

# **Fostering CU's Global Prominence in Geosciences by Improving Department Support and Strengthening Department-Institute-Museum Relationships**

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## **Executive Summary**

CU-Boulder is a world leader in Geosciences. Our international reputation reflects the breadth and quality of Geoscience research and education at our campus. The unique partnerships among Geoscience-oriented Departments, Institutes, and the CU Museum of Natural History are integral to this strength. The rise in our national and international presence has been further augmented by significant recent University investments in faculty hires and analytical facilities across the Boulder campus. Despite this, we feel that this upward trajectory is continuously challenged by (1) a systemic shrinkage of University support for Department staff; (2) the need for improved communication and transparency between Institutes and Departments; and, (3) the complexity in the FTE rostering structure. We see opportunities both to enhance unified strategic planning efforts and to reduce real and perceived inequities in resources and opportunities available to Department faculty. This white paper aims to articulate these challenges and needs from the perspective of concerned faculty in the Department of Geological Sciences. We encourage:

- Better communication between Institutes, Departments and the Museum, as well as RIO and A&S, to enhance the potential for unified strategic planning and cooperative partnerships on common interests.
- Enhanced Department staff support, and resources to enable the Department to maintain its current high level of performance in research, education, and service activities.
- Increased equity in Department-Institute-Museum structure and resources, and campus-level conversations to discuss creative mechanisms for improving support and opportunities for all Department faculty regardless of Institute-affiliation, and
- Campus-level discussions about how to end the use of different scales for annual salary merit increases for faculty in the same Department and how to correct any inequities that may have arisen from their historical use, potentially by reconciling the two FTE rosters.

We feel strongly that it is only by better unifying CU Geoscience research and teaching that we can reach our full potential and firmly establish CU as the #1 place globally to conduct Earth science research.

## **1. Overview and Motivation**

The Department of Geological Sciences, together with the Institutes and the Museum of Natural History, house diverse Earth science faculty who constitute a core component of CU's interdisciplinary Geoscience research and teaching strength. The Department has been growing, and is seeing tremendous success at winning grants, attracting top-notch hires, and launching cutting-edge analytical facilities. In tandem, over the last 10 years, the size and quality of the graduate

student applicant pool has increased dramatically, and the undergraduate major population has nearly quadrupled. Together these factors have contributed to CU's growing global eminence in Geosciences.

However, the Department's strong positive trajectory is challenged on several fronts. First, and most importantly, Department expansion has been unmatched by the University support required to sustain the staff to oversee payroll, procurement, grant management, admissions, graduate student support and advising, and teaching. These areas are in sore need of support to sustain our success. Instead, we have found that resources for Department staff have actually been reduced, leading to critically-low front office support levels and low staff morale in the face of the mounting workload and increasing complexity in University protocols for such fundamentals as grant management, procurement administration, and personnel hiring.

Second, a number of real and perceived disparities in administrative support, opportunities, resource access, and salaries exist between Department faculty and staff unaffiliated with an Institute (referred to here as GEOL faculty, currently a Department minority), those affiliated with INSTAAR, CIRES, or LASP (referred to here as Institute faculty), and those affiliated with the Museum of Natural History (referred to here as Museum faculty). Additional complexity arises because a mix of faculty in these different groups are rostered in the Research and Innovation Office (RIO) and others in the College of Arts & Sciences (A&S). During the 2012 ARPAC evaluation, the External Review Committee highlighted that "clearly an asymmetric relationship exists between the Institutes and the Department", and identified "Institute Dominance", "Department/Institute Balance", and associated "Issues of Incentive and Equity" in their report as the core challenges facing the Department's future. They further stated that they "saw no evidence to explain why some faculty were [Institute] faculty and others were not." Some faculty see these inequities as a historical artifact from when Institute faculty were the main drivers of research and the non-Institute faculty of teaching. This asymmetry in roles is no longer true in the modern University and Department setting at CU-Boulder. Nevertheless, disproportionate support for the different groups remains. Specifically, the use of different salary structures for faculty in the same Department, combined with the discrepancies in resources, generates the sense that there are multiple classes of Department faculty who are valued differently by the University depending on where their FTEs reside and whether they have an Institute or Museum affiliation. However, in reality, Institute or Museum affiliation is a consequence of the conditions of a particular tenure-tenure track hire at time of appointment, and not of the precise interests or abilities of a faculty member.

If the Department is to maintain and further expand its world-class reputation in Geosciences, then it is imperative that University support for Department staff be increased to a functional level, and that we strengthen GEOL-Institute-Museum relationships by improving transparency, communication, salary and support equity, and strategic partnerships. We appeal to the Department, Institutes, Museum, A&S, RIO, and University to engage in this much-needed discussion to collectively identify and assist us with developing new ways of operating more effectively. It is our belief that such a frank discussion of Department-Institute-Museum relationships would be invaluable for the success of all partners and for Geosciences research and education at CU as a whole. Our advocacy for openly addressing the issues outlined herein is motivated by a sincere interest in preserving and potentially augmenting these partnerships in ways that are sustainable and equitable.

## **2. Challenges and Needs**

### **2.1. Strategic Planning, Institute-Department Coordination, and FTE Rostering**

***Challenges: Inadequate Institute-Department and RIO-A&S communication curtails the Department's ability to develop and implement a strategic growth plan for its educational and***

***research missions, and generates situations in which Department, Institute, Museum, RIO, and A&S interests do not appear to be aligned.*** Hiring in the Department occurs by a process initiated by the Department, by an Institute or the Museum, or through special hiring “opportunities”. Just over the last five years, the Department has made a set of outstanding hires that initiated from all of these directions. We welcome and fully support these new faculty members as important colleagues and friends. However, with ongoing requests for continuing Department growth, it is important to recognize that the resources available to support each faculty member (from junior through senior) diminish if there is no corresponding augmentation of resources. This reality should not be ignored, but rather ought to be an important part of all strategic planning conversations. For Institute hires, GEOL faculty have little early or decisive input to the choice of hiring area or with regards to the individual selected for the position. At times, there appears to be little consideration of the specific costs and benefits of Institute hires, mostly rostered in RIO, to the Department and A&S. Institutes are the main hiring body for Institute faculty and DA-ICR splits are typically strongly asymmetric (e.g., generally 87.5-12.5% or 75-25%, but also 50-50% for some); this can generate the sense that Institute and Department interests are neither well-aligned nor coordinated.

For example, the Department graduate student resources currently consist of 18 50% TAs provided by A&S, and 5 Department fellowships. Informal polling suggests that CU’s peer institutions, those with whom we are competing for top-tier graduate students, commonly guarantee 4-5 years of support in graduate student offer letters. This is rarely possible in the Department even with typical external grants in force that have timescales of 2-3 years. Although the Department has remained competitive for high-caliber graduate students in the face of these odds, as the graduate student support/faculty member ratio declines further with each new hire (our faculty numbered 30 in 2007, now are 35 and will soon be 39 if all pending hires are successful), this ratio becomes a matter of increasing concern, even alarm.

***Needs: Better transparency and communication between Institutes and Departments, as well as RIO and A&S, to enhance the potential for unified strategic planning and cooperative partnerships on common interests. With continued growth, new mechanisms should be adopted to maintain or increase the current graduate student, teaching, and administrative support resources for each Department faculty member.*** We advocate for the Institutes to share their goals and provide specificity regarding their desired growth directions, especially in areas that may affect the Department. This could occur through annual visits of the Institute heads to Department faculty meetings, so that all Department members know what activities on campus could impact Department hiring and growth directions. The Institutes should similarly be aware of Department strategic plans, perhaps through the Department chair providing a verbal update annually at an Institute fellows meeting. Improved communication would promote the ability to align and partner on shared interests, and allow us to better circumvent situations in which Institute hires may not be perceived as strongly benefitting the Department. One suggestion is for all future Institute hires to be initiated with full agreement by both the Department and Institute, with joint search committees consisting of Institute and GEOL faculty who would together write the description of the position, and have all candidates visit with the same intended Department tenure home. This would eliminate the “surprise” factor that accompanies some present hires. Transparency would be further enhanced by reconciling RIO and A&S FTEs to one place within the University.

We request that new mechanisms be implemented for RIO, A&S, and University contributions to graduate student fellowships, administrative, and teaching support resources if Department expansion continues. For example, if each proposed RIO hire came with a RIO contribution to such Department support (the vast majority of which comes from A&S), this would help alleviate concerns about dwindling support for each Department member with ongoing growth. We recognize that TA-resources are tied to student enrollment, and are specifically requesting that other sources of graduate student fellowship support be identified to assist our research mission if Department growth continues. The Department is actively fundraising to generate additional

fellowship support from alumni donations, and has 100% faculty participation in monthly contributions to these resources. Faculty also have excellent success at acquiring external research grant funds, which provide a robust resource. However, these sources appear insufficient to keep pace with Department needs.

## 2.2. Improving Department Resources and Support

***Challenges: University support for Department staff is insufficient, leading to low staff morale and inadequate support for faculty to perform their basic research and teaching responsibilities.*** Department staff serve all administrative needs of GEOL faculty, including grant management and administration, as well hiring of students, postdocs and PRAs. These staff additionally handle graduate student admissions and teaching-related issues for all Institute, Museum, and GEOL faculty. The IT and building proctor activities are provided for all inhabitants of the Benson building, in which all Institute- and Museum-affiliated faculty need at least shared office space for teaching-related activities.

Recent Department growth has increased the administrative support need. In parallel, over the last decade, the undergraduate major population has nearly quadrupled (from 87 to 340 majors, according to in-Department advisor records). While we celebrate these student numbers as a measure of the quality of teaching done in this Department, it also heightens the pressure for teaching support on all faculty. Simultaneously the University has cut GEOL front-office support staff by 12.5% (from 4 to 3.5 positions), cut building proctor support, and increased the complexity and opacity of grant management, administration, and other aspects of the University bureaucracy. The mounting burdens on the front office, the impossibility of completing all tasks needed by faculty in requisite time frames, and relatively low staff salaries and higher workloads compared to similar positions at the Institutes have generated poor front office morale and high staff turnover. This is an unsustainable state of affairs.

***Needs: Improve Department staff support and resources to enable the Department to maintain its high level of performance at research, education, and service activities.*** Such resources could come from A&S, RIO, or other University levels.

## 2.3. Inequities in Resources and Support across the Department

***Challenges: Opportunities, resource access, and administrative support for Department faculty differ depending on whether they are GEOL only or affiliated with the Museum or an Institute and if so which one. The complexity of these different relationships and current lack of transparency inhibits clear understanding of what inequities truly exist and what might be done to improve opportunities, resources, and support for all faculty.*** Institute faculty have superior administrative support compared to that available to other Department members. Access to Institute resources also provides better opportunities for fund-raising and research publicity, grant writing and grant management, and space. In some Institutes, Institute faculty also have access to postdoc and visiting scholar (sabbatical) programs, graduate student support resources, and outreach support that are not available to GEOL and Museum faculty. Institute faculty have double the advocacy on their behalf (from GEOL and their Institute) on issues at the campus level.

Museum faculty face additional challenges. They not only lack the resources of the Institutes, but have additional curation responsibilities (20% of their workload) that they feel are poorly understood by others in the Department. While all A&S faculty (including GEOL and some Institute) receive \$XQK accounts with ~\$1.5k of funds annually, most Museum and most Institute faculty are rostered in RIO and therefore do not have access to these A&S benefits.

***Needs: Increased equity in Department-Institute-Museum structure and resources, and campus-level conversations to discuss creative mechanisms for improving support and opportunities for all Department faculty.*** This would allow recognition of real inequities in resources, reveal if some inequities are perceived and not factually based, and may illuminate strategies that the Institutes employ to improve their support (e.g., INSTAAR faculty include extra overhead on grants for INSTAAR support staff). Do Institute resource streams function differently from Departments? Are there rules that prevent Departments from using the same approach as the Institutes? Are current Institute: Department DA-ICR splits appropriate (mostly 87.5-12.5%, but some 75-25% and 50-50%)? How can the resources for GEOL and Museum faculty be on par with those available to Institute faculty in the same Department?

#### 2.4. Use of Different Scales for Merit Raise Exercises across the Department

***Challenges: Current annual merit raise exercises use different scales for faculty in the same Department.*** When Department faculty salary inequities are evaluated, and when annual merit raise exercises occur, the assessment is restricted to faculty within the College or within RIO, and cross-comparison is apparently prohibited. This leads to the widespread faculty perception that salaries differ depending on rostering in RIO versus A&S, or affiliation with an Institute or the Museum. Whether salary disparities exist in reality is currently unclear, but the use of different structures with limited transparency across them generates a sense of inequity that is divisive for the Department.

In addition, the 2012 ARPAC External Review Committee report noted that “For one Institute, raise decisions were made prior to the receipt of the departmental evaluation each year. This is a clear statement to the relevant faculty that their contribution to the department is not valued in the determination of the annual raise.”

***Needs: Campus-level discussions about how to end or equalize the use of different scales for annual salary merit increases for faculty in the same Department and how to correct any inequities that may have arisen from their historical use.*** Reconciling FTEs into one place is a possible solution. We see benefits in clearly articulating the rationale for, and carefully considering the benefits and limitations of, the historical Department rostering structure in which some faculty are housed in RIO and others in A&S. This structure leads to the separate merit raise scales and limited transparency across roster homes.

### **3. Conclusions**

We cannot over-emphasize the high value we place on our faculty colleagues and collaborators, be they affiliated with an Institute, GEOL or the Museum. It is precisely because of our desire to continue building long and productive professional and personal relationships with all Department faculty members that we feel the concerns outlined in this document should be tackled head-on, in an open and frank discussion of ways forward. We believe that the collegiality, cooperativeness, intellectual power, and high-quality character of the individuals in this Department will allow us to hold the conversations needed to address and overcome these challenges. By discussing potential solutions in such a constructive way, we are confident that we will emerge the stronger for it. We request that those at the A&S, RIO, and campus levels work with us to address these issues, and operate with other units in Department-Institute relationships that face similar challenges. In our view, it is only by better unifying and supporting Geosciences faculty across the University – so that we are striving together toward common goals – that we can fully realize our outstanding potential as a long-term global leader in the Geosciences.