

Minutes of the UCOAC meeting  
UCLA, 2013 Nov 6

Attending in person: Faber (UCSC; Interim Director), Barth (UCI; chair), McLean (UCLA), Siana (UCR), Shapley (UCLA), Rockosi (UCSC), Prochaska (UCSC), Fassnacht (UCD), Mazin (UCSB), Rich (UCLA). Attending remotely: Bolte (UCSC), Martin (UCSB), Smith (UCSC), Treu (UCSB), Graham (UCB), Max (UCSC). Also in attendance: Fitzgerald (UCLA), Rich (UCLA), Malkan (UCLA).

**Director's report and introduction** (Faber). Interim Director Faber began with an overview of recent UCO related news and updates, summarized below.

- ▲ Staffing and administration:
  - Graeme Smith will be the new Associate Director for Lick Observatory beginning in January 2014, replacing Xavier Prochaska.
  - Aimee Dorr will be replacing Nathan Brostrom on the CARA Board, starting in November 2013.
  - David Koo has been reorganizing the network, information, and computer services group at UCO to implement a new financing scheme and business model.
  - Assistant Director for Administrative and Business Services Maureen McLean left UCO in August, and a new Assistant Director, Anna Korossy, is arriving in November. Other staff departures include a senior financial analyst and HR manager. Some replacement positions have been advertised.
  - A UCO Project Council has been formed to monitor and plan UCO technical work. This group includes all PIs using UCO lab facilities, and meets bi-weekly.
- ▲ Funding proposals:
  - An MSIP Letter of Intent was submitted to NSF to fund Keck NGAO development in September, led by Peter Wizinowich of Keck. UC Co-Is include Ghez and Max.
  - The K1DM3 proposal was approved by NSF (PI Prochaska).
  - The OSIRIS detector upgrade proposal was approved (PI Larkin).
  - Other recently submitted major proposals include an OSIRIS imaging camera upgrade (Ghez, Fitzgerald), protected silver coatings (Phillips), the Kast red-side upgrade (Holden), and the NIRSPEC detector upgrade (Fitzgerald).
- ▲ Lick infrastructure and E/PO programs:
  - The movable floor of the 36" dome requires major repairs and must be placed in a stationary position and buttressed for safety. This precludes 36" telescope viewing until the repair happens, but daytime tours can continue. Funding must be sought to carry out the repair. (Later revision: nighttime viewing can continue with restricted FOV on sky.)
  - The Friends of Lick board has expanded with two new members. It has been renamed the Lick Council.
- ▲ UCO budget and management issues:
  - A September memo from UCOP sets out the guidelines for the UCO budget for the next 6 years. The memo states that the UCO faculty will be permanently separated from UCO funding, and that future UCO budget requests will be zero-based budgets

- capped at a maximum of \$5M per year. Funding for Lick Observatory is to be provided for at most three years.
- In an October memo, the UCO Board made several recommendations including that UCOP should immediately initiate an international search for a UCO Director, and that the UCO debt should be forgiven.
  - David Kliger (former EVC of UCSC) has been assisting by negotiating on UCO's behalf in discussions with UCOP.
  - UC President Napolitano visited UCSC on Oct. 17 and attended a presentation on AO, Keck, and TMT given by Bolte and Max.
- ▲ Faber presented a list of current and ongoing projects in the UCO shops and their funding sources, and discussed the implications of the new UCO budget scenario for future projects and staffing.

**Keck SSC report and discussion** (Martin). Crystal Martin presented a summary from recent Keck SSC discussions and an overview of current instrumentation proposals and projects, and the status of instrument funding in the post-TSIP era. The full NGAO proposal will be due in March 2014. The expensive segment repair work is further reducing the amount of free energy available to support future instrumentation plans. The UCOAC strongly supported the idea that Keck should provide a modest amount of annual seed funding for development of new instrument concepts. The UCOAC discussed various models for development and maintenance of instrument software pipelines, and members broadly agreed that pipeline software development and maintenance should be a higher priority for the Observatory, with clear roles and responsibilities and an appropriate level of financial support, rather than relying on the goodwill of the observer community to create and maintain pipelines.

**K1DM3 status** (Prochaska). The MRI proposal to build the Keck 1 deployable tertiary was approved with funding of \$1.4M. PI Prochaska described the status and timeline of the project, anticipated to be a 3-year project to be completed in 2016. Retirements and loss of experienced technical staff at UCO are a concern.

**TMT SAC discussion** (Treu). There will be a new call for participation in the instrument science definition teams (ISDTs) going out to the partner countries/institutions, with applications due after the January 2014 AAS meeting. Broad representation is desired from the US community. The ISDTs are expected to submit revised chapters to the Detailed Science Case in May 2014, with annual updates thereafter. Another task will be to consider ideas for TMT Key Projects, in order to decide whether and how to do Key Projects and to inform time allocation policies. The next TMT Science Forum is expected to be held in summer 2014 at a location TBD.

**MOBIE handoff review** (Faber): The TMT project held a handoff review following the departure from UCSC of MOBIE PI Bernstein and project manager Bigelow. The instrument design and the quality of the plans and documentation were highly praised by the review panel. A search committee was formed to identify a new project manager and PI, including members from UC, Caltech, and Canada.

**Other TMT news** (Bolte): Mike Bolte gave an update on TMT Board and partnership issues, funding, and plans for the start of construction. Road grading and core drilling have begun at the

TMT site.

**Lick Observatory news** (Prochaska).

- ⤴ Deputy Director John Wareham departed in mid-2013, and Kostas Chloros has been named superintendent in charge of facilities.
- ⤴ As a result of recent retirements, the 3-m telescope cannot operate full time, and there will be monthly shutdowns of several nights until new staff can be hired and trained. A new teleops staff member was recently hired and it is anticipated that full-time operations can resume by April 2014.
- ⤴ The APF has begun taking data regularly and the spectrometer is functioning well with excellent radial velocity stability (see below for further details).
- ⤴ The Fall 2013 graduate training workshop was held with a full complement of 20 participants, and was supported financially by a generous donation from Virginia Trimble (UCI).
- ⤴ First light for ShaneAO is expected for November 2013 and it is anticipated that a science working group will be convened.
- ⤴ Sales of telescope time are being pursued. A new corporate partner will be buying 10 nights of 3-m time in 2014, and a foreign consortium is considering buying Nickel nights for remote observing. Pursuing additional time sales is currently being impeded by the shortage of business office staff to handle the complex legal and contractual arrangements.

**APF news** (Faber). The APF is now taking data regularly but still requires significant effort to operate, and it is not running in fully robotic mode. The spectrograph is working well, delivering 0.5 m/s radial velocity accuracy and has high throughput. Brad Holden is serving as project manager and working 50% time on APF. A shared-risk observing call is anticipated for January 2014 for the 20% UC share. Geoff Marcy is providing the vast majority of the APF operating funds, and UCO is providing the manpower. Thank you, Geoff!

**Budget discussion** (Faber). Interim Director Faber presented documents that outlined possible future budget scenarios for UCO. Due to the sensitive nature of this discussion, only a very brief and partial summary is given here. Topics discussed included:

- ⤴ How to hire and retain instrumentalists at UC campuses. Strategic systemwide thinking is needed, not just individual campuses acting in isolation. How will UCSC, and UC as a whole, be able to cope with the huge loss of experience and talent with recent and impending departures and retirements?
- ⤴ How to deal with the new budget cap proposed by UCOP. Budget projections for a minimal "bare-bones" UCO (including Keck instrumentation development but excluding TMT) will exceed the UCOP budget cap within the next two years. The current UCO lab workforce can't get much smaller than it currently is if it is to retain the ability to build Keck instruments. What must be sacrificed if UCO is constrained to a bare-bones budget?
- ⤴ How will UC retain our TMT share in the long term, if a permanent flat budget cap makes it progressively more difficult to develop instruments? A budget above the "bare-bones" level is needed in order to attract and retain world-class instrumentation and technology developers and to leverage external funding for TMT instrumentation.
- ⤴ What is the minimum size at which UCO can still remain viable? Inflation adjustments

are critically important to maintain UCO's capabilities, but are forbidden by the UCOP plan.

**Director search plans.** The UCOAC discussed the urgency of proceeding with a director search, and other issues including startup funding, the appointment process, and how to encourage applications from the best qualified candidates. The UCO Board has recommended that a search should begin as soon as possible, but it has not yet been initiated by UCOP.

**Lick Transition Study.** UCOP is convening a committee to prepare a transition study for Lick Observatory, in order to manage the transition to becoming self-supporting (without systemwide UCO funding) within the next few years. Participation by astronomers is possible and UCOAC members discussed various options for contributing to the study. UCOAC members discussed whether it will be feasible for Lick to continue operating as a scientific facility without any systemwide UC funding, and expressed some doubts about the feasibility of the UCOP mandate for Lick to continue operating as both an outreach and scientific facility if UC systemwide funding is cut off completely. One important issue is whether Lick should apply for historic landmark status, which has not been pursued in the past.

**Other discussions.** Faber informed the UCOAC that she would be speaking with a reporter from Science magazine who was preparing an article on funding issues at Lick Observatory, and the UCOAC discussed different possible approaches to pursue public discussion of the Lick funding situation.

These minutes were prepared by UCOAC chair Aaron Barth.