



Director of the University of California Observatories

The University of California Observatories (<u>UCO</u>) is a <u>Multicampus Research Unit</u> of the University of California System. The UCO coordinates and supports researchers' access to the suite of world-class observing and research facilities, which currently include the <u>Lick Observatory</u> on Mt. Hamilton, managed exclusively by UCO and owned by the UC Board of Regents, and the <u>W. M. Keck Observatory</u> on Maunakea, managed by UC and the California Institute of Technology (Caltech). On the horizon is the <u>Thirty Meter Telescope</u> (TMT) Observatory, which is being developed by a consortium that includes UC, Caltech, and several international partners. UC Observatories is headquartered at UC Santa Cruz, a member of the prestigious <u>Association of American Universities</u>. Core instrumentation laboratories are located at UC Santa Cruz and at UCLA. Nine UC campuses participate in the UCO, as do the three UC-affiliated DOE National Laboratories, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory.

The Lick Observatory was the first permanently occupied mountain-top observatory in the world, and it was placed under the auspices of the Regents of the University of California in 1888. Several decades later, the UCO was organized as a formal Multicampus Research Unit (MRU) to facilitate academic excellence in astronomy across UC and with the most sophisticated telescopes. The UCO has led extraordinary developments in ground-based telescope technologies and systems, including adaptive optics and infrared imaging devices, which are integrated into the observatory facilities. These state-of-the-art telescope systems enable important discoveries of the cosmos, as evidenced by the 2020 Nobel Prize in Physics awarded to UCLA researcher Andrea Ghez and former UC Berkeley researcher Reinhard Genzel for their observational work on black holes.

On the heels of this success, the next decade promises to be a transformational one for UC astronomy, as planning for the Thirty Meter Telescope advances and groundbreaking adaptive optics technologies are implemented at Keck. UC is poised to play a key role in the instrumentation and technologies for both of these cutting-edge facilities, as well as advanced technology instrumentation for both Keck and Lick. During this time, UCO's leadership and engagement will be critical to strong UC participation in key projects and facilities, for UCO draws on core skills and knowledge from throughout the UC system to seed and incubate new ideas, to set scientific priorities, to plan and build new instruments and technologies, and to seek out private and federal funding for major projects.

To this end, the University of California seeks a Director for UCO with a compelling vision and commitment to lead the organization in this transformative period.



The Director position

The next UCO Director will play a major role in shaping the future of the University's investment in ground-based optical-infrared observatories and maintaining its global leadership in optical-infrared astronomy. Leading UCO, the Director will facilitate and advance groundbreaking work in astronomy and astrophysics.

The advocacy and governance responsibilities of the Director are complex. The Director will engage with stakeholders at each of the participating UC campuses and UC national laboratories to ensure that UC Observatories' facilities, services, and programs best reflect the community's evolving needs and priorities. The Director may create and engage systemwide committees such as the UC Observatories Advisory Committee in order to provide advice on the strategic direction of UCO and on the strategic focus of UC's support for optical-infrared astronomy. In addition, the Director will grow and nurture domestic and international partnerships and will serve as the UC point-person in strategic discussions on the future of astronomy research internationally.

The UCO Director is appointed by the UC President or by designee in consultation with the President. The Director reports to the Vice President for Research and Innovation (VPRI) in the University of California Office of the President (UCOP), who has overall responsibility for research across the UC System. The UCO Director is a <u>Faculty Administrator position</u> at the University of California. As such, the UCO Director shall hold a concurrent tenured faculty appointment at one of the UC campuses.

Core areas of leadership

UCO enables excellence in astronomy throughout the UC system by designing and building leading-edge astronomical instrumentation and developing advanced technologies for ground-based telescopes. As the leader of the UCO organization and the steward of its mission, the Director provides leadership in a number of core areas:

- The Director works with all participating UC campuses and national laboratories to sustain excellence in technical expertise for astronomical instrumentation, developing innovative programs that attract external funding and utilizing expertise throughout UC and the world to design and build next generation optical-infrared instruments and technologies for UC's telescopes.
- The Director provides leadership and scientific direction to UC's astronomy partnerships, drawing
 on expertise from UC astronomy faculty and researchers throughout UC to build effective working
 relations with UC's partners at all levels (technical, scientific, and managerial).
- The Director plays a leading role in the ongoing effort to build the Thirty Meter Telescope, contributing to the work of the international partnership that is responsible for it, adding to the development of its operating plan, and joining the effort to ensure that its cultural and environmental impacts are sustainable.
- The Director is responsible for increasing support for the Lick Observatory, including through new
 partnerships as needed, to ensure that this storied facility remains a training ground for nextgeneration astronomers, an educational resource for all, and a celebrated part of the Santa
 Cruz/San Jose area.
- The Director develops a comprehensive fundraising strategy to secure external funding that supplements core funding from the Office of the President to support each of the UC facilities and



to attract support for UC intellectually-driven instrumentation projects and programs. The Director works closely with the VPRI, UC campuses, partners and stakeholders to pursue and lead efforts to raise such funds.

• The Director oversees the management of all UCO programs and activities, including the allocation of observing time and resources for technical and scientific core capabilities. The Director is responsible for several facilities at UC Santa Cruz, including the UCO administrative offices and instrumentation laboratories, and is responsible for putting in place the appropriate management and structures (with delegations-of-authority to the deputy director, associate directors and managers) to effectively run and oversee these facilities.

Specific responsibilities

- Engage the UC astronomy and astrophysics community in the development of short- and longrange plans for UCO's facilities and programs, including the maintenance of existing capabilities, prospects, and plans for instrumentation and upgrades to specific facilities, opportunities to extend and enhance UC's observing portfolio, and development of funding models that take advantage of external funding to support these activities.
- Engage at the national and international levels to develop scientific priorities and policies for the Observatory enterprise.
- Develop the annual budget for review and approval by the UC Office of the President and maintain robust fiscal oversight to ensure the financial health of all aspects of the Observatories as a worldclass Multicampus Research Unit.
- Serve on the Board of Directors for the California Association for Research in Astronomy (CARA) that manages the W.M. Keck Observatory, and on the Board of Directors for the TMT International Observatory LLC, which is developing and will operate he Thirty Meter Telescope.
- Direct operations of UCO within its budget so as to maximize the productivity and scientific impact of Observatory facilities and infrastructure for the benefit of the entire UC system.
- Conceive and develop and incorporate new capabilities for instrumentation, helping to strengthen UC campuses that develop expertise in building optical-infrared instruments and techniques.
- Engage the UC astronomy and astrophysics community to ensure that UCO core labs, new and developing lab facilities, services, and programs best reflect the community's evolving needs and priorities.
- Establish new, and operate and grow, existing public outreach and education programs based on best practices, with a focus on building relationships with the broader scientific community and key stakeholders.
- Recruit, support, and evaluate appropriate technical and administrative staff at UCO offices, at the instrumentation labs, and at Lick Observatory.
- Assist in recruitments throughout the UC system of individuals who will support work at and for the observatories.
- Oversee the distribution of telescope time and program resources in a manner that involves all stakeholders and balances the principle of access for all with a strongly merit-based peer-review system.
- Actively pursue public and private fundraising, working closely with campus development offices



and partners at Caltech, the W. M. Keck Observatory, and the Thirty Meter Telescope.

Qualifications

The University of California sees the UC Observatories as a jewel in its crown – a unique vanguard scientific enterprise that supports the excellence of participating campuses, that enables inter-campus collaboration, that creates energy at the system level, and that contributes to worldwide scientific advances. The UCO Director will be a leader with a rare combination of attributes – relevant scientific credentials, a capacity for overseeing administrative and operational areas; the relationship, communication, and political skills necessary to create and sustain alignment across a complex, multistakeholder, highly decentralized environment within and beyond the University of California; and the ability to generate resources internally and externally while demonstrating impeccable stewardship of both resources and mission.

The Director must be able to work effectively across the participating UC campuses at chancellor, provost, dean, department chair, and faculty levels while also engaging the University of California Office of the President; must leverage the contributions of the UCO Advisory Committee as representatives of the broader UC astronomy and astrophysics community; and must also both contribute to and engage with various scientific advisory committees (notably those for Keck and TMT) that will support them or that they will join.

Given that the instrumentation labs remain a distinctive facet of UCO's activities, the ideal candidate will bring a balance of experience, accomplishment, and interest among observation, theory, and application. The ideal candidate will also add sensitivity, judgment, and finesse to the ongoing efforts to fully launch the Thirty-Meter Telescope in a culturally and financially sustainable way.

Selectors will gauge candidates on these many important competencies and attributes, starting with evidence of the following:

- International distinction as a researcher and scholar in a relevant field with a scholarly record and contributions that are suitable for a tenured faculty member at a campus of the University of California.
- Substantial administrative experience leading large science projects or programs or complex organizations, including responsibility for budget management and general management of administrative, research, and technical functions.
- Demonstrated interest in playing a leadership role in science policy at national and international levels.
- Experience in developing long-term, ambitious goals for complex organizations, to include strategic visioning, planning, and implementation.
- Excellent communication skills with a demonstrated ability to listen to a variety of constituent groups (faculty, administrators, staff, and students from multiple campuses) and diverse opinions, to synthesize input, to make decisions, and to share information broadly in order to build consensus and support for action.
- A successful record of experience and leadership in advancing diversity, inclusion, and equal employment opportunity in research or higher education environments or comparable setting

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and the cultural sensitivity and political finesse to create and sustain alignment across stakeholder groups with varying perspectives and concerns.

- Demonstrated ability to foster strong partnerships and collaborations with government, industry, and other research enterprises.
- Experience successfully forming and leading collaborations across networks of people working at multiple locations.
- Demonstrated success in securing external support from federal, state, corporate, or international and also (preferably) from private sources.
- Preferred: Knowledge of astronomical instrumentation whether as a core area of expertise or secondary area of engagement.

Candidates both internal and external to the UC system are encouraged. For candidates from outside the UC system, the process for securing a faculty appointment will begin as soon as the most promising external candidates are identified.

The University of California has retained Opus Partners (www.opuspartners.net) to support this recruitment. Confidential inquiries, applications, and nominations should be sent to Craig Smith, Partner, at craig.smith@opuspartners.net. In order to interview with the UCO search committee, candidates must formally apply via Opus Partners and must provide a resume, a cover letter, and a statement of contributions to diversity, equity, and inclusion. Apply here. Additional information about UCO and the Director is available at https://www.ucop.edu/research-innovation/2021-uc-observatories-director-search.html.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, protected veteran or disabled status, or genetic information.