributed yet.

Maxwell asked if there should be a student survey given the need for high quality study space. Sinkler said they have polled on it, but results vary and students say they do not use the library. This creates a dilemma because, like faculty, they may not be using the library because it is crowded and does not serve their needs. Smith said an undergrad rep at library committee meetings agreed to take the survey out to the students. Undergrad students send out a poll every 2 weeks and they plan to ask additional library questions.

Smith redirected to the one page document and notes the most important word to her is expansion. She said when she started there were plans to do a partial renovation and Smith requested the project be put on hold due to already limited space. There is currently a commitment to do a full library renovation program plan. This is great progress, but if Mines only does a renovation and not an expansion they will not be preparing for the next 50 years. Smith reiterated that they have commitment for full library renovation, but need faculty and student support to push for expansion. She also notes that the faculty master planning process decisions are to be made by Thanksgiving. Then an external architect will be hired to create a broad campus design plan. This means the clock is ticking.

Martin said that emphasizing the student experience is more powerful than the faculty. Griffiths asked what square footage percentage increase is desired. Smith said usable square footage is 47,000 square feet, which is less than half of what it should be on a

student FTE analysis. Therefore, Smith said the square footage would need to be 90-100,000 minimum. This includes book stacks and excludes things like boiler rooms. Seger said concerning the memo of support, they cannot speak on behalf of all faculty until the survey results are in. Farca said she will provide the updated revised version of the document. King said a reasonable starting point is a memo that says the Faculty Senate believes this should be a priority.

Maxwell confirmed that part of the library committee plan includes an open invitation for departments to host a library committee conversation. Farca said the one-page document can be shared with departments as well. Stone suggested that the memo include three bullet points highlighting the need to expand usable space, focus on the student experience, and get it done. Smith has identified a critical need that requires action. Maxwell said his department has an enhancement committee that works with large donors. He asked if the library might need a committee like this. Smith said she has been doing individual donor cultivation and has several individuals with significant interest. Smith said a committee would be helpful, but vision and commitment are necessary otherwise the effort would be premature. She also shared that she has major donors who have talked to the president in support.

6. Climate Change Subcommittee

Leydens said he, Maxwell, and King served on a subcommittee. The mass media and politicians were claiming that climate change was a hoax, and several Mines peers were writing their opinion and statements. Faculty Senate wrote a 3-line statement that all members approved of. When the subcommittee met, they talked about doing two things. Leydens said the first was to add some of the reference citations to the document. Second, was to develop a separate document noting climate change related research that Mines faculty do. After the document was posted, there was some push back from faculty and alumni.

Going forward, the two action items are straightforward but the subcommittee needs volunteers. Stone asked what the byproduct is. Leydens responded that it could be beneficial for the Mines community and good awareness of what Mines climate change related research is happening. Showcasing faculty research could also show the impact on other areas and how people think about climate change. Leydens noted the important role of faculty as academics and advocates. Cath volunteered to help with the subcommittee. Brune mentioned possible political push back from conservative donors. King said Johnson and Poate were strongly in support but mentioned that did get some pushback. Leydens said Faculty Senate also issued a statement on immigration. These actions set a precedent for entering the public debate when it's relevant to Mines.

7. Teaching Faculty Multiyear Contract (Stone et al)

Stone said he and others were charged with 3 sensitive issues for teaching and library faculty about a year ago. This includes multiyear contracts, sabbatical type opportunities, and tenure possibilities. Multiyear contracts have been given the most attention. Stone had dinner with Oregon State and Mines segregation of teaching and research faculty came up in conversation. Mines wants to make sure students get a quality education, and yet the faculty come and go. Having multiyear contracts would put people in positions where they can have meaningful careers, and not have tenure status. Stone noted that the level of achievement and recognition brought to Mines by faculty is likely to lead to burn out without sabbatical-like opportunities.

Stone said they spoke with Boyd, Walker, and deans about the issues, and they all want something in writing to get it done. Faculty are leaving the campus because they do not feel appreciated or satisfied and they are looking for other opportunities.

A survey has been created and was intended to be distributed last spring. Seger said it is ready to go. Maxwell said an action item is to send the survey materials out to senate to be discussed at the next meeting. Consensus is that there are mixed opinions on faculty preferences, so the survey will help clarify. Smith said at the last spring Faculty Senate meeting, they voted unanimously on the principles in the white paper and said go ahead and release the survey in the fall. Maxwell clarified that there is no debate on whether the survey will go out, they were only discussing content and giving new members a chance to review.

8. Senate Discussion – not discussed

Adjourned at 4:00

Next Meeting October 24, 2017 2-4
Guggenheim Boardroom