
URGE Admissions and Hiring Policies for Carnegie Institution for Science

This is what was found by the Carnegie Pod for the Earth and Planets Laboratory at the Carnegie Institution for Science on Hiring and/or Admissions Policies, as well as what the pod would propose to change and improve.

Note: We acknowledge this information is not always accessible to students and even staff. If you do not have access to this information, please reflect on your own experience and outline what admissions and/or hiring should be like to foster a diverse and inclusive community.

- **What EEO (Equal Employment Opportunity) statement is included in a standard job or admissions advertisement? Are there other inclusion statements and resources publicly available²?**

EEO statement in current EPL job advertisements:

“At Carnegie, we are committed to building a diverse and inclusive community. We believe academic environments should be places where diverse groups of people with a variety of viewpoints and ideas can thrive and work together. As such, we encourage applicants from under-represented groups and backgrounds to apply. The Carnegie Institution is an equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of gender, race/ethnicity, protected veteran status, disability, or other protected group status.”

A Carnegie-wide DEI statement addresses Carnegie’s DEI committee, eugenics statements, diversity training, recruitment, and community outreach.

The EPL online library provides various DEI resources, including DEI Programs, articles and blog posts, racial justice book recommendations, DEI policy statements, research reports, and workforce statistics.

Idea(s) for the future:

- The EEO statement could be moved to the beginning of the job advertisement.
 - Could include the website’s EEO statement in a more obvious location (e.g., “Work with us” section on the website).
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- **Where are advertisements posted or sent? Are there other strategies for reaching applicants for hiring and/or admissions, e.g. job fairs, showcases?**



Our science-oriented job advertisements are posted to a mix of professional societies, topical group list serves and department chairs. We select from the list below for the most appropriate for the job being advertised:

Professional Societies:

AGU -EOS, Geochemical Society job board, AAS job register (and AAS Women's newsletter), Physics Today, DPS, Earthworks, EGU, GSA Today, American Chemical Society, American Institute of Physics, SACNAS, NBSP, Earth Science Women's Network, Association for Women Geoscientists, Meteoritical Society

List serves:

IRIS, UNAVCO, Volcano listserv/digest, CIG, and GeoPRISMS, Women In Planetary Science blog, COMPRES, AIRAPT/Megabar, Women in Physics, Women under pressure, Psik-computational, CIDER listserv, MYRES

Various Facebook groups, Twitter. Some personal outreach.

Idea(s) for the future:

- Could send job ads to a set list of university departments to reach individuals who may not have networks within the above professional societies. Keep in mind that potential candidates may be in departments other than Earth science (e.g., physics, chemistry, math, etc.).
- Consider the associations for minority scientists listed by the American Physical Society (<https://www.aps.org/programs/minorities/resources/index.cfm>).

• What are the requirements for an applicant, e.g. letters of recommendations, fees/test scores/grades? Is providing any of these a potential barrier that could be further lowered or removed? Are there any problematic questions asked?

Postdoctoral fellowship applicants must provide a CV, three references, a cover letter, summary of past research, and a research proposal.

Staff Scientist applicants must provide a cover letter, CV, list of publications, abstracts of two most relevant and important papers, a 2-3 page summary of previous research, a research plan of up to 5 pages, and three names of references.

No formal procedure/requirements for hiring grant-supported postdocs.

Support staff require CVs, a cover letter, and reference letters.



Ideas to reduce potential barriers in the application:

- Other components (short essay prompts) could be added to the application.
 - Consider sending interview questions beforehand to increase accessibility and decrease unconscious bias for interviewers.
 - Add an FAQ section on the application procedure.
 - With permission, sharing research proposals and statements from past applications that were successful.
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- **How are applicants/applications evaluated? Is that process and/or rubric^{4,5} public? What kind of biases are introduced in this process and what strategies are used to address these, e.g. removing applicant names?**

Post Doctoral Fellows

The panel is chosen to be representative of the six research themes on campus (Astronomy, Geo-cosmo-chemistry, Geophysics, Experimental Petrology, Mineral and Materials Physics, and Astrobiology). Applications are divided by theme and made available to all scientific staff, and relevant committee members (one from each theme) are in charge of the initial review of these applications including meeting with the theme group to provide a prioritized list. A rubric is provided (i.e., generally following U of Michigan STRIDE recommendations), with categories for Past Research (scored for originality and impact) and Research Proposal (scored for originality, impact feasibility and fit). The following information on how to score these using a 1-5 scheme with 5 as the highest is provided as follows:

Past Research:

Originality: Evidence of previous innovative and original research (e.g. did their research break new ground? Were new techniques or methods developed? Did they apply results in a unique way?)

Impact: Evidence of impact of previous research (e.g. publications, citations, conference abstracts/talks, awards or other recognition)

Research Proposal:

Originality: Evidence of originality and independence in proposed research (e.g. Is their proposal novel and innovative? Does it show independence from previous supervisors? Do they propose to develop new techniques or novel applications?)

Impact: Has the candidate clearly articulated the importance of the project? Have they identified a project that can lead to a breakthrough? Will the outcome potentially lead to a step change in knowledge?



Feasibility: Is there evidence for a well thought-out research strategy that is likely to yield results? Are the EPL facilities appropriate? Can EPL provide sufficient support?

Fit: How well does the research align with current research at the lab? Does it provide synergy across research groups? Does it enhance EPLs research strengths?; Does it broaden our horizons in exciting ways?

From the prioritized lists from the committee members representing their themes, the committee decides on a list to invite for an interview. The candidates are sent an invitation that includes the following instructions:

“All candidate interviews are done remotely via ZOOM and will last for ~ 45 minutes and will include a 15-minute presentation focussed on your research proposal, followed by ~25 minutes of questions from staff with an opportunity for you to ask questions to us. The interviews will be open to all Carnegie scientific staff at EPL. Please do not summarize your previous research as we have already concluded that your research is outstanding and that you are well-qualified for a Fellowship. You should aim to excite a knowledgeable but diverse audience with your scientific questions while providing sufficient depth for those staff most closely specializing in your area of interest. We ask that you specifically address the following in your presentation among other aspects you may find important:

- 1) What are the key hypotheses being tested or questions being asked with this research and why is it important to study now?
- 2) Why is Carnegie a good fit for the proposed research? (Does Carnegie have the tools and expertise needed for success? Who do you see providing mentorship?)
- 3) What are the challenges involved in the project and how do you anticipate addressing them?”

All staff are invited to participate in the interviews and provide feedback to the committee. After the interviews, the committee meets to determine who will be offered fellowships. Considerations like theme allocation, support of new hires, and the history of how staff scientists have served as primary mentors in the past (e.g., if a staff scientist has not recently served as primary mentor, their subtopic might be more highly prioritized) are all a part of the decision making process. The recommendations from the committee are given to the Directors who have final authority to determine who will be offered positions.

Staff Scientists

For the most recent searches we used a common approach. A committee was formed that included a staff member as Chair, four other staff scientists, and the Directors as ad hoc members. The committee wrote the job ad that was placed in a number of professional society job sites and circulated to topically appropriate list-serves.

All scientific staff members were given access to the applications and we developed a rubric to downselect to a long list of 30 applicants from whom letters were solicited. The rubric generally following U of Michigan STRIDE recommendations and included the following categories to be scored from 1 to 3, 3 being the highest:

Previous Record:

Evidence of Original Research (e.g. based on published outputs; grants, etc.)
Evidence of scholarly impact (quality of research publications and influence, awards, etc.)
Evidence of research productivity (publication metrics relative to career stage)

Potential:

Vision: Potential for (evidence of) building a world-leading research group; Potential for (evidence of) developing new research directions; Potential for (evidence of) attracting research funding
Leadership: Potential for (evidence of) scientific and community leadership

Fit:

Enhance: Potential for (evidence of) ability to contribute positively to EPL's climate and priorities
Collaborate: Potential for (evidence of) collaboration
Facilities: Potential for (evidence of) developing new facilities or enhancing/utilizing existing facilities

On the basis of feedback from staff and their own evaluations including reading published research the committee selects a long-list (12 to 20) for short interviews (remote via Zoom; one hour interviews including a research talk plus time for questions)

On the basis of the short interviews the staff are asked for a second round of comments and the committee re-evaluates the candidates using the rubric. On the basis of this evaluation a short-list is constructed for longer, 2-day (remote during Covid, normally campus visits) interviews that include an hour long research talk, meetings with staff (typically in small groups) and finally a meeting with the Directors. The committee meets

and ranks the short-listed candidates and provides a recommendation to the Directors. The Directors have final authority to determine which candidates will be recommended to the President who has the final say in hiring. The recommendation from the Directors is based on the search committee recommendation and their own judgement.

No uniform procedure for grant-supported postdocs.

Support Staff:

A job description is written by those most knowledgeable of the job duties. The description is included in an advertisement that is circulated within the institution, but also appropriate professional societies and in some cases local newspapers. If an insufficient number of applications is received, a search firm is employed to suggest additional candidates. Review of the candidates is done by a small committee consisting of staff knowledgeable about the requirements of the position along with the Directors. Top candidates are brought to campus for in-person interviews with the committee and Directors. Reference letters are solicited for the top candidates. The hire is made by the Directors on recommendation of the search committee.

- **Who is on selection committees and who makes the final decisions? Who interacts with the applicants?**

For postdoctoral fellowships, a fellowship committee made up of EPL staff scientists representing the various disciplines is selected by the Deputy Director. All EPL staff scientists can provide feedback on applicants through the entire process. See above.

For Staff Scientists, a committee of 4-6 staff scientists is appointed by the Director. The Institution President has the final say on the recommendation of the Director that is based on the recommendation of the search committee. For short list applicants, all people on campus interact with them. See above.

For support staff, the committee consists of the support staff most closely connected with the job duties of the position. The Directors serve as ad hoc members of the committee.



- **Has your hiring and/or admissions process been evaluated by outside consultants? What is the process for changing it?**

A institutional-wide DEI committee proposed a three-year roadmap for improving diversity and inclusion efforts. There is a specific section in this report on “Best Hiring Practices” to increase the likelihood of hiring individuals from diverse backgrounds. Recommendations for increasing representation are listed in this report. The stated goal is to have candidate pools that reflect the PhD demographics over the last five years. It encourages the use of detailed rubrics to decrease biases in the hiring process. In addition, for Staff Scientist hiring, the report proposes an identical “pre-interview” for a long-short list of candidates (same questions and committee members involved). Finally, they note that proper accommodations should be offered for in-person interviews and that the components of the interview should be communicated with the candidate beforehand.

Most recent hiring committee was provided with anti-bias training with an outside consultant part way through the process.

- **Has your university or company implemented or considered strategies like cohort hiring, mentoring, dual career support and partner hires, re-visioning your work culture, or other considerations outlined in “Leveraging Promising Practices”⁶?**

Cohort hiring has been discussed, but has not been particularly feasible for our smaller institution.

Idea(s) for the future:

- Develop a semi-formal mentoring program for Staff Scientists, possibly with another more senior Staff Scientist from outside of their department.
- Reach out to Carnegie Postdoc alumni to develop a mentoring network for Postdoctoral Fellows.