

## **STATUS**

The Committee on the Status of Women in Astronomy - American Astronomical Society

**JANUARY 1993**

### **Note from the Chair's Corner**

by Debra Elmegreen

Our committee includes Geoff Clayton, Kathy Eastwood, Debra Elmegreen, Jay Gallagher, Laura Kay, Geoff Marcy, and Jill Price.

Coming soon is the long-awaited List of Women Astronomers, including subfield and expertise, which will be useful for SOC's, invited reviews, colloquia, etc. At the request of many astronomers, and at the initiation of Judith Pipher, the AAS under the direction of Peter Boyce is sending out a questionnaire for women who wish to be included. The list will be available electronically (by ftp) or by hard copy; details will be announced. Since this is a list organized by the AAS, and will require constant updating by the main office, ONLY women who are members of the AAS will be included on the list. We want to emphasize that we would like as many on it as possible, and hope that this will provide some incentive to join the AAS if you have not. Spread the word to your students! (For details on joining, find any AAS member's directory and fill out the form in the back; or contact the AAS Executive Office, 1630 Connecticut Ave. NW, Washington, DC 20009, ph. (202) 328-2010, fax (202) 234-2560.)

We are all grateful to Meg Urry and the SOC for the successful September meeting on Women in Astronomy, hosted by the STScI. The participants underscored the need for the AAS membership to consider ways to increase awareness and positive action towards women and minorities in astronomy, from issues of respect to issues of harassment, employment, and the like; the Conference Proceedings are in the works.

Observatory and laboratory safety is an issue of concern to many, particularly to students using campus observatories in remote corners. We urge everyone to reexamine the conditions under which their students, especially women, are expected to work. Use the buddy system and make sure there are security precautions in place.

We are planning the CSWA meeting at the Berkeley AAS and would appreciate feedback about the issues of utmost concern that the membership wants addressed to the entire AAS. Please let your thoughts be known to anyone on the CSWA committee.

Geoff Marcy made a departmental survey of women and ways to improve their situation; it has been written up by Geoff and Debra and will be published in the Baltimore proceedings.

A reminder that there is an e-mail network (for men and women) which continues to generate enthusiasm and lots of discussion; to send comments or join the list, e-mail to [AASWOMEN@vaxsar.vassar.edu](mailto:AASWOMEN@vaxsar.vassar.edu).

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## **Suggestions for Improvements in Job Search Procedures**

by Kathryn N. Mead

### **Abstract**

The job search process would benefit from the dissemination of more information regarding (successful and unsuccessful) candidates' qualifications. A more open process would either encourage increased fairness or allow inequities to be proved more easily. While a job application is arguably more important to one's career than a funding or telescope proposal, only the latter two result in any feedback whatever. This seems a serious inconsistency. This article makes some suggestions for improving the system.

### **Problem 1.**

Not all searches are fair. Because any applicant can be rejected on the basis of "incompatible research interests", conscious discrimination is easy to conceal. Even those who intend to be fair have little guidance about how to ensure that minorities and women are given thorough consideration. The supposed controls on the hiring process, as described below, really do little to ensure that a typical job search will be fair.

- Ads in the AAS Job register must say AA/EOE in order to be published. However, these initials do not guarantee that proper procedures are followed because there is no enforcement of the rules.
- Currently, there is absolutely no systematic way for applicants to know why they were not chosen or why the person hired was chosen. Because no one except the search committee knows what went on, there is no opportunity for external evaluation.
- If you have access to non-public information and have reason to believe that you were discriminated against it is very difficult to prove. Official grievance procedures are slower than forming an M star and to prove a violation requires a large quantity of evidence of blatantly discriminatory behavior. However, the biggest problem is disparate treatment due to oversight. Most search committee members are not Human Resources personnel, so they are often unaware of what constitutes fair treatment with regard to Affirmative Action.

### **Problem 2.**

The current no-feedback system is unsatisfying. Most rejected applicants get a simple form rejection letter saying either that there were many excellent applicants or that there was a research specialty incompatibility, or both. Especially for "junior" level people, this lack of explanation leads to the (perhaps incorrect) conclusion that the job search process is capricious, irrational and too subjective. Proposals for funding and telescope time get more feedback than job applications.

### **How The System Can Be Improved?**

If more information about job searches was made public, then interested external parties could evaluate whether or not searches were fair. Conscientious employers could set an example for employers that want to improve. Some suggestions for information which should be available are listed below.

### **Things That One Might Like to Know When Applying for a Job:**

- How many jobs were advertised in that department in last five years?

- How many jobs were advertised at that institution in the last five years?
- How many people were actually hired?
- How many women were hired?
- \* Perhaps these statistics should be published in the job ad.

### **Responsibility of the Search Committee During the Search:**

- Lists of finalists should include at least 25% women (rounded to the next higher integer) and one minority. If the "top" candidate is a white male, then the most qualified female and minority candidates' applications should be submitted for approval (of dean, provost. etc.) with that of the first choice candidate. If he does not take the job, then, if the second choice is also a white male, it should be clear that he is more qualified than the most qualified woman or minority.

### **Information That Should Be Available After the Search:**

- Rejection letters should state the name of the person that was hired (many places do this already). Or, the name should be published promptly electronically or in the job register.
- Rejection letters should state how many females and males were interviewed as a fraction of the total number of applicants. This information would, among other things, make public the number of women in a given job pool.
- Rejection letters should also contain a brief explanation of the successful applicant's strengths. This way, the unsuccessful applicants would have some information about what made the successful candidate "more qualified".
- Once a job search is complete, the information mentioned above could be published in the Job Register (as a prerequisite for allowing publication of another ad in the Job Register).
- Rejection letters should contain comments on the applicant's qualifications for the particular job. Affirmative Action guidelines require that search committees submit this type of information (for women and minorities) in writing to the institution's affirmative action officer. Making this information public will encourage forthrightness in this process.
- The barest minimum that should be required is: for each person that is hired, the employer write a statement specifically and thoroughly explaining the strengths of the successful candidate and submit the statement to the AAS. Preferably, this statement would be available to anyone or at least to all applicants for that job. If no one was hired, then this should be explained.
- A statement of the qualifications of all finalists for a job would be even better. One thing that would be discouraged by this procedure is the selection of "straw woman" finalists. Also, it would allow verification of the consistency between the requirements stated in the ad and the qualifications of the finalists.
- Measures should be adopted to ensure that not only is an advertised position bonafide and not promised to anyone (as is required for publication in the Job Register) but that the position is not strongly intended for anyone either.

### **Conclusion**

Job seekers as well as the scientific community would benefit from several changes to the current secretive job search system. Unintentional and blatant discrimination would be discouraged by requiring feedback to job applicants similar to the feedback given to proposers for telescope time and funding. Rejection letters should contain specific feedback about the strengths and weaknesses in the addressee's application. At the very least, the name and qualifications of the successful applicant should be made public.

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## **Women at Work: A Workshop on the Status of Women in Astronomy. A "Minority" View**

By Geoff Clayton

On September 8 and 9, I saw the future. I saw it at STScI when I attended "Women at Work: A Workshop on the Status of Women in Astronomy". This meeting represented the future because the attendees were not largely white men but were more a reflection of the general population. The meeting seemed to be a great success for those attending. Everyone I talked to at the meeting was extremely enthusiastic about it. In addition to listening to talks on various subjects, we were divided up into small groups to discuss 6 topics: Excellence, Culture in the Workplace, Sociology of the Scientific Process, Quality of Life, Goals for Equal Representation, and Education. The purpose of this was to develop themes for "The Baltimore Charter" which will lay out recommendations for equal opportunity for women. I won't attempt to outline all the accomplishments of the meeting here but a nice summary appeared in the October 1992 issue of the STScI Newsletter.

Like this newsletter, the workshop was preaching to the choir. Whether this meeting will result in an increased awareness of women's issues in the general astronomical community, only time will tell. The problem is reaching the right audience. Perhaps the Baltimore Charter can be a focus for these efforts. While the number of women in astronomy has been rising quickly so has the number of men so that the fraction of women in the AAS is still only about 12%. There were 168 women and 42 men attending the workshop. To put this in perspective, assuming that all the attendees were AAS members, then almost 25% of the female members of the AAS were at the workshop while less than 1% of the male members attended. Many astronomers, and since 88% of astronomers are men, I mean many male astronomers, have the impression that we are all sensitive 90' s guys and there is no longer any problem. They think:

1. They treat women the same as they treat men.
2. There is no discrimination anymore.
3. Affirmative action programs are actually giving women an unfair advantage in hiring.

The Statistics that were presented at the workshop showed clearly that number 3 is wrong. Women are being hired exactly in proportion to their numbers in astronomy. This is good news because it indicates that women are not being discriminated against in hiring. However, there is a strong impression out there that if you are a woman, you will get hired more easily. The fact that so few women have tenure-track appointments doesn't seem to make much of an impression on men who think this way. In fact a colleague of mine, a male astronomer sensitive to women's issues who did not attend the workshop, started complaining to me about the "pinhead liberal" ideas coming out of the women's workshop. He was under the misapprehension that the workshop had adopted a platform advocating quotas for the hiring women. The Backlash has definitely arrived in the astronomical community.

I think also that the male misimpressions above led many departments to feel that this workshop was not very important. Generally, if departments sent anyone to the workshop, it was the "woman" in the department. Some departments were very responsive. Wisconsin sent 8 people, almost all grad students. Unfortunately, people who could most benefit from the "Click experience" as Sheila Tobias put it, were not in me audience.

I believe this was a very useful workshop for both men and women. The best part was just getting together with a bunch of people who already "get it". Also, it was nice to see that the old-girls network in astronomy is alive and well. I think this meeting did a lot to strengthen that network.

The real importance of this workshop was in meeting other people and finding out that there are in fact other people in astronomy having the same experiences. The workshop was very valuable for me as a man, because I don't have the same experiences that women do, and I may not experience things in the same way as other people. In this setting, I had the opportunity not only to hear individual experiences but more importantly how many women have experiences in common. I was very disturbed, for instance, by the strong negative feedback from many people at the meeting with regards to how sexual harassment was being handled by universities. There was a clear impression that the Ombuds offices did not seem to be neutral in these proceedings because the ombudspople were university employees.

Many of the experiences related were touching and personal, in particular when referring to some of the women who have acted as mentors over the years such as Vera Rubin and Margaret Burbidge. Also, Anne Kinney's after-dinner talk at the Banquet really drove home how a woman's experience in astronomy is strange and different compared to mine as a man. Some lessons of the workshop go way beyond gender issues. The two talks by Sheila Tobias were SO good that it reminded me just how poor most of us, men and women, are at giving a talk.

One of the most interesting topics that came up at the workshop was the possible effect on astronomy of large demographic changes. For instance, what would happen to science if there were more cooperation and less competition? At the same time that the representation of different kinds of people with different backgrounds increases in astronomy, you will naturally change how astronomy is done. I don't want to sound like Bill Clinton but I think we are ready for change.

## **Editorial Response:**

by Kathy DeGioia Eastwood

Several of the points raised by Dr. Mead are excellent. It is true that there is no watch dog over institutions who proclaim themselves "AA/EEO"; all that is required is that the institution have a plan for Affirmative Action. It is not required that the plan be vigorously pursued. Thus whether or not members of screening committees actually understand Affirmative Action policies depends on how proactive the institution is. Thus it might be useful for the AAS to play watch dog in some way.

I was surprised when I called our Affirmative Action office on campus to verify that there are in fact no watch dogs. Our campus has obeyed not only the letter but the spirit of law. I have been on several search committees, and it has always been required that the pool of applicants adequately represent the available labor pool. Women and minority candidates have been actively pursued at our university. Unfortunately, this is not true at every institution.

However, while I agree with Dr. Mead that the standard letter of rejection could at the very least include a description of the qualifications of the person receiving the job, I do not think it is practical for every applicant to receive a description of his or her strengths and weaknesses. While I agree that in the best of all worlds it would be a great thing, it is in fact impractical for search committees to provide that kind of detail for 200 plus applicants.

I think that the best interests of both sides, the applicant's and the employer's, would also be served by job descriptions being more precise in describing the required qualifications. Most job descriptions are left deliberately vague, just in case they might be able to attract the next Einstein. But in reality there are always certain expectations such as a narrow range of field, special teaching qualifications, and other specific skills. Normally these criteria are used to cut the pool from over 200 down to a manageable number such as 30 or 40. It would save both sides a lot of time and anguish if these criteria were laid out so that only those 30 or 40 applied in the first place.

One last point that should be made is that the use of quotas in preparing a short list may be unwise. It gives the impression that the women and minorities are only on the list to make up the quota rather than because of their qualifications.

## The Woes of a Physicist

by Kathy DeGioia Eastwood

After a hectic day at the office, the physicist stops for groceries on the way home. As she accelerates around the corner approaching her house, the coefficient of static friction on the seat cover is enough to keep the bottom of the bag of groceries in place on the seat. However, the center of mass of the bag continues temporarily in a straight line, and the groceries subsequently spill onto the floor of the car.

After thanking the babysitter and carrying the groceries into the kitchen, the physicist starts cooking dinner. She is interrupted by her younger daughter, who insists on being pushed on the swing in the back yard. As the physicist repeatedly converts chemical energy from her muscles into potential energy of the child, her arms begin to get tired. As she pumps more and more energy into the system, the child's kinetic energy and velocity at the bottom of the swing keep increasing until the child is flying past the muddy ground.

They are interrupted by the arrival of her teenage daughter, who is crying as she heads straight towards bedroom. By the time the physicist arrives at the door, it has been barricaded by an object with sufficient mass such that the product of the mass and  $g$  and the coefficient of static friction of the carpet is higher than the force she can exert with her tired muscles. She finally gives up and, bearing a wail from the back yard, rushes back to find that at the moment of zero potential and maximum velocity her daughter has dumped into the mud, skinning a knee.

In the bathroom the physicist applies bandages and puts the muddy jeans into the sink to soak. Hearing an explosion, she rushes towards the kitchen. The dog has spilled her water dish on the kitchen floor, reducing the coefficient of sliding friction to practically zero, which makes for a high-velocity trip to the stove. The temperature differential between the burner and the top of the stew had become so high that violent convection has ensued, pushing most of the stew over the sides of the pot. In the oven, the heating elements on the bottom had also created a  $\Delta T$  sufficient to create convection, but in this case the air had circulated to create a fairly even temperature. The heat was then conducted from the hot air past the surface of the brown-and-serve rolls, and the surface of the rolls had undergone an unfortunate chemical reaction.

The explosion, however, had come from the microwave oven. The microwave photons had excited the water molecules inside the vegetables, which increased the internal temperature and pressure. When the internal pressure on the inside became greater than the ambient pressure, the vegetables had splattered all over the inside of the microwave.

After a dinner of peanut butter sandwiches and the remaining stew, the physicist puts the children to bed while her husband does the dishes. As they settle down to an evening of grading papers, she ponders whether the universe is truly as rational as her colleagues have led her to believe.