Staff Scientist Career Path at SLAC

Staff scientists conduct research, develop theories, and devise methods to apply scientific principles, theories and analysis in projects related to the overall mission of SLAC. Research may include the design, development, commissioning and scientific operational support of SLAC scientific facilities or major SLAC science projects. Areas of current scientific interest include synchrotron radiation and x-ray FEL research, materials science, accelerator science, chemical sciences, life sciences, laser research, particle physics and particle astrophysics. Staff scientist positions are intended to be career appointments at SLAC of individuals who are central to defining and pursuing the forefront scientific mission of the laboratory.

There are five levels in the career path for staff scientists at SLAC. All levels require a Ph.D. or its equivalent in research skill and subject knowledge in the relevant scientific discipline and each level requires increasing professional achievement. All staff scientists are expected to advance the scientific mission of the laboratory and their performance is measured against the priorities and goals set out in SLAC’s and its Directorates’ Strategic Plans and Agendas. Starting at the Staff Scientist Level I, individuals may, with the approval of the responsible Associate Laboratory Director, be a task leader on subtasks of DOE Field Work Proposals overseen by the SLAC Director as Proposal Manager for projects that meet the approval of the responsible ALD and, in some cases, the Laboratory Director. Staff scientists above the Associate Staff Scientist level often have supervisory and management responsibilities. Other career paths, with titles such as Engineer and Physicist/Engineering, may require training and skill levels equivalent to those of a Staff Scientist, but primarily involve engineering and technical design, development, commissioning and operation of facilities and experiments.

Staff Scientist Levels

**Associate Staff Scientist**

The Associate Staff Scientist is a fixed-term entry-level research staff position for a recent Ph.D. graduate or postdoctoral fellow. Appointments are typically made within a given scientific Directorate for a minimum 3-year and maximum 5-year term. At the time of hire, a long-term career path within the sponsoring SLAC scientific Directorate should be identified. The Associate Staff Scientist typically works with Staff Scientists, Senior Staff Scientists, Distinguished Staff Scientists or faculty members in attaining the goals of research projects, which can include instrumentation and methodology development, and/or user support. The Associate Staff Scientist is expected to demonstrate a capability for conducting an independent research program.

**Staff Scientist – Level I and Level II**

The Staff Scientist is a continuing-term research staff position typically within a given scientific Directorate. There are two levels within the Staff Scientist category. Appointment or promotion of a scientist to one of these levels is based on documented
scientific achievements during the term as Associate Staff Scientist, or on research and professional work performed at other institutions. Level I Staff Scientists typically have full responsibilities for specific areas of instrumentation or methodology development and user support; they may have their own research projects as well. Level II Staff Scientists are in addition expected to have a higher level of distinction within the primary scientific discipline and may lead teams and engage in broader areas of research and development. Staff Scientists at both Level I and II may be a task leader on subtasks of DOE Field Work Proposals overseen by the SLAC Director as Proposal Manager for projects that meet the approval of the responsible ALD and, in some cases, the Laboratory Director. Staff Scientists may have supervisory responsibility. The Staff Scientist level is the career endpoint for the majority of the staff scientists at the Laboratory.

**Senior Staff Scientist**

The Senior Staff Scientist position is reserved for individuals whose accomplishments reflect scientific and professional achievement and recognition considerably greater than that of a Staff Scientist I or II. Advancement or promotion to this level requires an achieved recognition of leadership nationally or internationally, as a result either from original developments in support of photon science or PPA facilities, or original scientific research. Appointment to this level can also be made based on equivalent level of accomplishments achieved at other institutions. Senior Staff Scientists may be a task leader on subtasks of DOE Field Work Proposals by the SLAC Director as Proposal Manager for projects that meet the approval of the responsible ALD and, in some cases, the Laboratory Director. The Senior Staff Scientist may be a Principal Investigator on proposals of non-DOE sponsored research.¹ Senior Staff Scientists may have coordination and/or supervisory responsibility for technical staff, SLAC Research Associates and Associate Staff Scientists. This might include training, guidance in definition of facility development or research, performance evaluation, recommendation on salaries, hiring and termination.

**Distinguished Staff Scientist**

Appointment to the Distinguished Staff Scientist level is reserved for only a small, select number of staff scientists. This level requires extraordinary scientific achievement, and an individual at this level is recognized as an authority in the scientific field both inside and outside of SLAC. Appointment or promotion to this level requires achieved leadership and recognition at a laboratory-wide level resulting from original developments in support of SLAC science facilities or original scientific research, together with a demonstrated ability to manage major components of the SLAC scientific mission.

Individuals generate and carry out self-directed research programs with wide latitude for action or decision within the SLAC Agenda. The Distinguished Staff Scientist is expected to provide scientific leadership and may have coordination and/or supervisory responsibility for technical staff or staff scientists of all levels. This might include
training, guidance in definition of facility development or research, performance evaluation, recommendation on salaries, hiring and termination.

Distinguished Staff Scientists may be a task leader on subtasks of DOE Field Work Proposals overseen by the SLAC Director as Proposal Manager for projects that meet the approval of the responsible ALD and, in some cases, the Laboratory Director. The Distinguished Staff Scientist may be a Principal Investigator on proposals for non-DOE sponsored research.\textsuperscript{1} The Distinguished Staff Scientist may also have managerial responsibility for a significant research project or organizational unit.

Other Scientific Positions at SLAC

Project Scientists

The Project Scientist is a non-career path fixed-term research staff position of up to 5 years. A Ph.D. or its equivalent in research skill and subject knowledge is required. The Project Scientist works with staff scientists or faculty members in attaining the goals of a specific research project, which can include instrumentation and methodology development, and/or user support. Funding for these positions is typically project specific.

- Appointment (ALD and HR requisition process)
- For consideration in a Staff Scientist series position, individual must compete to fill a posted requisition

Research Associates

Research Associates at SLAC are fixed term academic appointments. Research Associates are engaged with the design, support, operation and/or scientific exploitation of the major programs of the laboratory, under the guidance of their faculty or Senior Staff Scientist / Distinguished Staff Scientist supervisor. They are expected to work with a significant degree of independence on one or more specific tasks in support of the research program, frequently interacting with the laboratory’s scientific community.

- Appointment by scientific Directorate after an appropriate search is conducted to obtain the best possible candidate with due consideration for gender and minority demographics
- For consideration in a Staff Scientist series position, individual must compete to fill a posted requisition

Postdoctoral Scholars

Postdoctoral Scholars are engaged in advanced studies beyond their Ph.D. training under the direct guidance of a Stanford Faculty P.I. Their research programs are fixed term commitments (limited to a cumulative total of 4 years postdoctoral experience) and focused to contribute to the research goals of the sponsoring faculty member (and their
grant/contract funding) and to prepare the Postdoctoral Scholar to be competitive for an independent research career in an academic, national laboratory or industry setting.

- Postdoctoral Scholars are appointed through the Stanford University Postdoctoral Office of Postdoctoral Affairs at the invitation of a Faculty member who has funding and approval from the organization in which the Postdoctoral Scholar will be working.
- For consideration in a Staff Scientist series position, individual must compete to fill a posted requisition.

**Graduate Students**

- Graduate Students have been accepted by Stanford University and are enrolled in a Ph.D. program.
- Assistantships are a form of graduate student employment, with a compensation package including both salary and tuition allowance; effort cannot exceed 50%.
- For consideration in a Staff Scientist series position, individual must compete to fill a posted requisition and have completed their Ph.D. degree by the start of the staff appointment term.

---

1 Stanford has established a 4-year trial period (1/1/2011 – 12/31/2014) for principal investigator privileges for SLAC Senior and Distinguished Staff Scientists with a limit on the number participating in the program. Consideration is being given to extension.