

Diversity Report 2010

Session I, Presentation by Mrs. Earnestine Baker:

- UMBC Meyerhoff Scholars Program was founded in 1988
- First Class of 19 African American males arrived in 1989
- Women were added in 1990
- In 1996 the program was open to all high-achieving high school students
- ~3% of all Science & Engineering PhDs are African American
- The program wanted to address the shortage of Underrepresented Minorities pursuing terminal degrees in SMET fields.
- 50-60 students/yr.--600 applications
- 700+ Graduates
- The program has generated the highest number of Science & Engineering PhDs in the Country

Meyerhoff Program Philosophy:

- Exposure to Research Scientists
- Exposure to Research Experiences
- Comprehensive Summer Bridge Program (6 weeks prior to Freshman Fall semester)
- University involvement
 - Program advisor for the first 2 years
 - Support throughout program
 - Retake STEM courses with grade of C
- Provide a support network
 - Learn to study individually and in groups (Team Building and Leadership Seminars)
 - Activities with mentors and parents
 - Parental Involvement: Meyerhoff Parent Association
 - Regular meetings to discuss success and concerns

Barriers to success:

- Financial Aid
- Fear of disapproval/rejection by Peers
 - We need to expose the community to scientist and successful graduates
- Medical vs. Graduate School (medical school more common)
 - May have shadowed a physician
 - Need to impact guidance counselors and science teachers who don't know about careers in science (Consider inviting High School teachers to events at Universities)
 - Impact perception about getting a real job
 - Why are you still in school?
 - Need exposure to PhDs and MD/PhDs-consider visits to the community or local high school and share personal stories
- Inadequate preparation to attitudinal/behavioral demands of the Academy
- Specific gaps in knowledge/skill development
- Limited exposure to models of academic excellence and scholarly practice
- Perceived hostile/unresponsive environment
 - Overall low expectations
 - Common thread for minority undergraduates: "You cannot do it"
 - Lack of peers
 - Isolation

Mentors:

Peer to Peer Mentoring: mentors close to own level can be the most effective. A mentor does not need to be a full professor to mentor effectively.

Session II, Strategies for increasing Diversity in Cancer Biology

We were fortunate to have **Mrs. Earnestine Baker** continue to participate during the second session. In addition, Dr. Thomas Wiese and Damon Williams participated in our group from Xavier University of Louisiana, a historically black university according to the NIH criteria. We discussed how to specifically increase minority recruitment based upon their first hand experience with the students. The main problem is one of communication, the students are very interested in careers in cancer research but have difficulty finding the opportunities that are available to them. Navigating to appropriate websites for every institution or program is not practical. Our main recommendation is to improve the CABTRAC website to address Diversity Recruitment.

Our specific recommendations were:

- 1) ***The CABTRAC website should be a central repository for all information on training in Cancer Biology***
- 2) To have pages on the CABTRAC website dedicated to Diversity Recruitment for each class of trainees: undergraduate students, graduate students and postdoctoral fellows.
- 3) To have the CABTRAC website serve as a central place for trainees to find opportunities to do cancer research at various institutions. Listings could include summer research programs, PREP, MARC, McNair, CURE and RISE programs as well as special fellowships available to minority students. This would be a series of links provided by member institutions as one of the benefits for participating in CABTRAC.
- 4) To have the CABTRAC website link to various NCI bulletins relevant to diversity training. These links are to be provided by Dr. Alexis Bakos, Chief of the NCI Diversity Training Branch.
- 5) Have CABTRAC reach out to historically black colleges and universities to waive the institutional membership fee and/or registration fees so their representative faculty and students could attend a CABTRAC meeting.
- 6) Dr. Wiese recommended having students participate in recruiting at national meetings for minorities instead of university administrators.
- 7) To ensure these websites on diversity can be viewed by anyone even if they are not currently members of CABTRAC. This will allow students to use the website as a resource for cancer biology training information.
- 8) CABTRAC should develop a postcard and promotional materials with our website address to distribute to institutions and students. This could be done by mailings or at a meeting that students from a historically black college or university might attend.
- 9) CABTRAC could consider mailing a postcard to GRE takers indicating our website address for further information on cancer biology training.

NCI Connections and Suggestions:

- Dr. Alexis Bakos suggested she would like to establish a partnership with CABTRAC to do some “matchmaking”. It would be like eHarmony for Science.
- The NCI Diversity Training Branch targets Cancer Biology undergraduates and graduate students (not postdoctoral trainees as the Cancer Training Branch does now)
- Dr. Bakos could provide a list of Cancer Biology T32 training grants so we could contact the PIs to participate in CABTRAC.
- We may be able to target our postdoctoral recruitment by identifying eligible graduate students on Cancer Biology T32s via NIH/CABTRAC.
- She could also link F31 awardees to T32 postdoctoral training opportunities. The NCI could facilitate creating a pipeline from predoctoral to postdoctoral Cancer Biology Training.
- Dr. Bakos mentioned that NCI has a 2-day Diversity workshop where it invites T32 trainees. All students on a minority supplement are also already invited.

- There will be a new Program Announcement from NIH/NCI for Summer Bridge Program funding for high school teachers. Another NCI program has outreach for middle school students.
- Dr. Bakos offered to present CABTRAC info at the minority conferences that she attends

Increasing Diversity: Recruitment Pipeline Ideas and Examples

Issues with identifying **diverse** populations:

- What are all the Diversity Programs?
 - NIH/NIGMS for MARC/Rise program directors
 - ABRCMS
 - SACNAS
- Who are the key advisors for URM programs?
- How do we get the info to appropriate programs to advertise graduate student/postdoctoral trainee openings?

Strategies for Creating a Pipeline:

- Short e-mail to be sent to teachers with the CABTRAC mission statement and weblink
- Increase exposure to middle, high school students via teachers and school guidance counselors
- Invite high school and middle school teachers to explore research outreach programs
- Advertise at Annual conferences for science/biology teachers

Strategies for Targeting Diverse Communities:

- ***There should be a continuum of activities from middle school to the junior faculty level that exposes and mentors training and successful outcomes in Cancer Biology***
- CABTRAC website could list opportunities for:
 - Institutions seeking graduate students or new faculty
 - T32 training grants or PIs seeking postdoctoral fellows
- We need to increase exposure of children and the community to Cancer Research
- The CABTRAC Webpage needs links for opportunities and example outreach activities
- At the Salk, a van was developed that goes to middle schools without good access to science. The outreach activity is staffed by graduate students and postdoctoral fellows. Invitrogen provides kits and experiments are performed. (*Salk representative offered to provide information on webpage to establish "Science van")
- Invite students to campus for exposure to research
- Have Cancer Day Symposiums to increase exposure (one example, Salk: Cancer Day Symposium for T32 participants. Another example is the regional Signaling in Cancer Symposium at Case Western Reserve University. Possible funding could be found to develop Cancer Day Symposium.)
- Advertise Summer Research Programs
- Engage graduate students/postdoctoral trainees to organize or participate in outreach activities
- Get news articles about students & postdoctoral trainees in local papers
- The outreach activities need to include relating your personal stories & experiences to audiences at all levels
- URM institutions seeking information can go to CABTRAC website for more information on opportunities
- Target institutions with large numbers of minority students (Majority Institutions)
- Virtual networking for graduate students and postdoctoral fellows
- Peer to Peer mentoring: Ideas from current students on retention

Additional Marketing and Website ideas:

Increase Exposure to Other Agencies:

- We need to reach out to AACR – CABTRAC is not represented (Suggestion: AACR Minorities in Cancer Research CABTRAC session)
- Inform Cancer Center Directors about CABTRAC and the need for outreach in Cancer Biology Education
- Develop a written description of CABTRAC (postcard or brochure) that can be given out or sent to Institutional Officials.

General Ideas:

- We need to incentivize our students and postdoctoral trainees to send us weblinks: The suggestion was that names will be entered into a drawing for monthly prize for each link sent (Sheridan to send e-mail with info).
- Two-way posting:
 - Post job opportunities
 - Post training grant slots
 - Post an ad for positions wanted
- Schools can go to website and post that they are looking for faculty speakers with contact information
 - Creates relationships & pipelines
- We need a webpage to explain the process of getting a PhD
 - Financial support
 - Explain the process
 - Outline the steps
- Get the word out about our mission
- Explain CABTRAC organization
- Explain the purpose of CABTRAC annual meeting
- Email list of CABTRAC members about dues utilization
- Develop a 1 pg. marketing document about CABTRAC
- Develop a CABTRAC brochure/small blurb with weblink to target:
 - Cancer Center Directors
 - T32 Directors
 - Program Directors
 - Spore PIs (Educational component)
 - Cancer patient/advocacy groups
 - AACR and other societies
 - SACNAS
 - ABRCMS
 - Howard Hughes Programs
 - MARC
 - McNair Scholars Program
 - Collegiate Cancer Council
 - Key Advisors @ other program
- Develop packets to handout (free items with weblink)
- Develop a Facebook page
- Develop a LinkedIn page