# UNIVERSITY OF HAWAI'I AT MĀNOA POSITION DESCRIPTION ASSOCIATE DIRECTOR FOR RESEARCH & EDUCATION INSTITUTE FOR ASTRONOMY Position Number #89181

### I. INTRODUCTION

The University of Hawai'i at Mānoa (UHM) is the premier institution of higher learning in the Pacific Basin and belongs to an international community of research universities. UHM is one of the nation's few public, Land, Sea-, Space, and Sun-Grant universities as well as the only institution in the State of Hawai'i classified as "R1, RU/VH: Research Universities (very high research activity)" by the Carnegie Foundation. By virtue of its culture and geographic location, UHM plays an important role nationally and internationally, especially in providing Asian, Pacific Islander, and Hawaiian perspectives into the higher education experience. As part of its strategic plan, UHM has a goal of becoming a Native Hawaiian Place of Learning.

The Institute for Astronomy (IfA) is a research institute within the University of Hawai'i with offices and laboratories on Oʻahu, Maui, and Hawaiʻi Island in addition to observatories on Maunakea, Mauna Loa, and Haleakalā. With a total staff of over 160, it is one of the largest university astronomy programs in the world and has a broad based research program including studies of the Sun, planets, stars, interstellar matter, galaxies and cosmology, and in developing related technology and instruments.

The function of the Associate Director for Research and Education is to assist and advise the Director in carrying out their responsibilities for the management and development of the University of Hawai'i's Institute for Astronomy (IfA) with respect to the research and educational functions of the Institute. This position serves as the Director's liaison with faculty committees, chairs, campus academic affairs and various research entities

# II. DUTIES AND RESPONSIBILITIES

### LEADERSHIP AND MANAGEMENT

Provides leadership for academic strategic planning, academic program development and review, instructional matters, research, and service programs at IfA.

Fosters, articulates, and promotes an overall vision for IfA's research enterprise in collaboration with members of the Director's office, faculty, students, and staff.

Supports the Director in working with faculty committees responsible for recruitment of faculty, and administration of graduate and undergraduate programs.

In collaboration with IfA observatory directors, provides scientific and strategic leadership and coordination for IfA-run observatory facilities.

May serve as Acting Director when the Director is away or not otherwise available.

# ACADEMIC AFFAIRS, EXTENSION, AND RESEARCH

Assists the Director in creating and sustaining an environment that fosters positive faculty, staff, and student morale and mutual respect, research productivity, instructional excellence, and professional growth.

Assists the Director in seeking out and evaluating new initiatives in astronomy research, education, and technology development.

Assists the director with ensuring a supportive professional environment for faculty, post-docs, students, and staff; provides opportunities for their professional growth.

Provides leadership and support for academic, extension, and research initiatives that foster the creation and dissemination of knowledge.

Develops discussions with individual faculty and researchers to review research progress, suggests new initiatives for research and instrumentation, provides a critical review of major proposals before submission, and stimulates initiatives to capture extramural funding.

Assists the Director in the allocation of UH observing time for telescopes on Maunakea and Haleakalā.

Participates in Director's consultation with an executive committee on major IfA programmatic decisions such as allocation of vacant faculty positions, responds to Announcements of Opportunity for extramural funding, reviews of strengths and weaknesses of individual areas, and identifies steps needed to correct shortcomings.

Develops and maintains excellence in instructional, extension, and research programs through the recruitment, retention, and development of high-quality faculty and staff.

Mentors junior faculty and scientific staff, including postdoctoral researchers, in all aspects of their work, including research, instruction, and service, in close collaboration with faculty, graduate, and undergraduate chairs, and the faculty chair.

Furthers the UH System's strategic commitment to being a foremost Indigenous serving institution through increasing IfA's engagement with the Native Hawaiian community especially via consultation with the Office of Native Hawaiian Place of Learning.

Works with the graduate and undergraduate chairs and the faculty to support the continued development of a balanced and relevant astronomy graduate and undergraduate programs:

- Supports the continued development of the astronomy graduate program by encouraging faculty to offer high-quality courses and involve graduate students in research projects using the unique facilities of the Maunakea and Haleakalā observatories.
- Supports and encourages faculty in the integration of research and educational endeavors at the undergraduate level through the implementation of relevant courses and summer research opportunities; and encourages the same at the graduate level by providing a high-quality research-oriented Ph.D. program.
- Ensures active student recruitment and retention programs to attract and retain top students for IfA's programs, with an emphasis on increasing local student participation; creates and sustains a positive student culture that integrates individual and collaborative academic achievement.
- Maintains an overview of all instructional program needs, including curriculum development, establishing innovative educational programs, evaluation of course proposals, course schedules, and student advisement.
- Reviews resource allocation with the graduate and undergraduate chairs.
- Collaborates with admissions committee to analyze demographic trends and promote diversity in the applicant pool.
- Monitors trends in education to ensure that IfA is providing state of the art pedagogy and programs to enhance student learning.
- Identifies new educational directions and methodologies, develops new educational programs, advises the Director on academic matters related to research programs.

#### III. LIST OF DIRECT REPORTS

In accordance with the official organizational chart.

# IV. AUTHORITY AND DECISION-MAKING EXERCISED

Work is performed under the general supervision of the Director of the Institute for Astronomy, UHM, with opportunities for the exercise of independent judgment and initiative, as well as substantive decision-making under broad policy and general operational guidelines as set by the Director and as set forth by the Board of Regents, other University guidelines and applicable state and federal policies and guidelines.

## V. DIRECTION AND REVIEW OF WORK

Job performance and program results achieved are reviewed, on a regular basis, by the Director.

#### VI. CONTACTS AND RELATIONSHIPS

The Associate Director for Research & Education assists the Director in the management and development of the Institute for Astronomy. In fulfilling that role, and subject to the guidance and supervision of the Director, the Associate Director for Research & Education works with UH-System and UH-Mānoa executives, administrators, faculty, staff, students, legislators, state and federal agencies, donors, and members of the community.

The Associate Director for Research & Education assists the Director in representing the Institute for Astronomy on the islands of Hawai'i and Maui. On the island of Hawai'i, the Associate Director for Research & Education works closely with the University of Hawai'i at Hilo on community and outreach issues, as well as collaborative education and research efforts.

### VII. MINIMUM QUALIFICATIONS.

- Ph.D. in astronomy, physics, or related field.
- Five (5) years of professional experience in academic leadership at the level of department chairperson or higher, or comparable professional experience.
- Rank of Professor/Researcher/Specialist or demonstrated record of comparable professional experience prior to appointment.
- Ability to establish and maintain effective working relationships with multiple constituencies.
- Record of distinguished teaching, scholarship, research, community engagement, publication, and/or professional activity and achievement.
- Demonstrated commitment to consultative and collaborative processes with diverse stakeholders.
- Strong leadership record with effective interpersonal communication and decision-making skills with commitment to the highest ethical and academic standards.

- Ability to function successfully in an environment characterized by cultural complexity and with a strong indigenous presence.
- Demonstrated ability to establish partnerships and alliances in support of innovative astronomy education and research, and provide academic leadership in faculty scholarship and research.
- Demonstrated commitment to building consensus using consultative and collaborative processes, and a solid understanding of shared governance with higher education.

# VIII. DESIRABLE QUALIFICATIONS.

- Leadership experience in private or public sector organization or an academic institution at the level of department chair or higher.
- National and international recognition and reputation in the astronomy community; ability to command the respect of colleagues in teaching, research, university administration, federal agencies, and other extramural funding sources.
- Administrative experience in a public university, four-year college, or land-grant college.
- Understanding or commitment to gaining an understanding of island and Native Hawaiian culture.
- Demonstrated experience working with diverse communities, including Indigenous peoples.
- Experience with global astronomical potentials and collaborations.
- Demonstrated commitment to and/or experience in promoting diversity, equity, and inclusion in the workplace.
- Working relationships with U.S. and/or international astronomy funding entities, e.g. National Science Foundation, National Aeronautics and Space Administration, Department of Energy, European Southern Observatory, European Space Agency, etc.
- Experience with transdisciplinary education and sciences.