Lowell Observatory located in Flagstaff, Arizona, is seeking an Instrument Scientist, a position within the observatory’s technology group. The Instrument Scientist is responsible for the creation and maintenance of all astronomical instrumentation as well as related hardware and software across all Lowell observatory sites in northern Arizona including: the 4.3m Lowell Discovery Telescope, existing and planned 1-m class facilities on Anderson Mesa, and smaller aperture telescopes on Lowell’s main campus on Mars Hill. The position may be filled at any experience level.

RESPONSIBILITIES

The Instrument Scientist (IS) will support Lowell Observatory’s technology group. In particular, the IS will assist bringing new instruments and capabilities on line at the various facilities such as: fully-robotic telescope control systems, adaptive optics and wavefront sensing projects, site monitoring improvements, calibration and performance trending of existing instruments, and the design, implementation, and commissioning of next-generation 4m-class instruments. The IS will also play a pivotal role in the preparation of grant proposals for instrumentation or technology projects, and may include meeting with potential donors or advisory boards. Additionally, the IS will occasionally assist observers and operators of the various telescope facilities, and will generally support all technical activities across the observatory. The IS may apply for observing time on any of the Lowell observatory facilities.

QUALIFICATIONS AND EXPERIENCE

Candidates should hold a MS or Ph.D. in Astronomy, Physics, Engineering, or a closely related field. A successful applicant will be able to demonstrate experience in some of the following areas; given the broad scope below, expertise in all of them is not required or expected:

- A strong background designing, building, or working with:
  - IR and optical detector systems development and operations
  - Optomechanical systems, including general optics design (especially Zemax or similar) and electronic controls
  - Closed cycle cryogenic (e.g. Stirling, GM, or JT) coolers and associated vacuum systems
  - Data reduction and processing
  - Troubleshooting instrumentation problems
  - Mechanical design
- Software development, including system administration and overall design
- Ability to work with multidisciplinary teams, including external collaborators

Additionally, the IS should have strong communications skills, and should be prepared for occasionally time-critical and potentially high-pressure situations.
The Instrument Scientist will work at elevations above 7000 feet, and temperatures can range from -20 to 80 degrees F. The work requires a moderate degree of climbing, walking, bending, reaching, and repetitive motions. Long periods of standing or sitting at a computer are required. Ability to lift up to 50 lbs. A valid driver’s license or ability to obtain one is required. Driving in winter conditions on mountain roads is to be expected. The position may include periods of night-time work, and weekend and holiday work is occasionally required to support ongoing observatory operations.

Status: Full-time, Regular
FLSA Classification: Exempt
Compensation Type: Salary
Compensation: $85,000-$95,000 DOE
Benefit Eligible: Yes
Location: Flagstaff, Anderson Mesa, and Happy Jack, AZ

To Apply:
Please send the following documents to humanresources@lowell.edu
• Lowell Standard Application (www.lowell.edu/careers)
• Letter of interest addressing your qualifications
• Resume

Applications will be reviewed weekly beginning March 21st. Position Open Until Filled

*Benefits Overview: In addition to 11 scheduled paid holidays, Lowell Observatory offers a Flexible Paid Time Off policy for all full-time, benefit eligible employees which allows you to determine how much time you need to rest and enjoy yourself outside of work. Paid time off also includes paid Parental and FMLA leaves. The cost of premiums for medical, life & long term disability insurances for benefit eligible employees is 100% paid by the company, and includes a contribution to either an H.S.A or HRA account for first dollar medical expenses. A portion of dependent medical insurance is paid by the company. Up to a 5% match on retirement contributions after 6 months of employment and funds in lifestyle spending account provided by the observatory.

Employment is subject to passing a background check

Lowell Observatory is proud to be an equal opportunity workplace and is an affirmative action employer. We are committed to equal employment opportunity regardless of race, color, ancestry, religion, sex, national origin, sexual orientation, age, citizenship, marital status, disability, gender identity or Veteran status. Lowell Observatory has always been, and always will be, committed to diversity and inclusion. We seek individuals from all backgrounds to join our teams, and we encourage our employees to bring their authentic, original, and best selves to work.

Lowell Observatory sits at the base of mountains sacred to tribes throughout the region. We honor their past, present, and future generations, who have lived here for millennia and will forever call this place home.

Lowell Observatory is committed to providing access, and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. Our non-smoking campus is at an elevation of 7,200ft/2200m, and the LDT is 40 miles south of Flagstaff at an elevation of 7,800 ft/2370m. If you need a reasonable accommodation for any part of the application and hiring process, please notify the Human Resources office for assistance.

Version March 2022/HR