

Committee on Minorities Annual Report -- 2000

Diversity at DOE

Late last year an APS member contacted COM with real concerns about diversity and hiring at the DOE national labs. After hearing those concerns COM decided that the best approach would be to take up those concerns and to push the issue in a coalition with the National Society of Hispanic Physicists (NSHP) and the National Society of Black Physicists (NSBP). The labs collectively are the single largest employer of physics researchers and DOE has serious diversity goals and plans as articulated by the Secretary. However at the grassroots level the strategy for recruiting and **making more** Ph.D. physicists needs more attention and experienced input. Therefore COM, NSBP, NSHP has a plan to approach the labs not as inquisitors and accusers but as friends and colleagues willing to help.

There are two main issues we have with DOE. The first has to do with accountability for diversity results and reporting, that is what are the requirements for diversity per the management contracts, and the real veracity of the reporting of diversity efforts. That is we are concerned that despite all the articulations on diversity of the current Secretary very little is actually required via the management contracts. Moreover when diversity reports are made we are concerned about the reliability of the reports in describing the true situation at the labs. In short despite all the aspirations for diversity of DOE we feel that where the rubber meets the road there is a serious deficit of effectiveness.

But the bottom line is that to increase diversity in the scientific staff it is the division directors, those with the direct hiring authority and search responsibilities that must be held accountable. Commonly we hear the refrain that they do not know where to find minority candidates. This highlights the importance of pushing this issue with NSHP and NSBP. Our experience is that many of our colleagues are not aware of the existence of these two organizations. Since minority physics majors (and in many cases the professors that teach, advise or otherwise mentor them) are drawn to these organizations, then a successful outreach effort by any lab must include these two organizations.

With these principles in mind our approach has been the following, first we compiled the staff diversity statistics at the labs to verify the many anecdotes that we have heard. That effort confirmed that the labs could be doing a much better job at recruiting and outreach. Our next step is to send a letter to DOE headquarters expressing our concern and ability to help. At the same time we would request a meeting at headquarters with the Secretariat and the Director of Science along with the various division directors at the labs. It is important to COM, NSHP and NSBP that the representatives from the labs be actual scientists with line and hiring authority attend this meeting as opposed to officials from human resources and/or workforce diversity offices. Likewise it is important that this effort be regarded at DOE and the labs has colleagues coming to help instead of adversaries coming to make accusations.

Our goals for outcomes of this meeting and indeed this entire effort are stated below:

1. Making Diversity a Major Compliance Item and Performance Evaluation Item for the Lab Director(s) (and Division Directors) per the Management Contract.
2. Establish Diversity Oversight Panel advisory to the Director of the Office of Science and of Defense Programs and Offices of the Secretary, Deputy Secretary and Undersecretary at DOE made of scientists and administrators (academic and industrial) and representatives from OSTP (models: PCAST, NSB, Board of Visitors, United States Naval Academy, Civil Rights Commission, Minority Affairs Alumni Council). This panel will aide in ensuring compliance and accountability. I see this panel being mainly of 'friends willing to help'. 2a. Schedule a regular series of site visits to the labs to meet the division directors, department heads, or line scientists with hiring authority to advise and consult with them regarding diversity in hiring.
3. Immediately make a concerted effort diversify the review panels for the labs themselves, for DOE research grants, and resource proposals at the national resource facilities.
4. Gain commitments from the lab directors to send recruiter teams constituted primarily of line permanent staff scientists to meetings of NSHP, NSBP and NCBPS. To advertise permanent staff positions, post-doctoral fellowships and student programs specifically with NSBP, NSHP and APS/COM.
5. Lab Director(s) (and Division Directors) certify that broad scope outreach with particular focus on minority and women candidates was taken in every post-doc and permanent science staff hire before such hires are made.
6. Diversify and include NSBP, NSHP and APS/COM in all DOE science outreach programs. Indeed partner with these organizations to bring these programs to minority communities in Indian reservations.

COM's request of the Council at this time is an endorsement of this effort, approach and goals. With that we hope that the Executive Officer would initiate the contact with DOE headquarters and we can get the meeting scheduled for Spring 2001.

Corporate Scholarship

Perhaps the most delightful duty of COM is the awarding of the Corporate Scholarship for Minorities who major in Physics. Every year we get over sixty applications worthy of being funded, but only have funds to award 25 scholarships. The students that we have been funded in recent years have been amongst the most sought after students in the country. One was a finalist, second place finisher in fact, of the Westinghouse Science Talent Contest. Most of the students not only are doing well in the classroom but also are involved in a serious way in undergraduate research.

However we are working to improve the program in 4 ways. First we are stepping up our mentorship of the students. The scholarship carries a \$500 award to the physics department

where the student is enrolled. In return we request that a mentor be assigned to the student. A few years ago we found that a significant number of students did not have mentors. We have stepped up and prompted the department to assign a mentor and/or members of NSBP or NSHP to be mentors. This is indeed another area where COM, NSBP and NSHP are working together.

With a great effort by the APS staff we have conducted a review of the program in terms of analyzing what has happened to the students, i.e., numbers that have finished a BS degree in physics, gone on to graduate school in any area and their subsequent career path. The results of this study indicate that the program is a spectacular success. 85% of the students we have funded achieve the program's objective, that is complete the BS degree in physics. But remarkably 16% go on to complete the Ph.D. degree in physics or in something very closely related, e.g., materials science.

What we intend to do with this study is the dress it up into a nice brochure that would serve two purposes. First we want it to aid in the fundraising to continue the program beyond 2003. Second we want it to be a brochure we can give to K-12 students, teachers and counselors to entice more students to take physics courses in school and consider a science career. Winning the hearts and minds of teachers and counselors is an important component of this effort.

Finally, prompted by the Gates Millennium Scholarship Program (GMSP) we are moving to build a relationship with the Gates Foundation and its GSMP program manager the United Negro College Fund (UNCF). Apparently GSMP did not receive the number of quality applications that they would have liked. As stated earlier, COM gets more applicants than we can fund for the APS Corporate Scholarship. We therefore would like somehow make sure inasmuch as possible that our applicants become GSMP applicants, and that APS become identified by the Gates Foundation as an excellent source of stellar science students. This implies involvement in some interesting politics that I will not detail here. But despite no movement yet on the front of working with UNCF, we have put a link to the GMSP on the APS webpage where students download the Corporate Scholarship application. Hopefully we will see in the future many of the GSMP winners will in fact be physics students.

Outreach

COM has come to the realization that we must do our own outreach to schoolteachers and counselors to encourage them to encourage students to take more science classes and to consider majoring in physics. We feel that physics loses many students to the ill-advise of counselors who steer them away from taking classes " hard classes that my ruin you GPA." or otherwise negative reinforcement away from a career as a scientist. So we must reach out to the teaching profession and provide positive role models and human examples of successful students and professionals in physics. This effort really dovetails on the 'Math is Power' initiative of the National Action Council for Minorities in Engineering (NACME). What NACME has done is fund a series of public service announcements and made a nice poster directed towards students and parents do demand that serious and advanced math classes are offered in their schools. Our effort will be directed to include the teachers.

We will develop an appealing poster for students by adapting the 'Masters the Universe' poster

from the centennial meeting. As stated before we hope to make brochure which would include several profiles of the students. Then members of COM and our partners in NSBP and NSHP will start attending the national and regional meetings of general teachers organizations and unions, e.g., the National Alliance of Black School Educators (NABSE) and the unions, NEA and AFT. Our plan is to buy exhibitor space and staff "physics major/career information booths". The poster and brochure mentioned here, as well as materials we can get elsewhere would be part of our booth materials. However the most important aspect is to start building relationships with the larger teaching profession (beyond AAPT) to get all teachers convinced that taking science courses and considering a physics career is a good thing just as desirable as any other subject and career.

Summary

These represent the major efforts of COM for 2000 and plans for 2001. Some of them require a plus up in funding from the Council and we will be making those requests formally in the future. However we would like feedback from Council at this time on our project with DOE. We would like an endorsement of our effort so that we can begin setting up the meeting we would like to have at DOE headquarters.

One very good thing about the DOE project is that we have formed a real partnership with our constituent societies, NSBP and NSHP. The two societies are actually meeting to find other ways in which they can work together. This will be an important legacy of the year that COM has had. With them being partners in the DOE project their visibility will be increased which was definitely one of COM's intentions. So we hope that 2001 will be an important year in the development of these organizations. But that is COM's general strategy, to increase visibility, make partnerships and be more effective in bringing more students into the physics profession.

In closing we should also mention is that we have fantastic sessions planned for March and April 2001. Our March session is titled "New Strategies for Diversity in the Beyond Affirmative Action". The speakers will be President Natalacio of UTEP and the National Science Board, Warren Buck, George Campbell, President of Cooper Union and formerly President of the NACME, and Cherry Murray. For April 2001 we are actually partnering with CSWP to put on two sessions. One session is on diversity efforts by the federal R&D agencies and includes Millie Dresselhaus of DOE, Daniel Goldin of NASA and Rita Calwell of NSF. The other session includes John Slaughter, former chancellor of UMD-College Park and current president of NACME. Indeed in 2000 we were able to plan more excellent sessions than we could put on. We have a great sessions planned well into 2003 including one featuring winners of the Corporate Scholarship.

Submitted 18 November, 2000 by
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