

Report and Recommendations of the Academic Reorganization Committee

The Charge

In the spring of 2018, Provost Russell Moore created the Academic Reorganization Committee (ARC). He charged the committee with examining the potential consequences of reorganizing CAS, both positive and negative, for our ability to provide a rich and wide-ranging liberal arts education for all CU Boulder students, for CU Boulder's other colleges and schools who partner with CAS, and for our ability to support the work of our faculty.

The following summarizes the charge to the committee issued by Provost Moore:

1. Examine and make recommendations regarding the academic structure(s) proposed in the "Cumalat/Julien" paper. That paper is focused solely on Arts & Sciences, but the committee will not be precluded from examining additional alternative academic organizational structures that might significantly benefit the campus.
2. Within the examination of any proposed academic organizational change, the analysis should contain a discussion of "why" such a change would be beneficial to our faculty, students and staff. The principle focus should be on the academic benefits that might accrue from such reorganization. This analysis should consider CAS as a unit as well as individual units and divisions within CAS. Given the size of CAS and its role in providing a strong liberal arts base to our campus, the committee should also carefully consider the impact of reorganization on other academic units not affiliated with CAS (e.g., other schools and colleges, institutes).
3. Should the committee choose to examine the organization of academic units outside of CAS, the committee should notify the provost and those units as quickly as possible so that they can be full participants in any discussion.
4. If, after these analyses, the committee determines that a reorganization of CAS is appropriate, within its recommendations it should note specific areas of focus in moving forward, including recommendations for additional committees (e.g., curriculum, advising, space, budget, personnel, advancement, etc.).

In addition, the ARC understands that it was working in an environment with other ongoing strategic initiatives. The committee membership reflected some of these

activities, and we included briefings on these initiatives into our deliberations. In many cases these activities highlighted our shared values and influenced our choices. The committee was co-chaired by Senior Vice Provost Bill Kaempfer and Professor Tricia Rankin, Professor of Physics, and it included the following people:

Margaret Berg – Music
Paul Chinowsky – Environmental Design
Herbert Covert – Anthropology/Sociology (A&S)
Justin Desautels-Stein - Law
Harsha Gangadharbatla – CMCI
Myron Gutmann – History/Institute of Behavioral Science (A&S)
Ben Kirshner – Education
Donald Lichtenstein – Business
Terra McKinnish – Economics (A&S)
Keith Molenaar – Engineering & Applied Science
Carole Newlands – Classics (A&S)
Armando Pares – Continuing Education
Roy Parker – Biochemistry (A&S)
Cora Randall – Atmospheric and Oceanic Sciences (A&S)
Erika Randall – Theater and Dance (A&S)
Jason Shelton – Director of Recruitment (A&S)
Paul Sutter – History (A&S)
Patrick Tally – Academic and Curricular Affairs (A&S)
Loiuse Vale – Interim Associate Vice Chancellor of Integrity, Safety and Compliance
Carol Wessman – Environmental Studies (A&S)

The committee was charged with delivering a report and recommendation to the provost by November 2, 2018.

We took those models into the full committee's first meeting, a retreat held just before

will have seats on the council of deans, and will have direct channels of communication with the provost to advocate for divisional needs and interests.

Specific Recommendations Concerning the Executive Dean

We recommend that CAS have an executive dean who will:

1. give vision and voice to the CAS liberal arts mission;
2. foster inclusion, equity, and diversity across CAS;
3. take primary responsibility for the overall student experience in CAS;
4. push for innovation in creative work and research;
5. maintain the CAS General Education curriculum and other common curricular initiatives;
6. represent CAS externally in the areas of advancement, public relations, and student recruitment;
7. manage common functions that are not division-specific;
8. consult with deans of divisions on matters of common concern to CAS;
9. adjudicate interdivisional issues and disputes;
10. allocate budget to the three divisions;
11. manage the common budget not allocated to divisions;
12. have authority over all CAS matters not explicitly assigned to the deans of divisions. In matters explicitly assigned to the deans of divisions, the executive dean will have a consultative role;
13. be hired by the provost with broad faculty input and be supervised by the provost. We advise that searches for this position be designed to ensure a deep candidate pool and include consideration of external candidates.

2. share responsibility with the executive dean for the liberal arts mission; inclusion, equity, and diversity; the overall student experience; and innovation in creative work and research.
3. control their divisional budgets;
4. manage personnel budgeted within their divisions, including appointment, promotion, tenure, and retention decisions;
5. have advancement responsibilities within their divisions and the capacity to represent their divisions to external constituents;
6. have authority over curricular initiatives specific to their divisions;
7. work with the executive dean and other deans of divisions on common CAS issues;
8. have the authority to work across colleges and to negotiate with other college deans on matters specific to their divisions;
9. sit on the council of deans and have direct lines of communication with the provost to communicate divisional needs and priorities;
10. be hired by the executive dean, in consultation with the provost and with broad faculty input, and be supervised by the executive dean. We advise that future searches for these positions be designed to ensure a deep candidate pool and include consideration of external candidates.

Recommendations on Faculty Governance

As some authority is being devolved to the divisional level, so too faculty governance with respect to divisional issues should be defined at the divisional level. Faculty governance with respect to college level issues should operate at the college level.

Additional Recommendations to the Provost

The ARC believes that many of the problems outlined by the C/J paper reflect the need for additional resources rather than just the need for organizational change. In its deliberations, the ARC was struck by the considerable resource needs in CAS, particularly given the resources CAS generates for the campus. Addressing the resource needs of CAS, especially those within the Natural Sciences Division, will ultimately involve reexamining the campus base budget.

Many of the changes outlined above can be accomplished as internal reforms within CAS, but their success will be reliant on the provost bringing additional resources and support to the college. This includes providing the resources needed to hire the deans of divisions, staff their offices, and provide additional CAS staffing as necessary. We

expect that each division will need budget and advancement staff, but that they will vary in what other staff they require.

Expected Impacts from Proposed Change

We designed our recommendation to thread the needle between maintaining CAS as a large college and providing autonomy and flexibility to subunits of the college. Our recommendation preserves the ability of students to take advantage of the breadth of CAS offerings and helps to ensure that the liberal arts mission of the campus is maintained. The structure we propose also allows greater opportunities for the development of more specialized programs along with speeding up divisional-level responsiveness to such opportunities. We anticipate that, over time, there will be rebalancing between the roles of the executive dean and the deans of divisions to optimize their portfolios. The success of this re-organization will depend on the individuals filling these roles understanding that while they have distinct responsibilities, they also share responsibility for the overall success of this change.

By devolving some responsibilities from the executive dean to the deans of divisions, and by making the deans of divisions officers, we anticipate several specific impacts:

1. The executive dean has increased capacity to support the broad liberal arts mission, enhance the CAS brand, and improve the overall student experience.
2. Discussions of the council of deans benefit from the increased diversity of perspectives around the table (more than just an increase in the number of voices supporting the liberal arts mission in these discussions).
3. Deans of divisions have the bandwidth and agency to take on initiatives of interest to their units and can move quickly because they do not require discussions at the college level. Tailored solutions, which can differ across divisions, can be developed for issues such as instructor rank faculty policies, faculty recruitment, P&T, startups, space, advancement, etc.
4. Deans of divisions have the authority, especially budget authority, to pay greater attention to new ways for generating and using resources.
5. As budget becomes held at the divisional level, it becomes more difficult to rely on internal transfers of CAS resources to solve what should be seen as campus problems.
6. Supporting the liberal arts mission must be a campus responsibility.
7. Faculty governance is enhanced by increased opportunities for faculty involvement at the divisional level, improved communication channels, and opportunities to consider ways to base representation on faculty size and

research and creative work, and to ensure the quality of common services.
Without the unifying force of an executive dean, these crucial features of CAS

through the executive dean, and then be used either for common expenses or transferred to divisions for temporary needs.

2. Re-examining the growth enrollment model, with consideration of making allocations at the divisional level, is required in light of the new budgetary distinctions between divisions.
3. Reconsidering as appropriate the number and/or composition of divisions within CAS.
4. Determining the staffing needs of the deans of divisions, as well as the detailed reporting structure within CAS and its divisions.
5. Ensuring that CAS divisions get bylaws.
6. Determining the appropriate role of faculty governance at college and division levels.

In addition, the ARC recommends that attention be paid to issues raised by the C/J paper that are beyond this committee's scope:

1. A review of campus-level resource allocations is imperative. This could be

Appendix A
Cumalat/Julien (C/J) White Paper

A Proposal for Reorganization of the College of Arts and Sciences

Submitted by John Cumalat, Department of Physics; Keith Julien, Department of Applied Mathematics.

The following departmental chairs have read this white paper and have discussed it with their departments. The chairs and the departments have voted to support the proposal to improve the college representation.

The Department of Geological Sciences and the Department of Ecology and Evolutionary Biology did not vote, but both chairs support the proposal as do several faculty members in their departments. The Department of Astrophysical and Planetary Sciences voted on the proposal and the department's vote was reported as 10 in favor, 1 opposed, 6 abstained, and 4 did not vote. The department's vote did not achieve the unit's required 75% in favor vote and they are not listed below.

Chair or Divisional Dean		Department
Keith Julien	and	Department of Applied Mathematics
Jeffrey B. Weiss	and	Department of Atmospheric and Oceanic Sciences
Marcelo Carlos Sousa	and	Department of Biochemistry
Carl A. Koval	and	Department of Chemistry
M. Deane Bowers		Chair - Department of Ecology and Evolutionary Biology
Shemin Ge		Chair - Department of Geological Sciences
David Sherwood	and	Department of Integrative Physiology
Alexander Gorokhovsky	and	Department of Mathematics
Lee Niswander	and	Department of Molecular, Cellular and Developmental Biology
John P. Cumalat	and	Department of Physics
Jerry W. Rudy	and	Department of Psychology
Bert Covert		Chair - Department of Sociology

Executive Summary for College Reorganization

In terms of the College budget, we suggest each of the t

I. Advantages of a CAS administrative reorganization:

- a. The Natural Sciences Division is at a disadvantage when advocating for resources within the College based on number of majors (~60%) and PhD students (~70%) in the College, the number of TTT faculty (50%), and student credit hour generation (50%). It is interesting that despite the College of Engineering and Applied Sciences' significant growth (which was not discussed with Natural Sciences departments), the Natural Sciences Division still had more than twice the number of Student Credit Hours as Engineering in the Spring 2017 semester. It is critical that the Natural Science Division be better represented at the Provost level.
- b. CAS is under-represented with respect to other colleges at the Provost's level. Each college has a Dean, but the representation is one Dean per college. By most measures the CAS is about 60% of the campus, but in Dean's meetings there are 10 Schools and Colleges – i.e. the CAS representation is 10%! Decisions made to expand the student body in a single college need to be approved by other units that can significantly impacted.
- c. Research is another area where the representation is determined via a senate model. CU has eleven institutes on campus and these are the research areas that the campus promotes. However, in several cases the research expenditures in NS departments are larger than most institutes. Again, it is important to have a divisional representative that is familiar with the research conducted in the division's departments.
- d. A fair distribution of development officers – for several years the Natural Sciences Division had no development officers – as a college we should have Advancement Officers assigned to our division. There are now 2-3 people assigned to Natural Sciences, but given the number of faculty is NS is equal to all other faculty outside of the college this is not equitable.

II. Resources

General funding and faculty lines allocated to the Natural Sciences Division seem low particularly when compared to resources received by departments in other Colleges (specifically in College of Engineering and Applied Sciences). The criteria used by the College and the Provost's Office in distributing resources is not transparent.

One example is the current Enrollment Enhancement Model. We use engineering as an example. The Enrollment Enhancement model is based on average engineering salaries versus average CAS salaries, yet most of the engineering students are taking classes in the natural sciences where there is little difference in salaries between

Natural Sciences and Engineering faculty. In a model where the Natural Sciences CAS salaries were the same as Engineering, the distribution would be different.

III. Infrastructure

The Natural Sciences Division has building needs that remain unmet after decades (e.g. H-wing of Duane, Cristol Chemistry renovation). Other examples include IPHY whose faculty and researchers are housed in five different buildings and Applied Math, a unit housed in six different locations. CAS seems to have little direct influence on which CUBoulder building projects are approved annually.

IV. Bachelor of Science Degrees

The Natural Science departments would like to respond positively to student requests to change our Bachelor of Arts degree to a Bachelor of Science degree. There is an external view that a BA degree requires less rigorous coursework, particularly with respect to mathematics and/or science courses. Of course, that is not true at CU. The argument has been that in the CAS we can't change from a BA degree. Yet, CMCI offers both BS and BA degrees.

V. Differential Tuition for Natural Sciences

If one looks at the tuition after COF in different colleges for each semester, then we find for students first enrolled in Fall 2017:

College	In-state Tuition	Out-of-State Tuition
Arts & Sciences	\$5124	\$17,191
Engineering	\$6780 (\$1,656)	\$18,645 (\$1,454)

Chart of College Reorganization Model



Figure 1: Proposed Reorganization Model for the College of A&S. The current Divisional Deans become Deans and report directly to the Provost. The Executive Dean duties are assumed by one of the Deans. (Note there is a new position called Director of Access and Recruiting.)

Appendix B

Gleeson Response to Cumalat/Julien (C/J) White Paper

June 2018. Revised October 2018

Professor Patricia Rankin and the Reorganization Committee,

Thank you for the invitation to share thoughts about the Natural Science White Paper draft produced by Keith Julien and John Cumalat.

The committee is tasked with evaluating the pros and cons of continuing to operate our college as a single organization, or as largely autonomous units. Both models (one large college; multiple small colleges) work at institutions like ours. However, I do believe that the models differ in the autonomy of Arts and Sciences faculty to control their future because of where and by whom the important decisions affecting the faculty are made. I

Shakespeare, finance pre-tenure leaves, create interdisciplinary initiatives, etc., etc. In a small college model, those resources are not quite stove-piped and stuck within each college, but very close. To make the university work in a little college model, all resources of consequence have to revert to the Provost, who would then remotely make all the real allocation and investment decisions. That's the crux of the grumbings from small college deans at conferences relative to their full A&S counterparts.

Small college models are favored by most provosts and chancellors. Large A&S colleges are preferred by most deans. That should tell us something right there. I've enjoyed the company of fellow deans at dozens of meetings of AAU deans, Big-12 deans, and Pac-12 deans. I've never heard a big or small college dean argue that his/her institution would be better in a small college model, but I've heard lots of complaints about Provost micromanagement or lack of understanding and the difficulty of working on interdisciplinary projects and redistributing dollars and FTE across small college boundaries. Where decisions are made is different in the two models.

The one advantage of small colleges in my mind is the opportunity to make a successful case for differential tuition for high cost colleges. How might that benefit such a college? It theoretically could mean more funds for higher salaries, more start-up funds, and more revenue that could be earmarked for a science building that would consolidate us. In theory. In practice, colleges don't collect tuition and so colleges don't receive any more tuition dollars than the Provost and CFO want to share. Like ICR, we can safely assume that a significant fraction of the additional revenue would not be leaving Regent Hall. Still, there would be more dollars flowing about, we just can't be certain and would have limited influence where they would flow. A decision by the faculty to reorganize should be coupled to a pre-negotiated binding agreement for distribution of any additional tuition revenue.

The natural sciences building shortage, our shortage of fundraisers, and most of the lesser issues mentioned in the White Paper are all problems we can agree exist. I just don't believe structure is related to these problems.

Missing from the white paper is clear acknowledgement that small colleges elsewhere all require their own staffs: budget officers, associate deans, HR, etc. Berkeley's small colleges each show 5 administrative positions in addition to the umbrella college's staff, but if you look more closely, the Biological Science Deans office actually lists at least 8 full time administrators, Math and Physical Sciences list at least 6. At Irvine, the School of Biological Sciences lists 12 dedicated administrators. Actual numbers aside, little colleges represent a large administrative overhead that sits in addition to the existing big college administrative bureaucracy. An additional 18-24 professional staff exist within Arts and Sciences at Berkeley that don't exist in our college. It would require millions of

dollars to properly outfit the small independent colleges so that they could provide a comparable level of responsiveness to their department chairs and directors. Many of our college shortcomings could be remedied without reorganization if we had 18-24 more people dedicated to fundraising and servicing our departments.

Missing in the White Paper is the functional requirement of the small college model to also staff and host an undergraduate college which is largely responsible for administering the Gen Ed requirements and advising open-option and lower division students. These colleges can be good things, but there are also examples where they start draining resources and hiring their own faculty because of their need to staff general education courses. These colleges are also sometimes run out of the Provost Office, further syphoning college resources and local decisionmaking regarding curriculum.

Summarizing, small college models are significantly more expensive to support, but aren't an inherently inferior model from a campus perspective if properly resourced. Small colleges will shift important decision-making related to initiatives, growth, or retrenchment from the college to the provost's office. Operating as one cohesive college best serves our liberal arts philosophy of education and cross-disciplinary research, and it retains its own budgetary flexibility and prerogatives for local decision-making.

There is a better argument for reorganizing deans' *responsibilities*, however, if the faculty really wanted to go there. A change in dean responsibilities could improve dean's office responsiveness and service to department chairs and directors. As time passes and the university becomes more complex and requires more accountability and more fundraising, the Arts and Science dean becomes more distracted from day-to-day management and this slows the decision-making of the college. I think our college would benefit from more autonomy for our division deans. Their ability to make independent decisions regarding FTE and dollars could speed interactions with departments, and because decisions would be made at a more local level, one could argue that decisions would be not only faster but better. While I am pessimistic that more revenue will flow to an independent science college or that some of the other named problems would be solved, I do believe our bureaucratic delays and customer service to departments can be improved by some restructuring of responsibilities.

One less expensive and less disruptive model would be to elevate the divisional associate deans to deans, and to elevate the dean to Executive Dean. The Executive Dean would be responsib

TA line. The Executive Dean would manage the functions that are not division specific. S/he would represent the college to constituencies external to the college, and invest more time in fundraising, including brick-and