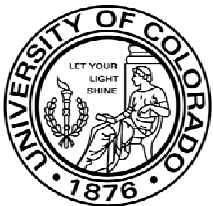


A REPORT of the

VICE CHANCELLOR'S TASK FORCE ON  
INTERDISCIPLINARY STUDIES AT CU-BOULDER

July 2004



University of Colorado at Boulder  
Office of the Vice Chancellor for Research  
and Dean of The Graduate School

**Report of the  
Graduate Task Force on Interdisciplinary Studies (GTIS)  
July 2004**

The basic charge of GTIS has been to develop recommendations whose implementation will help CU-Boulder achieve prominence in interdisciplinary education. The recommendations are based on the identification of obstacles and the recognition of specific mechanisms through which the climate for interdisciplinary study, and the opportunities for interdisciplinary study, may be enhanced at CU-Boulder.

As noted by Dean Lynch, CU-Boulder's recognized excellence in interdisciplinary research provides an opportunity to engage nationally in innovation in interdisciplinary graduate education. The GTIS has deliberated and developed these recommendations with this mandate in mind.

**GTIS History:** The Task Force began meeting in December 2003 and continued meeting monthly through May, 2004. In April, an additional meeting was held with Wyn Jennings, NSF Program Director for Integrative Graduate Education and Research Traineeship (IGERT). The Task Force heard testimony from invited university administrators and faculty experts affiliated with various colleges, departments, and institutes. These presentations were guided by discussion points distributed to administrators and faculty experts in advance. In addition, the same set of discussion points were issued to the faculty at-large, with written commentary received from 15 faculty members. Insights from both written and verbal commentary, in combination with GTIS members' own interdisciplinary experiences, informed the following discussion and recommendations.

**Working Definition of "Interdisciplinary:"**

As opposed to multi-disciplinary education, where an exposure to a variety of disciplines is achieved, genuine interdisciplinary education should have the effect of integrating knowledge and forging ties across disciplines. "Interdisciplinarity" might occur between two fields (i.e., bioethics) or across a host of disciplines (i.e. environmental studies, cultural studies); interdisciplinary efforts might also be problem-based (i.e., global climate change). In practical terms, interdisciplinary education engages multiple perspectives, often makes use of a variety of analytical tools, and aims to achieve what cannot be achieved working within a single discipline.<sup>1</sup>

It is important to note, however, that interdisciplinarity means different things in different parts of the intellectual world; some conceive interdisciplinarity in terms of a single scholar working in multiple fields; scientists and engineers might conceive of interdisciplinarity as involving teams of individuals all firmly grounded in different disciplines. Simply put, interdisciplinarity and collaborative work are sometimes linked but not always. We need to recognize the different

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<sup>1</sup> The GTIS has been working with the term "interdisciplinary" both because it seems the current term of art, drawn upon by virtually every academic organization one can find, and because it genuinely reflects the quest for the integration of disciplines and the subsequent creation of new knowledge that we hope to support.

forms that interdisciplinary work takes, and we need to support the solitary literary comparatist along with the engineering team. CU-Boulder's support for interdisciplinary work should be ecumenical, rewarding the wide variety of knowledge creation and institutional organization that can foster interdisciplinary study and education.

A more detailed definition, including limitations and criticisms of interdisciplinarity, is attached as an Appendix.

**Rationale for Critical Consideration of Interdisciplinary Graduate Education at CU-Boulder:** The view from leaders in graduate education suggests a national mandate for increasing opportunities for interdisciplinary education at the graduate level. In a scientific sense, the complexity of contemporary issues often requires examination through a variety of disciplinary lenses, with inquiry into many issues being most fruitful as a result of disciplinary intersections. In an applied sense, per Wyn Jennings, industry needs flexible personnel with the type of creativity and innovation often resultant of interdisciplinary graduate education.

Many students and faculty are drawn to interdisciplinary inquiry. Anecdotal evidence from faculty involved in interdisciplinary endeavors suggests that students drawn to such experiences are often exceptionally talented. Enhancing opportunities for interdisciplinary education at CU-Boulder will ensure that we remain competitive with regard to recruiting top students drawn to this type of inquiry. In addition, exceptional disciplinary-based students may also find appeal in the opportunity to engage in training outside of their home discipline. Again, anecdotal evidence from faculty involved in disciplinary-based training suggests that often students attracted to CU by disciplinary strength desire the value-added of exposure to some interdisciplinary instruction.

Indeed, interdisciplinary education perhaps has its strongest rationale for emerging areas of inquiry within which knowledge of a single discipline does not suffice. As an example, environmental engineering developed as an interdisciplinary extension to traditional engineering education, with inclusion of perspectives gained from chemistry, biology, and earth sciences. Within humanities, the same could be said of comparative literature, within which specific national literatures become constituent parts of a broader, more integrative whole.

Finally, historically the U.S. has been quite successful in recruiting the best international students to our institutions of higher education, and the U.S. model of higher education has long served as a model for much of the world. That said, we are beginning to experience serious international competition. Interdisciplinary education and expertise will play a key role in positioning our society for leadership with regard to creativity, innovation, and ingenuity in higher education.

While CU-Boulder has recognized several interdisciplinary efforts for strategic investment (e.g., Nanotechnology, Center of the American West), more can be done to enhance interdisciplinary educational efforts broadly. The remainder of the report outlines obstacles and recommendations with regard to these efforts.

**Obstacles to Interdisciplinary Education at CU-Boulder:** The following statement of obstacles is kept brief insofar as they also clearly emerge, and with more detail, within the

recommendations presented in the subsequent section. It is important to note that comments by administrators, faculty, and GTIS members suggest that there is strong agreement with regard to the nature of these obstacles.

1. Interdisciplinary education at CU-Boulder is substantially hindered by **lack of resources**. Funds are required, for example, for building programs and remunerating interdisciplinary teaching. Funding for some initiatives (e.g., faculty hires) could be garnered from more strategic implementation of existing funding (e.g., mandate interdisciplinary and cross-unit hires?) Additional details are provided in recommendations below.
2. Interdisciplinary education at CU-Boulder is also hindered by an overwhelmingly **discipline-based institutional culture**, such that tenure, annual evaluation, curriculum development, teaching assignments are primarily governed by disciplinary-based rules. In addition, each unit has its own budget and performance goals linked to excellence typically as defined by disciplinary-bound units.
3. Further, **the broader administrative structure of CU is not conducive** to interdisciplinary education. The models of both departments and colleges encourage the development and protection of disciplinary-based education. No distinct administrative unit exists for developing, enhancing and promoting interdisciplinary initiatives.

In sum, CU-Boulder **lacks a strategy** for developing and promoting interdisciplinary educational initiatives, **as well as the institutional leadership** required for success.

**Recommendations with regard to Interdisciplinary Education at CU-Boulder:** The following recommendations are presented through the use of 3 categories: 1) university vision and leadership, 2) issues related to faculty, and 3) issues related to curriculum. It is hoped that these categories clarify potential arenas and strategies for implementation. Also, it is important to note that the obstacles noted above appear within each category, and there are overlaps between categories, especially with regard to faculty and curriculum.

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## **1) University vision and leadership**

### **1 a): Interdisciplinarity must be integrated into CU-Boulder's institutional vision.**

- As a community CU-Boulder must **think boldly** and be willing to experiment and take risks. As related to this, we must also be willing to accept a certain level of failure, but to then seek to redeploy resources, and thereby set the stage for a long-term investment in interdisciplinary education.
- Related, CU-Boulder must **critically consider the type of interdisciplinary education**, which we aim to foster (e.g., problem-based vs. broader substantive arena).
- To this end, our campus requires an **institutional statement** on the value of interdisciplinary education, as well as a shared commitment to achieving interdisciplinary goals.

- **CU-Boulder’s initiative(s) in interdisciplinary education should be aligned with the institutional strategic plan**, and in such a way that interdisciplinary education is used as a means to a goal, and is not pursued merely for its own sake. The promotion of interdisciplinary education could perhaps take place within existing outreach efforts and/or “university without walls.”
- **CU-Boulder should build on its strengths and recognize existing potential** for interdisciplinary education collaborative efforts.

**1 b): An administrative entity should be created for leadership, advocacy and oversight of interdisciplinary educational initiatives.**

- **A new administrative structure devoted to interdisciplinary education should be created**, be it a college, school, or campus-wide center. This new administrative unit should **have its own budget, should report to the Provost, and should be accorded the same stature as schools and colleges** housing degree programs and faculties. The integration of disciplines requisite for interdisciplinary education requires a high level of coordination and investment mirroring the basic support mechanisms of other successful units, i.e., critical mass, design, resources, and incentives. [It must be noted that not all GTIS committee members agree on this approach.]
- Such an office should be **staffed by a high-level administrator**, such as a dean, whose cross-cutting duties on behalf of undergraduate and graduate interdisciplinary education would include providing campus leadership, as well as developing and administering guidelines for all interdisciplinary-related activities. The unit could start out on a smaller-scale, likely within the Graduate School, but must have from the onset, the requisite autonomy to operate in a cross-cutting manner. Perhaps ATLAS, with its mission of promoting interdisciplinary programs has a role to play with regard to relevant initiatives.
- Such an office should **work to enhance existing programs, identify and attract interested faculty, act as a resource for graduate students interested in interdisciplinary inquiry, as well as provide leadership and guidance with regard to several obstacles** presently impeding more effective development of interdisciplinary graduate education programs. Examples of overcoming obstacles should include:
  - ◆ **lessening administrative hurdles** in development of interdisciplinary curriculum (e.g., cross-listing) and implementation of team-teaching (e.g., assignment of “credit” to departments);
  - ◆ **negotiating disciplinary and department-bounded barriers** with regard to joint hires;
    - this includes provision of structure, oversight, and enforcement of MOUs between units;
  - ◆ **working to reconcile annual evaluations and campus promotion and tenure policies** with interdisciplinary goals;
    - this includes encouraging and rewarding interdisciplinary service.

- ◆ **engaging in ongoing critical assessment** of interdisciplinary programs, as well as institutional policies and procedures with regard to interdisciplinary education.
  - This should include continued identification of benchmarks at other universities and on our own campus.
- ◆ providing campus administrators and development officers with conceptual and specific goals for **garnering new funding**.

**1 c): CU-Boulder must enhance efforts to publicize the interdisciplinary nature of accomplishments.**

- Specifically, CU-Boulder should better communicate to outside constituencies how its greatest researchers and educators, based on Nobel Prize, MacArthur Fellowships, Fulbrights and other awards, are interdisciplinary in their pursuits.

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**2) Issues Related to Faculty**

**2 a): CU-Boulder must critically consider evaluation of interdisciplinary faculty, and provide institutional leadership in more flexible appraisal of teaching and scholarly excellence.**

There is tremendous need for critical consideration of evaluation with regard to interdisciplinary faculty. Faculty, especially junior faculty, engaged in interdisciplinary teaching and research feel pressured by the needs and requirements of their discipline and their discipline-based departments. Joint appointments often engender split loyalties and extra burden for interdisciplinary scholars. Particular attention must be paid to junior faculty, women, and faculty of color, for whom additional pressures are felt. Suggestions with regard to these obstacles include:

- **Evaluation criteria must be made more flexible.** Interdisciplinary scholars often engage in cutting-edge research and teaching, and often publish in journals not readily accepted by the discipline. GTIS submits that the evaluation of interdisciplinary faculty is essentially no different than the evaluation of disciplinary faculty; in each case, scientific and/or scholarly excellence is sought.
- Related, the institution should **compile an inventory of evaluation processes** for assessing authorship, appropriate publication outlets, quality of scientific merit, etc. For example, if sole authorship is not the standard for certain interdisciplinary combinations, it should not be stressed for evaluation.
  - Faculty and administrators at CU should carefully **read the work** of our colleagues, as is currently the case, and evaluate accordingly. Evaluation of interdisciplinary faculty will become easier once the campus achieves a critical core of such faculty.

- Facilitate in the evaluation of interdisciplinary faculty by **inclusion of statements on research, teaching, and service in packets sent to external evaluators.**
  - Procedures should also be developed to **recognize contributions of faculty to advising and mentoring of students outside home department.** The addition of a question regarding interdisciplinary research and teaching activities on FRPA forms could be a simple means of beginning such recognition.
- The institution should **develop procedures to work with departments in evaluation of** interdisciplinary faculty.
- **All interdisciplinary and/or joint faculty should have MOUs** clearly indicating how and where evaluation is conducted. MOUs, once agreed upon and used in the recruiting stage, should be adopted and **enforced by the Provost.**
- **In all, interdisciplinary efforts must be intellectually valued** such that both faculty and students aiming to engage in interdisciplinary work are not discouraged. The addition of a question regarding interdisciplinary research and teaching on FRPA forms could also further this recognition and valuation.

**2 b): The potential and model of the research institutes should be used more effectively to enhance interdisciplinary education.**

The mission of the institutes can be enhanced by inclusion of graduate education as related to institute-specific research foci. Additional benefits to be derived are enhanced dialogue among students from diverse disciplines; optimization of research and teaching missions through training grants; greater likelihood for seed money and experimentation in interdisciplinary teaching, e.g. between units in Engineering and Arts and Sciences. There are a number of routes through which the interdisciplinary education potential of existing institutes can be enhanced:

- **Interdisciplinary faculty recruitment:** Since it is easier for interdisciplinary faculty to join and flourish in a campus where interdisciplinarity is already a prominent factor, we should **create a critical core of institute faculty** in all appropriate units, in order to enhance unit culture. That said, cooperative hires cannot be the only effort to foster interdisciplinarity as the broader institutional issues must also be addressed (e.g., developing “culture” of appreciation for interdisciplinary efforts).
- **Increased assignment of faculty lines to institutes and centers, with rostering in the units:** The goal of such critical core-building is to engender the shared vision, common purpose, and coordinated decision-making characteristic of our institutes, with integration of disciplines a key objective.
- **Interdisciplinary teaching assignments built in to position descriptions:** It is important to note here that there is some concern with regard to the added burdens of joint appointments, particularly with regard to multiple departmental obligations for junior faculty.

A focus on development and enhancement of institutes and centers related to social sciences and humanities are immediately desirable.

**2c): Interested faculty must be identified and curriculum and program development encouraged. Indeed, interdisciplinary initiatives should be faculty-driven.**

Motivated faculty should be encouraged to develop interdisciplinary programs and curriculum through incentives and support structures.

- To this end, **CU-Boulder should provide incentives for interdisciplinary teaching**, such as funding for several teaching awards annually (e.g. 5-10K added to one's base for a period of three years);
- **resources should also be allocated to support pilot efforts** with regard to curriculum development (e.g., team-taught courses);
- **resources must be provided to cover teaching outside of home department.** This could take place through creation of a separate fund (short of establishing a separate unit with its own funding as per item 1b above) to pay for a replacement instructor if, for example, a faculty member in History desires to teach an interdisciplinary course in Political Science. The Deans should agree upon the use, purpose, and application of this central fund **such that a given unit cannot automatically engage veto authority over proposed interdisciplinary teaching initiatives.** The new pool of funds, **centralized and administered in a manner resembling the Graduate School's University Fellowship account**, would replenish the teaching staff of a unit when its various members engage in teaching beyond the unit.

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### **3) Issues Related to Curriculum**

**3 a): CU-Boulder should streamline development of interdisciplinary courses and programs, including dual degree programs.** Possibilities for such streamlining could include:

- **Reduction of administrative hurdles;**
- The development of **web-based forms** for simplified submission of course proposals;
- The **provision of examples** of exemplary courses/programs.

**3 b) Serious effort and resources must be invested with regard to encouraging and supporting interdisciplinary teaching.** As examples,

- **Appropriate faculty "credit" must be determined.** For example, team-teaching should perhaps be counted as teaching one's own course, because the effort required is often equal, or exceeds, that of teaching one's own course.
- **Funds should be provided to support TAs** for interdisciplinary courses and units. This should be a separate funding pool, and could include support for RAs,

to be allocated only to agreed-upon interdisciplinary programs. This pool could be used for start-up programs as well as in support of currently underfunded programs. Where possible, reciprocity should be allowed for “loaning” TAs to other units, e.g. those without graduate programs or those underfunded.

- **Flexibility should be introduced with regard to policies regarding minimum enrollment**, insofar as interdisciplinary courses, though often popular, may in some cases require more time to mature.
- **The development of interdisciplinary exam committees should be facilitated;**
- **An administrative unit should intervene if faculty or student efforts are unduly pressured by disciplinary concerns.**

**3 c): CU-Boulder should systematically present interdisciplinary efforts in University catalog.**

- To this end, units should be encouraged to inventory their curricula for all interdisciplinary courses, for central listing.

**3 d) Departments should be encouraged to allow room in graduate student curriculums to take courses representing other disciplinary perspectives** (eventually this could be required if institutional mandate /commitment of sufficient strength). Interdisciplinary courses could perhaps be considered for core requirement status, as opposed to only being engaged as electives.

**3 e) Each unit should designate one faculty member as point person for interdisciplinary education**, analogous to the Graduate School’s roster of graduate associate chairs.

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**Summary and Recommendations for Early Stages of Implementation**

In summary, the GTIS sees the following as concrete steps that can be taken to better facilitate interdisciplinary educational programs on the CU-Boulder campus.

- 1) Assign responsibility for fostering interdisciplinary graduate education to an administrative entity. In early stages, these responsibilities can reside within the Graduate School, but consideration should be given as to the utility of creation of a separate administrative entity specifically to foster, promote, and review interdisciplinary educational activities on campus.
- 2) This administrative entity should engage in the following:
  - Work with upper administration to integrate vision for interdisciplinary education into institutional strategic plan
  - Work to develop funding pool for interdisciplinary course/program development (including funds for replacement teaching), while also working to develop least-cost means of fostering interdisciplinary education on campus (e.g., streamlining course development and cataloging offerings).

- Create comprehensive listing of existing interdisciplinary efforts on campus; integrate into catalog
- Work to streamline development of interdisciplinary course and programs (certificates, dual degrees)
- Create a clearinghouse of resources for faculty and students interested in interdisciplinary efforts at CU-Boulder
- Work to create guidelines for evaluation of interdisciplinary faculty and programs; reconfigure MOUs
- Work to enhance promotion of interdisciplinary efforts at CU-Boulder
- Work on strategic plan for hiring of interdisciplinary faculty
  - Critically consider potential of using existing institutes
  - Where are most pressing hiring needs?
- Encourage inclusion of interdisciplinary education in discipline-based course requirements.

## Appendix A

### Exploration of the Meaning of “Interdisciplinary”

Jeff Cox

The *Oxford English Dictionary* provides a rather flat definition of “interdisciplinary”: “Of or pertaining to two or more disciplines or branches of learning; contributing to or benefiting from two or more disciplines.” Its cited uses of the word are brief and largely bureaucratic, though it is interesting to note that the term first appears in 1937 and that a 1957 article from *Family & Social Network* opines, “Ten years ago interdisciplinary research was very much in vogue,” which might suggest oddly enough that the golden era of interdisciplinary work was the 1940s.

The OED definition is not much help in distinguishing “interdisciplinary” from other competing terms such as “pre-disciplinary,” “multi-disciplinary,” “cross-disciplinary,” and “trans-disciplinary.” We might make the following distinctions. “Pre-disciplinary” points to a supposed state prior to the arrival of modern academic disciplines in which everyone is imagined to be a “renaissance” man or woman seeing the world whole rather than compartmentalized by disciplines. “Multi-disciplinary” suggests an exposure to a variety of disciplines, a sampling of disciplines; a double-major with each major conducted separately might provide a model of “multi-disciplinary” education. “Cross-disciplinary” points to a question, problem, text, or area of study that crosses the boundaries between two disciplines: literary scholars and political theorists both read Edmund Burke; sociologists, biologists, and psychologists all study human beings. “Cross-disciplinary” education occurs when two people from different disciplines discuss the same subject from the perspective of their respective disciplines. Where “interdisciplinarity” differs from both “multi-“ and “cross-disciplinary” work is that it suggests an integration of knowledge, ties forged between disciplines rather than a sampling or juxtaposition of disciplines. “Interdisciplinary” might occur between two fields (i.e. bioethics) or a host of disciplines (i.e. environmental studies, cultural studies). “Trans-disciplinary” seems to gesture towards a utopian reintegration of the disciplines in toto, a self-conscious recreation of the prelapsarian unity of the “pre-disciplinary”; it adopts the maxim of Francois Taddai, “No discipline knows more than all disciplines.”

In practical terms, as many who work in interdisciplinary ways are quick to point out, interdisciplinary education often achieves what cannot be achieved in the discipline alone. We have chosen the term “interdisciplinary” both because it seems the current term of art, drawn upon by virtually every academic organization one can find, and because it genuinely reflects the quest for the integration of disciplines and the subsequent creation of new knowledge that we hope to support.

While interdisciplinarity often seems the administrative buzzword of choice in campuses across the world, it is not without its critics. Ian Hacking, for example, has argued that interdisciplinary work is really the application of one discipline to problems from different disciplines; he argues that interdisciplinary scholars do not so much merge disciplines as use disciplinary tactics to attack problems commonly handled from a different disciplinary position. Stanley Fish has

argued that there is no distinction between disciplinarity and interdisciplinarity, that interdisciplinary knowledge simply marks out a new discipline that seeks to be recognized alongside the established disciplines. More cynical commentators have suggested that interdisciplinarity is simply a rallying cry for new disciplines seeking to shift funding from older departments and even that interdisciplinarity is an administrative cover for downsizing so that a new visual culture expert, for example, might be asked to cover both literature and art history courses.

While such objections surely can be answered, they do suggest that some caution needs to be exercised when we invoke “interdisciplinarity.” Hacking’s arguments remind us that interdisciplinarity means different things in different parts of the intellectual world. He conceives of interdisciplinarity in terms of a single scholar working in multiple fields. Scientists and engineers might conceive of interdisciplinarity as involving teams of individuals all firmly grounded in different disciplines. Simply put, interdisciplinarity and collaborative work are sometimes linked but not always. We need to recognize the different forms that interdisciplinary work takes, and we need to support the solitary literary comparatist along with the engineering team. Fish’s comments remind us that disciplinarity and interdisciplinarity are not opposed terms, that they may be markers of older and emerging fields. He also reminds us that disciplines are not the problem, that there would be no inter-disciplinarity without disciplines and that most interdisciplines aspire to disciplinary status at least as far as staffing and funding go. It is also important to remember that departments are not the enemy, that there are departments and programs—classics, ethnic studies, women studies, etc.—that are inherently interdisciplinary. Our support for interdisciplinary work should be ecumenical, rewarding the wide variety of knowledge creation and institutional organization that can foster interdisciplinary study and education.

## **Appendix B. Task Force Members**

The GTIS advisory panel members include the following individuals:

Len Ackland, Director, Center for Environmental Journalism; Professor, School of Journalism and Mass Communication

Hilda Borko, Chair, Educational Psychology Program; Professor, School of Education

Steven Bruns, Chair, Department of Theory and Composition, Professor, College of Music

Jeff Cox, Director, Center for Humanities and The Arts; Professor, Department of English and Department of Comparative Literature and Humanities

Adrian Del Caro, GTIS Chair; Associate Vice Chancellor for Graduate Education; Associate Dean of The Graduate School; Professor, Department of Germanic and Slavic Languages and Literatures

Edward Greenberg, Director, Program in Political & Economic Change; Faculty Research Associate, Institute of Behavioral Science (IBS); Professor, Department of Political Science

Lori Hunter, Assistant Vice Chancellor, Office of Academic Affairs; Faculty Research Associate, Institute of Behavioral Science (IBS); Professor, Department of Sociology

Merrill Lessley, Associate Chair and Professor, Department of Theatre and Dance

Clayton Lewis, Chair and Professor, Department of Computer Science

Roop Mahajan, Director, Center for Advanced Manufacturing & Packaging of Microwave, Optical, and Digital Electronics (CAMPMODE); Director, MicroElectronic Devices in Cardiovascular Applications (MEDICA); Professor, Department of Mechanical Engineering

Diane McKnight, Fellow, Institute of Arctic and Alpine Research; Professor, Department of Civil, Environmental and Architecture Engineering

Jane Menken, Director, Institute of Behavioral Science (IBS); Distinguished Professor, Department of Sociology

Russell Monson, Chair and Professor, Department of Ecology and Evolutionary Biology; Fellow, Cooperative Institute for Research in Environmental Sciences (CIRES)

Linda Morris, Task Force Administrative Support, Office of the Associate Vice Chancellor for Graduate Education

Melissa Sampson, United Government of Graduate Students Representative; Ph.D., Candidate, Department of Aerospace Engineering

Robert Sievers, Director, Environmental Program; Professor, Department of Chemistry and Biochemistry

Philip Weiser, Executive Director, Silicon Flatirons Telecommunications Program; Professor, School of Law

James White, Director, Environmental Studies Program; Fellow, Institute of Arctic and Alpine Research (INSTAAR); Professor, Department of Geological Sciences

Richard Wobbekind, Director, Business Research Division; Associate Dean for External Relations; Professor, Leeds School of Business

Christine Yoshinaga-Itano, Associate Vice Chancellor, Office of Diversity and Equity; Professor, Department of Speech, Language, and Hearing Sciences