Staff Scientist Career Path at SLAC

Staff scientists conduct research, develop theories, and devise methods to apply scientific principles, theories and research in projects related to the overall mission of SLAC. Research projects include synchrotron radiation and x-ray FEL research, materials science, accelerator science, chemistry, life sciences, laser research, particle physics and particle astrophysics. In addition to research, a Staff Scientist job can include a support function component related to a SLAC scientific facility or major SLAC science project. Staff scientists 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 four levels in the career path for staff scientists. 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 the SLAC Agenda. Starting at the Staff Scientist level, 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, and the support function activities of all these career paths may be very similar.

Staff Scientist Levels

Associate Staff Scientist

The Associate Staff Scientist is fixed-term entry-level research staff position for a recent graduate or postdoctoral fellow. Appointments are 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

The Staff Scientist is a continuing-term research staff position within a given scientific Directorate. Appointment or promotion of a scientist to this level is based on documented scientific achievements during the term as Associate Staff Scientist, or on
research and professional work performed at other institutions. The 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. 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 Staff Scientist may have supervisory responsibility. Staff Scientist 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. 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. 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. 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)
- Can be considered for Staff Scientist or Senior Staff Scientist positions if they are selected via the staff scientist hiring process.

**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
- Can be considered for Staff Scientist or Senior Staff Scientist positions if they are selected via the staff scientist hiring process.

**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 and focused to contribute to the research goals of the sponsoring faculty member (and their grant 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 Post-Doc Office at the invitation of a faculty member who has funding and approval from the organization in which the Postdoc will be working.
- Can be considered for an Associate Staff Scientist positions if they are selected via the staff scientist hiring process.
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%.
- Can be considered for an Associate Staff Scientist position if they are selected via the staff scientist hiring process, and will have completed the Ph.D. degree by the start of the staff appointment term.

\(^1\) Stanford has established a 5-year trial period for PI access with a limit on the number of SLAC Senior and Distinguished Scientists participating in the program.