



OFFICE OF THE ACADEMIC SENATE  
ONE SHIELDS AVENUE  
DAVIS, CALIFORNIA 95616-8502  
TELEPHONE: (530) 752-2231

March 20, 2012

**ROBERT ANDERSON, CHAIR**

University of California  
Academic Council  
1111 Franklin Street, 12<sup>th</sup> Floor  
Oakland, CA 94607

**Re: Review of the UC Observatories**

The proposal was forwarded to all Davis Division of the Academic Senate standing committees and Faculty Executive Committees within the schools and colleges for comment. Responses were received from the Committee on Planning and Budget, Research and Academic Freedom and Responsibility. Additionally, the Department of Physics responded. It is important to mention that the Davis Division of the Academic Senate's consultation process is designed to assess "standing committee" perspectives on issues. Consultation with a select population, within the membership, is not routine nor is it simple, particularly on a tight deadline.

The Committees listed above were generally in favor of seven recommendations. The Committee on Research (COR) responded: "COR has no objection to continuing with the 80/20% split appointments for faculty appointed at the UC Observatories. In addition COR understands that the UC Observatories must undertake some budget reductions and hopes that there is appropriate faculty oversight during the process."

In summary, the Department of Physics generally agrees with recommendations one through four. The Department of Physics has strong concerns with recommendations 5-7. Specifically:

- The Department feels that the report does *not* fully take into account the blue-ribbon UCO external committee review and the system-wide strategic plan report laid out by the UC astronomy task force (UCATF).
- UCO has provided useful support and leadership for the Keck and TMT Observatories. However, the operating funds, management, and headquarters for Keck and TMT are completely separate from those of UCO, a structure that promotes steady funding for these two major system-wide astronomical facilities against the vicissitudes of California state funding.
- The UCORP letter (correctly in our view) raises concerns that UCO and KECK are wrongly conflated in the UCO report. However, the UCORP letter makes a similar error by conflating TMT with UCO. TMT and UCO are also separate entities. Because UCORP discussed both, Department Chair Albrecht's comments here about the UCORP letter include the TMT as well as UCO, but the astronomers in my department are unanimous in their recognition that conflating the two as the UCORP letter does is an error.
- There is widespread concern among UCD astronomers about UCORP's view that "it is unclear whether such success [recruitment of faculty and graduate students] will survive reduced baseline access to TMT". Almost all UCD astronomers very strongly disagree with this assessment, and feel that the proposed baseline access to TMT would provide UC with an invaluable competitive and scientific advantage. Furthermore, UCORP makes no attempt to reconcile their statement with the UC-ATF report showing TMT to be the number one priority for UC Astronomy.
- Regarding UCORP report recommendation 6, while we agree that UCPB and UCAP should initiate an analysis of the rationale for maintaining 80-20 funding split for faculty at UCO, we do not agree with the implication that all such positions should be ultimately eliminated. We believe that the UC system should

provide funding that is adequate to support that fraction of the faculty effort that directly contributes to this core activity, no matter where it is in the UC system.

- Regarding UCORP report recommendations 5 and 7, both the internal UCATF and external UCO reviews made specific recommendations on how UCO should adapt its investment and governance in order to achieve the system-wide priorities in the context of UC's fiscal realities. We believe that the UC Astronomy faculty are the most qualified to develop a plan to implement these recommendations in a financially responsible manner. We, therefore, recommend that a committee of UC astronomers from across the system be established to address these recommendations, as well as the concerns expressed in the UCORP report.

Finally, UC provides the UC Observatories with funding. Given the current state of UC funding overall, it is unclear why we would be asked to review a document that did not clearly reflect the fiscal impact of the recommendations on UC Observatories or UC in general.

Sincerely,

A handwritten signature in black ink that reads "Linda F. Bisson". The signature is written in a cursive style with a small flourish at the end.

Linda F. Bisson, Chair  
Davis Division of the Academic Senate  
Professor: Viticulture and Enology

Enclosure: Department of Physics Response



DEPARTMENT OF PHYSICS  
(530) 752-1500  
FAX: (530) 752-4717

ONE SHIELDS AVENUE  
DAVIS, CALIFORNIA 95616

March 11, 2012

Prof. Linda Bisson, Chair  
Davis Division of the Academic Senate

Dear Linda,

The faculty and research staff in the Department of Physics, in particular the Cosmology Group, utilize extensively and rely heavily on UC's shared research facilities in astronomy and astrophysics in order to perform their world-renowned research. As such, the department is grateful for the opportunity to comment on the University Committee on Research Policy (UCORP) letter, dated January 18, 2012, on the external review of UC Observatories (UCO). The UCORP report identifies some important issues with UCO and its communications with UCOP that need to be addressed. While we generally agree with recommendations 1-4, we have strong concerns with several aspects of the report. Specifically, we feel that the report does not fully take into account the blue-ribbon UCO external committee review and the system-wide strategic plan report laid out by the UC astronomy task force (UCATF). The UC-ATF conducted a thorough process, including extensive campus-level faculty meetings and town-hall meetings in Irvine and Oakland to allow in-person and remote participation, generation of a broadly disseminated web-based survey of the community, and an open solicitation for community input.

We stress that UC's large-scale shared facilities are a vital part of UC's research, teaching, and public outreach missions. UC's current facilities are unmatched by any other public institution and have attracted the top faculty, researchers, and students to all of the campuses. They have allowed UC astronomers to remain at the forefront of the field and to make some of the most highly recognized discoveries of the past decade, including that which resulted in the 2011 Nobel Prize in Physics.

The current Keck 10-m telescope and the future Thirty Meter Telescope (TMT), followed by instrumentation, were clearly identified as the system-wide priorities for UC astronomy and astrophysics. UCO has provided useful support and leadership for the Keck and TMT Observatories. However, the operating funds, management, and headquarters for Keck and TMT are completely separate from those of UCO, a structure that promotes steady funding for these two major system-wide astronomical facilities against the vicissitudes of California state funding.

The UCORP letter (correctly in our view) raises concerns that UCO and KECK are wrongly conflated in the UCO report. However, the UCORP letter makes a similar error by conflating TMT with UCO. TMT and UCO are also separate entities. Because UCORP discussed both,

my comments here about the UCORP letter include the TMT as well as UCO, but the astronomers in my department are unanimous in their recognition that conflating the two as the UCORP letter does is an error.

TMT is a partnership between UC, Caltech, Canada, Japan, China, and India, with UC holding significant scientific, technical, and political leadership positions across the project. It is just beginning its early construction phase after a 10-year design phase, thanks to a \$125M gift to UC from the Moore Foundation that is designated explicitly and exclusively for this purpose. One model to help fund the operation costs of TMT, as suggested by the UC-ATF and External Review, is to redirect 50% of the Keck operation costs from 2018 onwards to that of the TMT, so there is no net-cost increase for UC. This would still enable UC astronomers to fully participate in Keck, yet insures a small share in the TMT (point 4 in the External Review). There is widespread concern among UCD astronomers about UCORP's view that "it is unclear whether such success [recruitment of faculty and graduate students] will survive reduced baseline access to TMT". Almost all UCD astronomers very strongly disagree with this assessment, and feel that the proposed baseline access to TMT would provide UC with an invaluable competitive and scientific advantage. Furthermore, UCORP makes no attempt to reconcile their statement with the UC-ATF report showing TMT to be the number one priority for UC Astronomy.

Regarding UCORP report recommendation 6, while we agree that UCPB and UCAP should initiate an analysis of the rationale for maintaining 80-20 funding split for faculty at UCO, we do not agree with the implication that all such positions should be ultimately eliminated. Rather, as recommended in the UC-ATF report, support for development and construction of instrumentation is at the core of our ability to open new frontiers in astronomy and astrophysics with UC-wide shared facilities. Astronomy has evolved rapidly in the past decades, with significant efforts distributed across the UC campuses. UC should focus system-wide funding on labs capable of building next generation adaptive optics and IR instrumentation and associated software and data analysis capability. We believe that the UC system should provide funding that is adequate to support that fraction of the faculty effort that directly contributes to this core activity, no matter where it is in the UC system.

Regarding UCORP report recommendations 5 and 7, both the internal UCATF and external UCO reviews made specific recommendations on how UCO should adapt its investment and governance in order to achieve the system-wide priorities in the context of UC's fiscal realities. We believe that the UC Astronomy faculty are the most qualified to develop a plan to implement these recommendations in a financially responsible manner. We, therefore, recommend that a committee of UC astronomers from across the system be established to address these recommendations, as well as the concerns expressed in the UCORP report.

Sincerely,



Andreas Albrecht  
Professor of Physics & Department Chair