AAS CAREER SERVICES

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Abstract. The American Astronomical Society provides substantial programs in the area of Career Services. Motivated by the Society’s mission to enhance and share humanity’s understanding of the Universe, the AAS provides a central resource for advertising positions, interviewing opportunities at its annual winter meeting and information, workshops and networks to enable astronomers to find employment. The programs of the Society in this area are overseen by an active committee on employment and the AAS Council itself. Additional resources that help characterize the field, its growth and facts about employment such as salaries and type of jobs available are regularly summarized and reported on by the American Institute of Physics.

1. Introduction

The American Astronomical Society is the largest professional organization for research astronomers in North America and, barring the International Astronomical Union, the World. The AAS provides many services to its members, to astronomy and to affiliated disciplines. The mission of the AAS is to enhance and share humanity’s scientific understanding of the Universe. The detailed mission and vision statement of the AAS may be found on its web site\(^1\).

The Society accomplishes its central mission through the following broad goals:

\(^1\)http://aas.org/about/mission_and_vision
1. The Society, through its publications\(^2\), disseminates and archives the results of astronomical research. The Society also communicates and explains our understanding of the universe to the public.

2. The Society facilitates and strengthens the interactions among members through professional meetings\(^3\) and other means. The Society supports member divisions representing specialized research and astronomical interests.

3. The Society represents the goals of its community of members to the nation and the world. The Society also works with other scientific and educational societies to promote the advancement of science.

4. The Society, through its members, trains, mentors and supports the next generation of astronomers. The Society supports and promotes increased participation of historically underrepresented groups in astronomy.

5. The Society assists its members to develop their skills in the fields of education and public outreach at all levels. The Society promotes broad interest in astronomy, which enhances science literacy and leads many to careers in science and engineering.

Some direct examples of services or activities executed by the AAS to accomplish these goals include publishing the *Astronomy Education Review*, *Astrophysical Journal*, *Astrophysical Journal Letters*, *Astrophysical Journal Supplement Series* and the *Astronomical Journal*; organizing major meetings in the field of astronomy (the two annual meetings of the Society, annual meetings of its various divisions and, new in 2011, providing logistical support for astronomy meetings not organized by the AAS or its Divisions); disseminating timely information about the field to its members through an electronic newsletter and monthly emails as well as via the Society web page; lobbying on behalf of the discipline and related sub-disciplines with the US Congress, administration and agencies; coordinating activities in the area of astronomy education; awarding prizes and other recognition for research or service work in or for the discipline; providing a press release distribution system and press conferences at annual meetings; organizing volunteers to accomplish various activities through topical committees or working groups (e.g. Committee on the Status of Women in Astronomy or


Working Group on Laboratory Astrophysics) and; providing various career services, which I detail in this chapter.

The motivation for providing career services is rooted in our central mission, and justified through our goals (outlined above). An easy way to consider the Societys activities is that a well-informed, well-networked workforce helps to ensure a vibrant and efficient scientific discipline. We attempt to tailor our services in this area to accomplish the goals of the Society, while doing so at the lowest possible cost and in the most efficient way.

In this article, I outline the various Career Services that the Society provides, a bit of the history of each of these services and some sense of the future direction for these services in the coming years. The AAS website contains links to all AAS career services and resources4.

2. The AAS Job Register

The AAS Job Register5 began in 1979 as a simple listing of jobs in a sequential format along with appropriate contact information for applicants to use to apply for each position. Initially, there was no charge for a job listing and the Society absorbed all costs for the processing and dissemination of the Job Register. The motivation for starting the Job Register was that the job situation, meaning the availability of positions generally, was fairly bleak. There were few openings and a large number of applicants (driven, in part, by the large investments by NASA in basic research connected to the human space program, ultimately declining in the mid to late 1970s, with drastic results on young people who had been drawn to astronomical research due to the excitement of the space race).

Some simple policies put in force at the outset are in force today, the job listing must be bona fide, meaning it must be truly an open job with no pre-selected candidate; the AAS plays no part in the job seeking or negotiating process other than publishing the position description; and the position must be open for at least thirty (30) days. The reason for these simple rules is primarily to prevent the Job Register from being used to claim that a full and open search was undertaken for a position, when in fact, the position was hard-wired for a particular candidate.

In the mid-1980s, the Society began charging a small fee to employers for the publication of their Job announcement, primarily to offset the printing and distribution of the Job Register, but even with the fee, the costs exceeded the revenue. As the popularity of the Job Register grew, the fee had to be increased to cover a larger fraction of the staff time required to

4http://aas.org/career
5http://members.aas.org/JobReg/JobRegister.cfm
manage, produce and disseminate the Job Register. By 1990, the cost was just more than USD 100,000 per year to produce, edit and distribute the Register.

In 1993, the Society moved the Job Register from a fully print-format publication to a fully on-line publication. After assessing commercially available solutions, it was decided to develop a customized solution in house, which would provide greater flexibility and customization. During a short transition period, the Job Register appeared both in print and online formats; those who requested print could still receive it. Meanwhile, an email alert system was set up that allowed distribution of the job titles newly published each month to be distributed to opt-in subscribers. This service is still in place today. A 250-word posting limit was also imposed to save costs and attempt to encourage brief job descriptions.

Just prior to the conversion to the online version, it took just over half an FTE (Full Time Equivalent, a measurement of the level of staff effort necessary to accomplish a task) to process the job ads, copyedit the ads, invoice and bill the advertisers and prepare and distribute the Job Register. The conversion to an online-only Job Register was primarily undertaken to reduce costs and increase the ease of distribution, as many publications were already online by that time (the Societys journals moving fully online in the late 1980s); it was clear the Internet and Web would be a primary mode of future communication and the Job Register must be accessible using these new communications tools.

With the reduced costs, the small net profit that resulted from the conversion began to be used to bring speakers to AAS meetings on career-related topics, ultimately to offset a fraction of the salary of a staff member dedicated to employment issues (the Associate Executive Officer for Public Policy and Employment Policy Programs, a now defunct position) and undertake other efforts in career services. Due to US tax law, revenues from the Job Register are considered unrelated business income and are subject to tax, although the AAS is a tax-exempt organization. The Society pays this tax each year, but only on the net proceeds after subtracting expenses related to career services, following standard practice in this area with the advice and guidance of qualified tax accountants and legal counsel.

Today, the Job Register is run using a database driven system to receive the Job announcements from employers, process payments for the publication of the ads and handle the subsequent online posting. The 250-word limit has been lifted, but a fee per word is charged for ads with more words than this limit. The current cost for a posting for one month is USD 190.00, with USD 0.25 charged for each word beyond 250. The Register is published monthly on the first of the month. Submissions are due no later than the 15th and must be paid for in full by the 25th of the month prior to the ad
Figure 1. New jobs published by month in the AAS Job Register since 2004. Note that jobs listed for multiple months are counted only in the month they appear. All job types are included in this figure, permanent, postdoc, temporary, etc.

The number of jobs posted month-to-month varies due to the academic job cycle, but the year-to-year pattern has remained constant for years. A histogram showing the number of jobs published each month from 2004-2010 is shown in Figure 1.

A snapshot of the current Job Register is shown in Figure 2. The design and features of the Job Register web page have evolved over time in response to both job seekers and employers with the guidance of the Committee on Employment. Jobs are grouped according to defined categories, but advertisers may select the category for their job. Multiple categories are not allowed. Each job entry is for a unique job, except for the rare case of an employer being unsure how many positions may be available.

The Job Register is currently published once per month. Some online job listing sites are ‘live’ in that as soon as a job announcement is submitted, paid for and approved, it appears online. This system is detrimental and interruptive to the working life of a job seeker, many of whom are either graduate students or postdocs trying to get research done. The AAS has opted to publish only once per month to minimize the number of times a job seeker has to review the posted jobs. Having a live site would require daily review for new postings, or notification any time a new posting went live. Although not immediately appreciated by Job Seekers or Employers, once
the rationale for the once-a-month posting is explained, nearly everyone approves of the policy.

3. The AAS Job Center

The AAS has long had a so-called “Job Center” at its annual meetings. The Job Center serves as both a “live” posting of the current Job Register listings and as a way to connect job seekers with employers for either informal or formal interviews. The center is usually set up on the exhibit floor of the AAS Meeting hall. It consists of poster boards with the current Job Register listings, tables and chairs, a message board and books of resumes of job seekers attending the meeting. Usually located nearby, interview rooms are available for use by employers.

In the early 2000s, the Job Center was shifted to occur only at the winter meeting. This step was taken due to the very low number of job seekers
or employers participating at the summer meeting Job Center. We do not anticipate having a Job Center at the summer meeting in the future, as the recruitment cycle has not shifted from its established fall-winter focus, with the winter AAS meeting falling in early January, near the peak of recruitment activity and demand in May/June remains low for this kind of service.

4. AAS Career Workshops

The AAS has regularly organized both sessions and workshops related to employment and career development at its annual meetings. At the 2010 winter meeting of the Society, five workshops were held ranging in topic from specific advice on interviewing, job seeking and resume writing to giving good oral presentations. Most workshops have a nominal registration fee, which helps offset the costs of holding the workshop (supplies, photocopies of materials, audiovisual support, etc.) as well as motivating workshop registrants to attend the sessions once registered. To ensure the workshops and their content are valued by participants, we carry out surveys of participants to assess both the content and the presenters. These surveys help us establish new workshops, use alternate presenters and ensure high quality workshops in the future. Included here is a typical comment from one of our longer-running workshops:

"Even though the winter AAS meeting has been over for nearly a month, I am writing to thank you for including the career workshop in the schedule (Advancing Your Career in Astronomy: Identifying and Seizing Opportunities, Learning and Honing Professional Skills). The presenters discussion on the skills needed to become a successful astronomer with a good reputation was extremely valuable. As a student in the middle of my graduate career, I learned tips that will be useful throughout the various stages of my work with respect to reputation, networking, and career development. It was, however, the one-on-one career consultations that were exceptional. Her suggestions on improving a CV have been useful, and the career advice she gave me was honest, unbiased, personalized, and well considered. In twenty minutes she instilled me with confidence in my decisions and future; I am exceedingly grateful for having the opportunity to meet with the presenter one-on-one."

5. The AAS Committee on Employment

The AAS Committee on Employment, initially established in 1971 as the Committee on Manpower and Employment in Astronomy, was subsequently
renamed the Committee on Employment in June 1988. The committee is now charged to facilitate the professional development and employment of astronomers at all career stages and on all career paths, and to promote balance and fairness in the job market. The Committee typically has between seven and ten members, from a range of career backgrounds, including academics and those working for the government and industry. Council appoints volunteer members for three-year terms and the chair serves year-to-year with reappointments as chair possible.

Bart Bok, who served on Council at the time, chaired the initial committee. The committee was formed after Executive Officer Hank Gurin (who served from 1969-1979) presented a report to the AAS Council about a job placement service he had been running informally through the Executive Office (himself and an assistant). The report submitted by the newly formed committee at the San Juan meeting of the AAS in 1971 recommended the establishment of an active placement service similar to a new Job listing service run by the American Institute of Physics, which ultimately became the Job Register, along with a variety of other recommendations related to expanding the range of employment opportunities for students of astronomy. Two recommendations made by this committee at the time that stand out, as they relate to problems with us still today, were the education of graduate students in astronomy as to their realistic job prospects and the limiting of graduate students in astronomy due to overproduction of PhDs.

Currently, the Employment Committee meets roughly monthly by teleconference to discuss ways to accomplish its charge. The committee serves several vital roles, including envisioning new services or programs, developing suggested speakers for AAS meetings, overseeing existing career services programs and providing advice to the Council on issues of employment policy. Recently, the committee has worked with the Statistical Research Center of the American Institute of Physics and other AAS committees to develop surveys of the career path for early-career astronomers (a longitudinal survey) and a survey of the astronomy job market (following up with Job Register posters to determine how positions were filled and by whom).

Additionally, the committee has undertaken the recruitment and editorial review of articles for the AAS Newsletter relating to astronomy careers. All but the current version of the AAS Newsletter is available for free.

The committee also recently undertook the reinvention of the Non-Academic Astronomers Network, meant to be a service that can connect astronomers working outside of academia and to provide a resource for students and postdocs seeking information on opportunities outside of academia.

6http://aas.org/publications/newsletter_archive.php
7http://aas.org/career/nonacademic.php
6. Statistics Gathered by the AAS or by the AIPs

Astronomy is a complex field, with many different types of employment available from University professorships to staff astronomers to planetarium staff. Tracking the discipline in any reliable way is a challenge, especially given the size of the AAS Executive Office, which is small. Over time, we have come to rely heavily on the help and assistance of the American Institute of Physics Statistical Research Center. This group of highly trained statisticians and survey experts help track the disciplines of physics and astronomy and provide many valuable reports, all of which are available online. The AIP helps track the number of minorities working in our discipline, the number of faculty and where they are located, the typical salaries received by those employed in astronomy and many other relevant statistics.

7. Other Miscellaneous Activities Related to Career Services

The AAS Council has passed and reaffirmed a statement relating to the postdoctoral selection process in the United States, focused mainly on the so-called ‘named’ postdoctoral fellowships. This was done to ensure an even playing field among the various fellowships and to prevent the early offer of a position to particularly well-qualified applicants by a single institution. This policy is detailed on the Job Register publication policy page and on the AAS Council Resolutions page. The text of the resolution is included below.

On the Postdoctoral Application and Selection Process
Adopted June 1988, Kansas City, MO; Reaffirmed May 2003, Nashville, TN; Reaffirmed January 2006, Washington, DC

The AAS Council is concerned about the procedures in the postdoctoral application and selection process. The postdoctoral experience now includes almost all recipients of the Ph.D. in Astronomy and Astrophysics. In recent years, deadlines for application and selection of postdoctoral appointments have advanced in the year and there is strong competition for new graduates.

To insure an orderly and fair postdoctoral appointment procedure, the AAS Council recommends that the deadline for decisions on postdoctoral offers will not be required earlier than February 15th of a given year.

The AAS has also been concerned for many decades about the number of under-represented groups working in our discipline. To help focus attention on this issue and the importance of improving the distribution of people

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8http://www.aip.org/statistics

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within the field, the AAS Council adopted a resolution on under-represented groups and endorsed the so-called Baltimore Charter⁹.

**On Women, Under-Represented Groups and the Baltimore Charter**

**Adopted 11 January 1994, Washington, DC**

“Recognizing the principle that the inclusion of women and other under-represented groups in the ranks of professional astronomers is important and highly desirable, the American Astronomical Society is committed to addressing issues of attitude and procedure that negatively impact any groups. The American Astronomical Society supports the goal of the Baltimore Charter, which is to promote a culture in which both women and men can realize their full potential in scientific careers. We recognize that there are many differences in the institutional structure of astronomical organizations, and that no single strategy is likely to be suitable to all of them. We do, however, urge all astronomical programs to formulate strategies that will enable them to realize the goal of the Baltimore Charter. We note that the AAS has already modified its bylaws to reflect commitment to this goal.”

8. Conclusions

The AAS Career Services program has grown stochastically since the hiring of a full-time Executive Officer in the late 1970s. As staff time and resources have become available and the goals in this area have been clarified, the programs and services have expanded logically over time. The recent strategic planning exercise, undertaken by the Council from 2006 to 2009 and supported by an ongoing review and revision of the strategic plan, will guide the development and implementation of future programs. Right now, the combination of a comprehensive Job Register with the other programs and services combined with an engaged and supportive Employment Committee providing oversight and guidance allow the Society to efficiently provide Career Services at a low cost with significant impact. As long as there are jobs in astronomy, the Society will provide Career Services designed to support and enhance the careers of individual astronomers and the institutions that seek to employ astronomers to expand our shared knowledge of the Universe.

⁹http://www.stsci.edu/stsci/meetings/WiA/BaltoCharter.html