

How to Apply for a Postdoc

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Is a Postdoc the Right Next Step?

- Fellowships offer the opportunity to pursue independent, novel research for a typical period of 3 years. Compared to PhD work, you are usually much more independent in terms of developing your projects, and leading proposals for telescope time, computing time, and funding. Most fellowships include an annual research budget.
- Nearly all permanent research scientists or faculty were postdocs. This is a time to develop your vision for how your work will impact the field over a timescale of 3 years, and to think about longer timelines.
- If your dream is to be a professor at a non-research intensive institution focused on undergraduate education, you will need to supplement most postdocs with opportunities for leadership in education.
- Opportunity to work at a new institution: engage in new collaborations, use different observing or computational facilities, experience a different institutional culture.
- Opportunity to have different mentors, both formal and informal.
- Opportunity to live in a new location and experience a new country, city, or region, a new climate, new cuisine, and new recreational activities.
- Increased compensation: Fellowships typically pay \$65k-75k per year.

Fellowship vs. Project-Funded

Staff Employee vs. Stipendee Fellow

Timeline

- Summer is the prime time to explore ideas for your proposal and to discuss these ideas with senior scientists.
- The AAS Job Register is your primary avenue for learning about opportunities and it is updated continuously. A small number of postdocs (typically outside the US) are not advertised there.
- Nominations: Deadlines as early as August!
- Submit Materials:
 - October-December for fellowships: e.g. 51 Peg Oct 10; NSF & ESO Oct 15; Hubble Nov 4
 - Year round for project-based postdocs
- Participate in Interviews: Some fellowships require an interview, generally conducted in December or early January. Most project-based postdocs will require an interview
- Learn Results: Late December thru mid January for fellowships
- Make a Decision: No earlier than February 15th BUT non-Astro and/or non-US jobs may not adhere to this

Application Materials for Fellowships

- Some require a nomination by a faculty member or senior scientist. *These include, for example, the Harvard Society of Fellows, MIT Pappalardo, UC Berkeley Miller*
- Application Form or Cover Letter
- Curriculum Vitae
 - this is the opportunity to list activities and recognitions that demonstrate leadership potential and a sustained commitment to fostering community
- List of Publications
 - Published, Submitted, & In Prep; First author papers
- Statement of Past and Current Research
 - tell your story in a manner that engages someone reading dozens of these
 - explain your motivation, your contributions to experimental design and the work, and state the impact you perceive
- Research Proposal
 - propose a project that is bold and impactful: it is far better to be too ambitious than too conservative
 - you do not need to reinvent yourself! you have likely developed research questions in your current work. Pursue them!
 - it is essential that you get feedback on drafts from senior scientists who have served on postdoc selection panels
 - NSF is different!* A 10-page proposal, no reference letters, and a thoughtful plan for Broader Impacts.
- DEI Statement
 - describe any past work and future plans in concrete, specific terms, and propose a scope of work that is feasible
- Three letters of reference
 - ask the writer whether they can provide a strong letter
 - consider getting one letter from someone who is not a collaborator but can enthusiastically describe the impact

Visas

The following applies to non-US Citizens or Permanent Residents

- Common visas include F1-OPT, J-1, H-1B
- F1-OPT is a one year extension following completion of your PhD that allows for optional practical training. It serves as a bridge year during which you can begin a postdoc and apply for a J-1 or H1-B.
- J-1 is an exchange visa with no intent to remain in the US. The duration is nominally 3 years. Home country may impose a 2-year residency requirement depending on funding or skills list. Spouse and children may join under a J-2 visa and spouse may apply for work authorization.
- H-1B is a dual intent visa meaning you can apply for permanent residency. It is reserved for specialty occupations requiring highly specialized knowledge. The duration is up to 6 years and it may be used after J-1 is exhausted. Spouse and children may join under H-4 visa but spouse cannot seek work authorization, except in certain narrow circumstances.

Strategy

- Make a list of your professional goals: Do you want to PI a NASA Mission, support the community in using JWST, be a professor at a small liberal arts college...? Get advice from senior scientists about what skills are required to compete for your dream job and then pursue postdocs that provide opportunities for those skills. Recognize you may not yet know what your ideal job is!
- Make a list of your personal goals: What locations work for you and your partner? Do you want children and when? Do you want to be near extended family? Is an urban or rural landscape a priority? What non-work activities do you enjoy? Pursue postdocs that enable your top personal goals.
- Contact faculty and staff at potential host institutions. They may offer connections that you were not aware of.
- Do not apply to jobs that you would never take: However, recognize that you may not know enough about a job to decide this in advance, and you can apply and investigate further if offered.
- Do attend the January AAS and, if finishing your PhD, give your 15 minute dissertation talk. Attend topical conferences and speak if given the opportunity. However, you do not need to go on a lecture tour in the fall of the year you are applying.
- Seek advice from individuals with knowledge and experience. Recognize that not all advice is sound.