

Minutes of the UCOAC meeting
UC Irvine, 25 February 2013

Attending: Sandra Faber (Interim UCO Director, UCSC), Aaron Barth (UCI, Chair), Rebecca Bernstein (UCSC), John Wareham (Lick Obs.), Andrea Ghez (UCLA), Ian McLean (UCLA), Chris Fassnacht (UCD), Tommaso Treu (UCSB), Ben Mazin (UCSB), Alison Coil (UCSD), Alex Filippenko (UCB), Graeme Smith (UCSC), Connie Rockosi (UCSC), David Cowley (UCSC), Xavier Prochaska (UCSC), Mike Rich (UCLA), Virginia Trimble (UCI), Michael Cooper (UCI), James Bullock (UCI), Tammy Smecker-Hane (UCI). Attending via Skype: Brian Siana (UCR), James Graham (UCB), Maureen McLean (UCSC), Garth Illingworth (UCSC), Mike Bolte (UCSC), Don Gavel (UCSC).

News and Updates.

Report on Jan. 30 UCO Board meeting: Faber gave a brief summary of topics discussed at the UCO Board meeting including recommendations that she made to the Board during that meeting. The main session of the Board meeting was very constructive with good discussion. It is not yet known which of the recommendations will be endorsed by the Board. The recommended staffing plan for UCO faculty was not supported by the Board, who viewed the plan as being too flat with too many Associate Directors. An important question remaining to be resolved is how many of the faculty roles should be centralized at UCSC and how many should be distributed across the system. The Director expressed her concern that during the executive session of the Board meeting, Board members apparently brought up objections or disagreements with some of her recommendations, but those issues were not raised while she and other UCO faculty were present during the open session.

For the upcoming March 8 board meeting, the main topics will be the Lick spartan operating model, the parameters for the upcoming director search, the schedule for debt repayments, and the faculty roles and staffing plan.

Director search plans. The board has requested that Interim Director Faber present a job description and appointment process, at the March 8 meeting. The stakeholders include the UCOAC and systemwide astronomy community, the UCO Board, and the UCSC astronomy faculty and UCSC administration.

Currently, there is different and incompatible information about UCO's governance as an MRU in the AP manual and in the current version of the Compendium. The AP manual states that the UCO director is appointed by the UCSC Chancellor. The Compendium draft has a description of MRU governance which states that MRU directors are appointed by the UC President or the President's delegate. The description of MRUs in the Compendium is appropriate for short-timescale or temporary opportunities, but not appropriate for a very long-term investment in facilities such as UCO. UCOAC members and the Director expressed the general view that UCO should fall under some other (new) category rather than being in the same category with term-limited, temporarily funded MRUs. This will be a topic for discussion with UCORP.

Action item: UCOAC members should speak with UCORP members and VCRs about the MRU structure for UCO and the importance of having a separate category for long-term investments rather than short-timescale opportunities.

Regarding the Director position itself, the proposal to the Board will be to model the directorship after an administrative position, being a 12-month appointment with no teaching obligations, with a 5 year term and possibility of reappointment. After leaving the directorship, this would transition to a regular faculty FTE appointment but without that appointment counting against the department's normal FTE allocation. In principle a former director could choose to take up that appointment at any UC campus, with approval of that campus's administration.

The composition of the search committee was discussed. There was general agreement that all campuses and labs having astronomy faculty and researchers should be represented on the search committee. Search committee members need not all be astronomers, and there should be some administrator members of the committee. Faber proposed having a minimum of 7 astronomers on the search committee. UCOAC itself is not the search committee but UCOAC members wanted the UCOAC to have a role in the process. One proposed idea was for the search committee to present their top 3 candidates to UCOAC for review and comment, at the same time that those candidates are presented to UCOP and the Board. The roles of the UCSC faculty and chancellor in the appointment process also remain uncertain.

Interim director search: A strong interim director is needed, and even if the new director search begins in summer 2013 the new appointment could take a year to conclude, so an interim director could be needed for a full year. UCOAC members expressed a view that, while an interim director could come from any campus and take up a short term role located at UCSC, it would be best for UCO to maintain leadership at UCSC by having a current UCSC faculty member as the next interim director. It will be important to fill this role soon since Interim Director Faber intends to retire on Jun 30.

Action item: UCOAC members should poll their constituents to come up with suggested names for an interim director.

Keck 20th anniversary gala plans. The Keck Week gala is March 13-19. Several UCOAC members and other UC faculty will be in attendance. Action items for attendees were to try to set up meetings with foundation leaders during the event (Faber, Ghez, Bolte), and to prepare brief descriptions of instrumentation projects that are fund-raising priorities to distribute to UC faculty attendees (Prochaska).

UCORP Meeting. UCORP will be discussing UCO on April 8, with Faber in attendance. UCORP chair Kleeman wants information on the UCO strategic plan and budget, with comparisons to other research units within and outside of UC. An important topic for discussion with UCORP will be the usage of teaching relief as a way to free up faculty time for administrative and instrumentation roles in UCO. [Note: This UCORP meeting was subsequently postponed until May 13.]

Action item: UCOAC members should meet with their new UCORP representatives (if this has

already not happened) before the May 13 meeting, to give them background information on UCO and systemwide astronomy research, and the benefits to their campus of systemwide-funded astronomy facilities.

PRG reports. The reports to the Portfolio Review Group are 2 weeks late and will be submitted on Feb. 27. Faber distributed near-final versions of the two reports to UCOAC members for review and comment.

Future UCOAC meetings: Faber suggested having a regular annual schedule of UCOAC meetings with topics to be discussed annually. For example, soliciting proposals for new instrumentation could be scheduled as an annual call and discussed at UCOAC on a predictable schedule. UCOAC members expressed support for this idea. For the next meeting, an early/mid May date was preferred.

Keck and TMT News.

MOSFIRE update: Ian McLean described an issue with the electronics of the MOSFIRE configurable slit unit. The electronics have not operated correctly in the low temperatures at Mauna Kea. For now, the temporary fix is to heat the electronics enclosure. So far this hasn't impacted seeing. The slit unit sometimes has a fatal error while configuring the slits, which requires a 30-minute reinitializing process. Solutions are being investigated. At present, UCLA has no remaining funding that can be used for MOSFIRE support.

Strategic Planning: James Graham gave a brief update on the Strategic Planning Committee's work so far. The SPC has recently had briefings on the UCLA IR Lab (Ian McLean), and on future needs for infrastructure and staffing in the UCSC shops (Rebecca Bernstein).

Summary of the February Keck SSC meeting (Prochaska): Key items from the SSC meeting were discussed; the public SSC meeting notes will contain full details. New UC SSC members include Crystal Martin (co-chair), Andrea Ghez, and Rebecca Bernstein. Major topics included the segment repair plan, future instrumentation proposals to NSF, KCWI status, and a plan for bi-annual SSC solicitation of instrumentation white papers with the possibility of seed funding for new projects.

Keck archiving policy: The Keck Observatory Archive wants to make proposal titles and abstracts public when data goes public. This already happens for NOAO and NASA proposals and KOA wants to do it for UC and Caltech proposals. The result would be that UC Keck proposal titles and abstracts would be indexed in ADS and come up in ADS searches. UCOAC members discussed positive and negative consequences of this ADS indexing.

Action item: UCOAC members should discuss the ADS indexing issue with their constituencies, in preparation for a discussion and vote at the next UCOAC meeting.

Comet ISON is coming in fall 2013, and NASA is interested in the possibility of coordinating Keck observations among partners. They view a NIRSPEC campaign as a high priority and are pushing for a NIRSPEC detector upgrade on a very short timescale. Ian McLean emphasized

that the guiding principle should be “do no harm” since NIRSPEC could observe the comet without an upgrade, but a rushed upgrade is risky.

Action items: Faber will contact UC solar system researchers to assess the level of interest in coordinated Keck and/or Lick programs for comet ISON. More information is needed about the NIRSPEC detector upgrade plans. Lick Observatory will plan special outreach events for comet viewing.

TMT: A new design idea by Jerry Nelson for the tertiary mirror will lead to very significant savings, which will have major benefits for funding the first light instruments. The MOSFIRE clone still needs PI leadership.

There is a strong interest in developing science working groups, under the umbrella of the TMT SAC. High impact science with TMT will require pooling resources and large collaborations, and UC can play a major leadership role. The LSST science collaborations are a good model. The upcoming TMT Science Forum meeting in Waikoloa (July 22-23, 2013) will be a good opportunity to begin forming science working groups. The meeting website is:

<http://conference.ipac.caltech.edu/tmtsf>

Budget Discussion.

UCO technical groups and budget discussion (Rockosi, Faber): UCOAC was presented with a budget and staffing breakdown of the projects in the UCO shops at UCSC, research scientist roles and funding, and staffing at Mt. Hamilton. A major review of the UCO business office is anticipated for April/May. For FY14, anticipated new projects include the KCWI camera and the DEIMOS upgrade. An NSF proposal is pending to fund K1DM3. UCO has allocated 0.5 FTE for a 6-month TMT software project on motor controllers, with the goal of bringing more TMT software effort to UCO in the future.

Shane AO, funded by a \$2M NSF MRI grant, is planned for installation at the 3-m in summer 2013. The laser upgrade was delivered in 2012 from LLNL and is currently in lab testing, with planned delivery to Mt. Hamilton in the first half of 2014. Other work includes development of new optics for the wavefront sensor that will work at wavelengths down to the I band, and wind-predictive control. These are seen as precursor technologies for Keck NGAO. This is a good time to begin planning for large projects with Shane AO that can have a substantial impact and visibility once the system is ready for general use.

Mt. Hamilton updates (Prochaska, Wareham): Lick staff member Greg Sulger was killed in a car accident in December 2012 on Mt. Hamilton. This was a tragic loss for the Lick community, and a garden area by the main building will be dedicated to Greg.

A Hamamatsu CCD is in hand for the Kast red side upgrade and would dramatically improve QE and reduce fringing for Kast red side observations. Funding is being sought for this project and the UCSC shops would be ready to start working on the upgrade now if funding is found.

Three low-demand instruments were or will soon be retired: PFCam (2013A), Gemini (2013B), and the Nickel spectrometer (2012). An MOU with W. Harris (UCD) for operating the CAT telescope is expected to be finalized soon. The next 3-m mirror realuminization could happen in 2015, but it might be preferable to do this sooner. With upcoming staff retirements, it will also be essential to ensure that important skills for realuminization, optics inspection and cleaning, etc., are retained and taught to new staff members.

The summer visitor lecture and concert program was expanded in 2013 for additional nights. An E/PO LOTI grant proposal was not successful this year but will be attempted again.

Mt. Hamilton spartan operational model (Prochaska, Wareham): Basic assumptions are that UCO will bear no costs for APF operations, that UCSC will continue to provide maintenance funding at current levels, that Shane AO operations will be cost-neutral, that CAT operations will be fully funded by fee-for-usage, and that UCO faculty and research scientist effort toward Lick will not be charged to Operations. It is anticipated that there will be a 1-month winter closure in 2013B. Other aspects of the spartan model were discussed including tele-ops support, funding of support astronomers, UCO shop support and SPG support, and changes to the Deputy Director funding. PIs are likely to be charged for support astronomer time for training of new observers. Unresolved is whether PIs will be charged per-night fees for 3-m nights. The Director favors this model but some UCOAC members voiced concerns, particularly that NSF might be unwilling to fund contributions to operations costs for a UC-run observatory, and that general demand for 3-m nights from students and postdocs would likely suffer if fees were charged.

Graeme Smith noted that the Lick 3-m PI community is almost as large as the UC Keck PI list in terms of numbers, and includes numerous students and postdocs. Mt. Hamilton is part of UC's telescope ecosystem and fills a different role than Keck. If the 3-m were not available, this would increase time pressure on Keck since Lick serves a different constituency.

UCO budget impacts in FY14: Director Faber noted negative budget impacts for the next fiscal year. These include the loss of faculty retirement savings which previously would have been kept, the mandated 3% salary increases for some staff members, startup funds needed for a new director, and the transitioning of some faculty administrative support costs to the UCSC campus. These are estimated to total \$1.8M.

Needed new expenditures for FY14 include planning and design for a new instrumentation facility at UCSC, a desired new faculty position for an AO scientist, an augmentation in the UCLA IR lab support, distributed compensation for systemwide faculty roles, major new project management and accounting software, and spare equipment for APF. These items are estimated to total \$1.3M.

Future UCO projects: Faber presented a list of possible projects that the UCO shops at UCSC could take on if staff time were freed up from other responsibilities. UCOAC members agreed that the top priority should be the DEIMOS upgrade. The Kast spectrograph red side upgrade was also viewed favorably but as a lower priority than DEIMOS, and one that would only be done if a donor can be found to fund the upgrade.

Faculty Roles in UCO.

Desired new faculty positions at UCSC: UCOAC members expressed strong interest in UCSC hiring an AO scientist to lead future UC AO efforts. An AO scientist could be hired at another campus, but there are benefits to concentrating AO expertise at UCSC which already hosts the CfAO. However, if UCO faculty retirement savings is not retained, then no UCOP funding will be available for this. Faber is proposing the new hire to the UCSC administration.

Faculty roles and questionnaire: Faber summarized the responses to the faculty roles questionnaire sent out during the previous week. So far there were only 9 responses from systemwide faculty, so there is very little data yet. UCOAC members discussed whether some of these roles should be considered normal faculty service without compensation, and which roles were so critical and time-consuming that they would require teaching relief or summer salary support. Additional questions raised: would sufficient funding be available to support research scientists in these roles, since buying out an equivalent amount of research scientist time during the academic year might be more expensive than providing teaching relief to teaching faculty? Should teaching relief be available for people who take on a large number of individually smaller roles such as committee service, if the integrated time commitment is as large or larger than some of the high-level roles? UCOAC did not reach conclusions on which of these roles should be located at UCO headquarters and which might be more amenable to distribution around the UC system. Faber expressed a view that the critical mass needed at UCO headquarters is 11 faculty members if Mt. Hamilton is included, or 8 faculty without Mt. Hamilton (including the Director). Faber's proposal is for the default structure of UCO faculty positions to be 9-month campus appointments, supplemented by 2 quarters of teaching relief and one month of summer salary. The supplemental support would be allocated in 5-year terms with the expectation of renewal pending a positive review.

Faber raised the question of whether UCO should have a deputy director as a non-faculty position within UCO. The benefit would be that much internal UCO business could be delegated to a deputy director, freeing up more of the director's time to concentrate on Keck and TMT partnerships and other high-level issues. This model works well at Palomar. UCOAC members expressed strong general support for this idea.

E/PO and Development: Faber proposed development as a faculty role that would require a major effort and require compensation (teaching relief and/or summer salary). Some UCOAC members argued that a better model would be to hire a professional UCO development officer to focus on systemwide UCO fund-raising, while faculty leadership and support could be contributed as needed to this effort without requiring faculty compensation. Faber asked whether UCO should invest in faculty support to lead E/PO programs. Opinion was somewhat divided among UCOAC members about whether UCO should invest in E/PO given the currently strained budget. There were suggestions that it could be preferable to hire professional E/PO staff, who could work full-time on E/PO with collaboration and supervision by faculty. A possible plan would be to hire two staff members to handle E/PO, communications, and development.

For any UCO faculty roles at any campus, an essential requirement will be to set annual goals and have performance evaluations (by the Director and by UCOAC) to compare performance results with expectations.

UCOAC recommendations to the UCO Board: A few key statements were agreed upon for UCOAC to take to the upcoming UCO board meeting: Strong leadership of UCO is needed, with permanence and continuity at UCSC, in order to lead our partnerships with Keck and TMT. An AO faculty hire should be viewed as a high priority. If UCO faculty roles are distributed around the system, a system must be in place for defining expectations and for evaluation of performance. Having adequate financial support in the UCO budget to support some number of faculty roles is important, but the exact number and description of the most critical roles is not yet defined (and requires SPC input). Hiring a non-faculty deputy director for UCO should be considered.

Other items.

APF policy issues. Because the UCOAC meeting was running late, the discussion of APF policy and time allocation issues and other Mt. Hamilton topics will be postponed for a future meeting.

These minutes were prepared by UCOAC chair Aaron Barth with additional input from Interim director Sandra Faber.