

Report and Recommendations of the Academic Reorganization Committee

Executive Summary

Provost Russell Moore formed an Academic Reorganization Committee (ARC) in spring 2018 and charged it with examining the “Cumalat/Julien” white paper submitted to Academic Futures (C/J paper – See Appendix A), which proposed a reorganization of the College of Arts and Sciences (CAS). Provost Moore’s charge did not limit the ARC to examining only the C/J paper, and it asked for recommendations concerning alternative organizational structures that might significantly benefit the campus, with a focus on faculty, students, and staff.

The ARC consists of 22 faculty and staff members from across campus, 13 from CAS and the remainder from other units. The committee focused on several values and commitments in responding to Provost Moore’s charge:

- a. A commitment to the liberal arts mission at both the campus and college levels
- b. A focus on student success and the quality of the undergraduate experience
- c. A desire to support and enhance creative work and scholarship
- d. A search for solutions to problems identified in the C/J paper
- e. An incremental approach that sees CAS’s evolution as an ongoing process and that seeks to avoid creating more problems

Based on its examinations and analyses the ARC recommends that CAS remain a unified college, but that the jobs, powers, and responsibilities of the dean and associate deans of divisions in CAS be redefined. We propose that the College have an executive dean who is the leader of CAS, and who is responsible for the overall liberal arts mission of the college and has supervisory responsibility for deans of divisions. Deans of divisions will be officers of the university with substantial budgetary authority, as well as responsibilities and powers that are consistent with the Regents’ definition of a dean.

The ARC expects these recommendations to result in the following benefits:

- a. Improving CAS representation and voice in campus-level decision making
- b. Increasing the attention paid to CAS needs in campus level resource allocations

- c. Enhancing faculty governance in CAS
- d. Optimizing internal resource allocations within CAS
- e. Facilitating new revenue generation
- f. Empowering strategic decision-making at the divisional level

The ARC anticipates that a committee will be formed to determine how best to implement our recommendations including consideration of the budgets for divisions within CAS, the number and composition of divisions, the staffing needs of the deans of divisions, and the appropriate faculty governance structure. In addition, the ARC urges attention be paid to the issues raised that are beyond our scope – especially the need for a broad review of campus-level resource allocations.

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.

Our Process

During the summer, co-chairs Kaempfer and Rankin formed a steering committee, made up entirely of faculty from CAS and with representation from all divisions, to meet on a weekly basis to plan the work of the larger committee. That committee included Terra McKinnish, Cora Randall, Paul Sutter, and Carol Wessman. The Steering Committee began its work by looking at the organizational model proposed in the Cumalat/Julien white paper (hereinafter referred to as the C/J model; see model 2a in the table below) and searching for examples of such a model in action. The committee found it useful to study two peer institutions with relevant experiences:

1. UC Santa Barbara: UCSB currently operates under a C/J model with a College of Letters & Science (L&S) that has three divisions (Humanities; Social Sciences; Mathematics, Physical Sciences, and Life Sciences), each with its own dean. There is also a dean of undergraduate education. All four deans report to the executive vice provost. One of the divisional deans serves as a rotating “executive dean,” referred to in the table below as a “managing dean” (see model 2a), who manages the common functions of the college.
2. UC Davis: UCD went to a C/J model in the late 1990s but then changed course a few years ago. After the C/J model proved unstable, they returned to a model with a single executive dean and three empowered divisional deans who report to that executive dean (model 1b in the table below).

After lengthy discussions and a site visit to UC-Santa Barbara made by Bill Kaempfer and Tricia Rankin, the steering committee settled into thinking about the reorganization problem along a spectrum of organizational models. We were influenced to move beyond the C/J model as a single option for reorganization by several factors:

- The UC Santa Barbara model, the closest analogue to the C/J model, had several weaknesses that concerned the steering committee;
- The UC Davis experience revealed inadequacies with the C/J model, prompting them to return to an executive dean model after first trying a variant of the C/J model (1b in the table below);
- A memo from Todd Gleeson (Appendix B) questioned the C/J model’s assumptions and suggested that model 1b in the table below might be more appropriate for solving many of the problems raised by the C/J paper.

Organizational Model	Dean Positions	College Structure	Example
1) Single Dean Reports to Provost	a) Associate Deans of Divisions	One college with associate deans of divisions reporting to a college dean.	CU Boulder College of Arts & Sciences
	b) Deans of Divisions	One college with semi-autonomous deans of divisions reporting to an executive dean.	UC Davis (present) Gleeson Model
2) Multiple Deans Report to Provost	a) School Deans	Schools within a college; school deans report directly to provost; responsibility for shared services (e.g. advising, IT) assigned to a managing dean.	UC Santa Barbara C/J Model UC Davis (pre-2015)
	b) College Deans	Independent colleges	

More specifically, we came to think of two types of models, and two variants within each (see chart above):

1. College of Arts and Sciences with a single dean reporting to the provost.
 - a. Status quo with a college dean and associate deans of divisions.
 - b. UC Davis/Gleeson model – One college with semi-autonomous deans of divisions reporting to an executive dean. This latter variant we have come to call either the Davis or the Gleeson Model, as it is a model hinted at in a response written to the C/J paper by Todd Gleeson, and it is similar to a college structure recently adopted by UC Davis.
2. College of Arts and Sciences, or multiple colleges, with multiple deans reporting to the provost.
 - a. C/J model of a single college with three deans reporting to the provost and a “managing dean” coming from their ranks and overseeing the common functions and services of a still-united CAS (aka the Santa Barbara model)
 - b. Separate colleges with their own deans reporting directly to the provost

This report uses the term “single dean model” to refer to models in which a single dean reports to the provost (models 1a and 1b) and the term “multiple dean model” to refer to models in which multiple deans report to the provost (models 2a and 2b).

We took those models into the full committee's first meeting, a retreat held just before the fall semester began. After hearing introductory presentations, the full committee broke up into groups and produced SWOT (Strength, Weakness, Opportunity, Threat) analyses of the single dean and multiple dean models. The results of these small group analyses were fairly consistent: not only does each model have strengths and weaknesses that were consistently identified by the various groups, but the strengths identified for one approach were consistently seen to be the weaknesses of the other, and vice versa. As a result of those preliminary analyses as well as subsequent conversations among both the steering committee and the ARC as a whole, we decided to focus our examination on the functional nature of the problems and then see whether solving them would necessitate structural or organizational changes. Considering as a committee how we could best address the issues identified with minimal risk, we gravitated toward model 1b above, a single dean model with an executive dean supervising deans of divisions.

Our Guiding Values and Commitments

The ARC has remained focused on several values and commitments very much in line with Provost Moore's charge as we understand it.

1. The ARC has retained a consistent commitment to the liberal arts mission of CAS, and to the importance of that mission to CU Boulder as a whole. Almost every undergraduate student at CU Boulder takes at least 30% to 100% of their credit hours in CAS, including students in other colleges, who take up to 70% of their credit hours in CAS. That underscores the significance of delivering a quality liberal arts curriculum through CAS for all students on campus. In addition, it is important to offer students opportunities to follow their own initiatives and interests while exploring the many options across the liberal arts curriculum offered through CAS. Consequently, we have thought about academic reorganization in terms of whether any proposed changes would enhance or degrade that comprehensive liberal arts mission. Our concern for maintaining the liberal arts mission is in line with the Academic Futures report.
2. We have remained focused on what is best for our students, primarily, as well as faculty and staff. Committee members have particularly emphasized the importance of maintaining the quality of the undergraduate experience and making sure that any academic reorganization of CAS not inhibit student success or decrease the focus on inclusive excellence. This was an important driver for keeping the divisions under a single umbrella. The more separate

- the divisions, the harder it will be to maintain the general education curriculum and to facilitate students transferring between majors or taking double majors.
3. We have proceeded from a concern for maintaining, and even enhancing, the excellence in creative work and research for which CAS is well known. We consider that an important driver of the C/J paper was the perception of a lack of attention to possible new initiatives in the College and a lack of resources to maintain and build excellence in faculty scholarship.
 4. The committee found the problems identified by the C/J paper, which details concerns and challenges particularly affecting the Natural Sciences Division, to be compelling. We have proceeded with a sincere desire to solve these problems, even as we have diverged from seeing the model that they proposed as the best path forward. In this spirit, we have noted as worthy of further attention some issues raised that went beyond our charge.
 5. We recognized early on that structural change alone would not necessarily solve the major problems we see CAS facing. We were also working within a very limited time frame. Therefore, we opted for a cautious approach that has emphasized examining whether there are functional rather than structural fixes to the major problems we found with the current organizational structure. Meeting the challenges that CAS currently faces will be an ongoing process, and those challenges may change over time. Therefore, we have assumed that our work will not be the final say on the form that CAS takes in the future. Instead, we have approached our work as an incremental step towards solving these problems without creating structural impediments to future flexibility.

ARC Recommendation

The ARC recommends that CAS remain a unified college and that the jobs, powers, and responsibilities of the CAS dean and associate deans of divisions be redefined. We propose that CAS have an executive dean who is the leader of the college, and who is responsible for the overall liberal arts mission of CAS and has supervisory responsibility for deans of divisions. Deans of divisions will be officers of the university with substantial budgetary authority. Their responsibilities and powers will be consistent with the Regents' definition of a dean.¹ Deans of divisions will report to the executive dean,

¹ "Deans are the principal administrative officers for a college or school. Deans serve as the presiding officer for faculty meetings and are responsible for the administration of the college. Deans provide leadership toward achievement of teaching, research, and service activities for the college or school. Deans are responsible for matters at the college or school level including but not limited to enforcement of admission requirements; the efficiency of departments and other divisions within the college or school; budgetary planning and allocation of resources; faculty

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.

Specific Recommendations Concerning the Deans of Divisions

We recommend that the divisions of CAS have deans who will:

1. be officers of the university, with the ability to sign contracts;

assignments and work load recommendations on personnel actions; curriculum planning; academic advising accountability and reporting. [OFFICER]"

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

- involve chairs more in the process, with the goal of increased faculty confidence that their voices are being heard.
8. The redistribution of budget authority increases transparency by ensuring the need for the executive dean and deans of divisions to work together. This structure requires interaction on common issues and major initiatives while also giving deans of divisions (with support of their own budget staff) necessary autonomy over the budgets that they control.
 9. The redefined positions of the executive dean and deans of divisions are sufficiently distinct and substantive to attract quality candidates. These positions could attract an applicant pool from beyond CU Boulder.
 10. Our choice to preserve the college as an umbrella organization while adding some autonomy at the divisional level should lead to additional opportunities for our students and for faculty to collaborate, while not removing any currently existing options.
 11. The clarification of leadership roles in CAS, along with assigning to the deans of divisions some of the responsibilities now held at the CAS dean level, increase the bandwidth that deans can apply to responding to opportunities and addressing student, staff, and faculty issues. This clarification provides more ability for the deans of other colleges to target the dean most likely to be able to address their concerns, such as joint hiring, cross college programs, etc.

Reasons for Recommending a Single Dean Model

The C/J paper proposes a model with multiple deans reporting to the provost and eliminates the CAS dean position. After careful consideration, the ARC strongly cautions against a move at this point to such a multiple dean model or to a multiple college model. The ARC instead recommends a model with a single dean reporting to the provost (single dean model), specifically a CAS executive dean with supervisory responsibility for deans of divisions. This recommendation is made for the following reasons:

1. The UCD and UCSB experiences gave us valuable perspectives on the multiple dean model and to some extent provided us glimpses into how the future could evolve if we went in certain directions. UCD returned to a single dean model as have some other institutions.
2. In order to protect and enhance the liberal arts mission of the college as well as the undergraduate experience, it is imperative that divisions cooperate to maintain a shared vision, to prevent increased siloing of curriculum as well as

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 are at risk, as deans of divisions could be conflicted over the concerns of their individual divisions and the needs of the college as a whole.

3. CAS currently sees some benefits from budget flexibility, which allows resources to be moved around within the college as conditions change. It is difficult to maintain such budget flexibility without an executive dean to transparently oversee overall budget allocations at the college level. While, in theory, budget flexibility could be maintained under a multiple dean model if the deans of divisions jointly operate from a shared budget, we are deeply concerned about how functional such an arrangement would be. We understand that even our recommendation will have some impacts on this flexibility and will shift some problems up for campus consideration.
4. The model that we have recommended minimizes the additional administrative costs compared to a model that has separate colleges or schools.
5. There are no clear reasons why a multiple dean model would better solve the problems raised in the C/J paper. Because we identified a number of risks associated with multiple dean models, including siloing of curriculum and research and barriers to student exploration across the liberal arts curriculum, it is more sensible to first attempt to solve the problems under a single dean model.

Issues Requiring Further Attention

If our recommendation is accepted, the ARC anticipates the formation of an implementation committee. The tasks of this committee should include:

1. Determining the composition of divisional budgets.
 - a. Guiding principles, initial budget divisions, and a reallocation process are needed.
 - b. The scope of budget allocations to divisions will ultimately determine the scope of authority exercised by deans of divisions.
 - c. The executive dean will retain control of any college resources not allocated specifically to the deans of divisions during the re-organization.
 - d. Once the general principles behind the budget allocation have been worked out, there will still be the need to understand/design the mechanisms for how additional budget will flow down from the provost,

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 undertaken as part of Financial Futures. In particular, consideration should be given to the ongoing resource issues identified in the C/J paper, such as start-up costs for hiring in the natural sciences, in light of the resources CAS generates for the campus as a whole.
2. The continued success and future growth of our research mission requires that the institutes and departments work well together, especially as the problems that need to be solved become more complex and more multidisciplinary. Since the C/J white paper raised some concerns about this relationship, the committee believes there is value in looking more closely at this relationship.

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
Brenda Schick	and	Department of Speech, Language, and Hearing Sciences
G. Lang Farmer		Divisional Dean of Natural Sciences
Ann Carlos		Divisional Dean of Social Sciences
Ruth-Ellen Kocher		Divisional Dean or Arts and Humanities

Executive Summary for College Reorganization

The future of education is to increase the number of students involved in cutting edge research and scholarly activities, exposing them to skills that will lead them to more marketable opportunities after they graduate. The Chancellor in his 2017 State of the Campus address proposed having 50% of the undergraduates involved in research and scholarly activities.

The signers of this white paper believe that the College of Arts and Sciences (CAS) can best address the Chancellor's goals through a fundamental reorganization of the College administrative structure and not by dividing the CAS into a set of smaller colleges. In the proposed reorganization, the current CAS Dean position, and the Divisional Dean positions for Natural Sciences, Social Sciences, and Arts and Humanities, would be eliminated and replaced by three Dean positions of equal status tied to each of the three College Divisions. The three Deans would be appointed by, and report directly to, the Provost and would work collaboratively in support of the missions of each Division and the College as a whole.

A reorganization in the CAS is required because the huge size, complexity and diverse missions of the departments in the CAS disadvantages the College in the campus budgeting process, limits the CAS Dean's flexibility in managing resources, and inhibits departments from competing most effectively for campus and extramural resources. Furthermore, the CAS is nearly twice the size of all of the other CU Boulder schools and colleges combined, with the Natural Science Division alone being larger than any other school or college. Nevertheless, the CAS is allowed only one seat at the Provost's Deans Council. The proposed reorganization would remedy the underrepresentation of the CAS faculty at the Deans Council by expanding their seats to three.

General Reorganization Proposal:

We suggest that CU Boulder can best deliver a liberal arts education by preserving the CAS as a large, interdisciplinary college. However, the College's effectiveness could be improved by eliminating the current Dean position and by elevating the responsibilities of the Divisional Deans. Currently, the CAS Dean meets with an individual department only once a year and departments play a limited role in the annual budget process. The current CAS Dean has an overwhelming number of responsibilities across three Divisions constituted of different disciplinary areas and very different academic cultures. The Dean is expected to be an expert in and to advocate for all of the activities of faculty, staff, and students within forty different academic departments. We argue that the result is a Dean who is spread too thin and who is too

dissociated from the day to day activities of the College to effectively perform important college duties and longterm planning. For example, the Dean may have only a superficial familiarity with details of specific CAS Division issues and so is at a disadvantage when advocating on behalf of the CAS at the Provost level, particularly when competing for resources with the Deans of smaller, more homogenous colleges.

Establishing smaller colleges which contain departments with similar needs and expectations is one possible way of remediating the problems outlined above with the current CAS. Smaller colleges would increase the representation of CAS academic departments in decision making at the university level. However, while carving out smaller colleges from the current CAS might provide greater visibility to faculty research and scholarly work and significantly improve representation, it could also fragment those departments with faculty members who may wish to belong to different colleges. Smaller colleges might also require duplication of some existing resources, including advising, budget officers, and human resources managers, and could cause a significant expansion in administration staff and associated expenses. Another drawback would be possibly creating barriers that could prevent faculty from effectively interacting across Colleges, both in terms of classroom teaching and research collaboration.

Instead, we propose that the CAS remain intact, but the current CAS Dean position, and the Divisional Dean positions for Natural Sciences, Social Sciences, and Arts and Humanities, would be eliminated and replaced by three Dean positions of equal status tied to each of the three College Divisions (see proposed organizational chart at end of this document). The result is an administrative structure similar to that of the College of Letters and Science at the University of California Berkeley. The three Deans would represent the current CAS divisions at Provost meetings and at research cabinets. The Deans would also represent their respective faculty, engage the faculty in creating annual budgets, fundraise for their divisions, hold regular meetings with Department Chairs, be responsible for convening committees for promotion and tenure cases, and have financial authority. An Associate Dean reporting to the Deans may be needed to ensure the smooth operation.

The Executive Dean will be responsible for the college infrastructure: Academic Advising and Student Success, Finance and Operations, Advancement, Undergraduate Education, Academic & Curricular Affairs, CAS Personnel Administration, Budget Office, Communications, the Financial Service Center, and Space Management and Construction. To maintain a community amongst the leadership, we view the position of Executive Dean as rotational to be occupied by one of the CAS Deans for a period of 23 years.

In terms of the College budget, we suggest each of the three Deans could advocate individually and in concert for new continuing budget allocations from the Provost to fund new, strategic initiatives with each Division. However, all three Deans would work together, along with appropriate departmental representatives, to create priorities for continuing funds released, say, by TTT faculty retirements and for the use of the annual CAS temporary budget. Further we propose a new position be created called *Director of Access and Recruiting*. The Director work directly with Admissions to obtain the best possible students.

Perspective of the Natural Sciences Division:

The Division of Natural Sciences is in favor of the proposed administrative changes to the CAS proposed here, for the reasons outlined in the following text. However, we note that even with such a model the Natural Science faculty will be the least represented faculty group on the Boulder campus.

We first state our core values so that it is clear that the Natural Sciences Division values a liberal arts education and considers the proposed administrative changes as being in support of, rather than diminishing, these values.

1. We support an inclusive liberal arts education. We consider such an education to be inherently “interdisciplinary” and we believe a student’s exposure to the arts, humanities, social sciences, and natural sciences is important.
2. The primary mission of the Natural Sciences Division is STEM education and research, in which knowledge is created and disseminated through the application of the scientific method.
3. A natural sciences education serves students who aspire to careers in the life, earth, physical and mathematical sciences but also must provide a means for all students to develop the critical thinking skills required of informed and independent members of society.
4. Faculty in natural science departments have an obligation to regularly participate in formal teaching of both undergraduate and graduate students, although the nature of that formal teaching should evolve to provide the best educational experience possible, given changes through time in pedagogical best practices, knowledge in our various disciplines, and student expectations, background, and preparation-level.

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)
CMCI	\$5952 (\$828)	\$17,989 (\$798)

The tuition in the Natural Science departments should be the same as Engineering – this should be an additional \$10 Million in revenue. It is very hard to argue that tuition should be higher in CMCI than in the Natural Sciences.

Students majoring in departments in the Natural Sciences Division should be charged differential tuition.

VI. Start up and retention packages

Most departments have, or will have, difficulty in meeting their University/College mandated contributions to faculty startup and retention packages. How can such cost be met, or contained (without diminishing our ability to compete for best faculty)?

A Natural Sciences Dean would be able to make competitive startups a priority.

VII. Additional Topics to Consider

- a. Campus should provide continuing funding for “service centers”, those instrumentation facilities that provide services both within and between departments (and the college). Such baseline funding would help supply local IT support, lab managers and instrument service contracts.
- b. The Natural Sciences Division has some of its departments located on the main campus and some on the east campus. The Natural Sciences faculty as a whole must be consulted about future plans for the expansion of academic and research programs on east campus.

College administrative structure- Basic departmental activities (instructor, lecturer and faculty hiring, for example) are impeded by College administrative structure. Streamlining is required.

Chart of College Reorganization Model

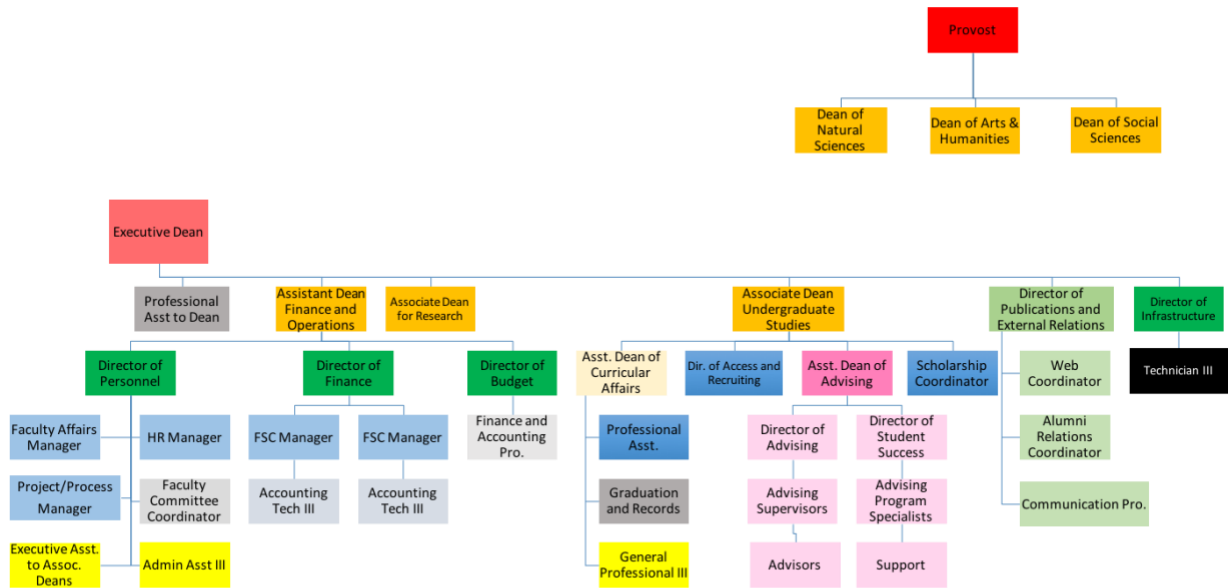


Figure 1: Proposed Reorganization Model for the College of A&S. The current Divisional Deans become Deans and report directly to the Provost. The Executive Dean duties are assumed by one of the Deans. (Note there is a new position called Director of Access and Recruiting.)

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 don't believe that the arguments made in the White Paper for the change are effectively addressed by the reorganization it proposes, and hence I do not believe fundamental reorganization is in our best interests. Below I offer a few thoughts on the proposed change, and close with some suggested revisions to College operations that may improve faculty life in the College.

One of the driving arguments made for the change in structure, namely greater influence and representation at Deans Council, is not a particularly compelling argument. In fact, I believe that the faculty of the College are in several ways advantaged by retaining the current college model. I participated in deans council meetings for 16 years as an associate vice chancellor and later as a dean. I don't recall instances where the Provost brought FTE, dollars, buildings, or anything else of consequence to dean's council and divided up the spoils by vote. Voting was and I assume still is extraordinarily rare. The number of voices at the table shouldn't be confused with the authority and responsibilities of the voices at the table.

Real resource and policy decisions are influenced more by 1:1 dean-provost meetings, and the relationships a dean maintains with the various vice chancellors and other deans. Because of the importance of these 1:1 relationships, the College doesn't fare well when the dean doesn't have the respect of fellow deans or lacks a good working relationship with the Provost, but those weaknesses are independent of college size or organization.

The nature of instruction and research/creative work in the liberal arts means that some divisions require subsidization, while others generate revenue in excess of their expenses. Faculty turnover also differs by divisions. An A&S dean is able to move vacant FTE and surplus dollars back and forth across divisions as needed to build science and fine arts buildings, generate "new" faculty and TA lines elsewhere, support

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 responsible for budgeting the three divisions and adjudicating interdivisional issues, but otherwise leaving decisions to each of the 3 deans. The easiest model might be to call our divisions "schools." The Executive Dean would focus on the big picture and not the amount of start-up packages or whether or not to invest a

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-mortar fundraising (analogous to the Chancellor – Provost division of labors). That leaves the decision-making and the selection of our decision makers at the local level, where I think better decisions are generally made, particularly on a campus with a tradition of very little turnover in the personalities in Regent Hall. I find this model superior for preserving many of the big college model advantages including the College's political clout, while strengthening divisional autonomy and decision-making. It too would cost administrative FTE. At minimum, each school dean might require an associate dean, a budget specialist, and an administrative assistant. If resources weren't adequate for this, I would reallocate the investment in some of the recently created associate dean and other positions to fund these needed positions.