

**Cancer Biology Chair and Directors Retreat  
(CABTRAC Annual Meeting)  
Breakout Session Summaries  
Tucson, Arizona November 5-7, 2010  
By Sarah Ryan and Paul Cao**

*Recruiting, Retaining, and Training Minority Cancer Biologists* (Paul)

This session focused on recruiting and retaining minorities, in particular African Americans, in STEM (science, technology, engineering, mathematics) fields. Dr. Earnestine Baker, from the University of Maryland – Baltimore County (UMBC), headed this discussion. She talked about the Meyerhoff Scholars Program and its success over the years at UMBC to increase diversity among future leaders in STEM fields. Briefly, prior to the Meyerhoff Scholars Program, UMBC has graduated fewer than 20 African American STEM majors per year. Since inception, students from this program at UMBC have gone on to pursue higher degrees in STEM fields (medicine, biomedical research). Discussion included why few African Americans pursue PhDs compared to MDs (cultural and parental pressures – MDs earned much more money). Developing interest of minorities to STEM fields should be started early (i.e. undergraduate, summer bridge programs) and a supporting community should be placed along the way to help foster these interests. The Meyerhoff Scholars Program has positively impacted UMBC, and is widely viewed as an exemplary national model for recruitment of minorities into STEM fields.

UMBC Meyerhoff Scholars Program

<http://www.umbc.edu/meyerhoff/>

*Train the Trainer: Planning a Career Symposium at Your Institution* (Sarah)

Moderator: Lynn Matrisian, Vanderbilt University

This breakout session was designed to teach graduate students getting a PhD in cancer biology how to organize and fund a multi-disciplinary career symposium at their school. The goal of this career symposium is to highlight the variety of careers one may pursue with their degree, including academia, industry, science policy, science writing, government, administration, etc. Many schools, including Wake Forest, have classes or Graduate Student Organizations, or the Graduate Office alumni contacts to go to for career advice and ideas. However, the symposium format allows a wider variety of contacts and career opportunities. Our discussion focused around the idea that “There is a will! But what’s the right way?” Vanderbilt University has hosted 3 large career symposiums since 2001. Using Vanderbilt’s career symposium as a model, we realized the first step is to get the graduate office involved. With this resource involved, the next step is procuring funds. The best way to do this is to get the participation of all the different departments, especially those with training grants, and ask for a few thousand from each based on the budget (i.e. Vanderbilt’s budget is \$45,000). Another way to increase funding is to allow students from other regional institutions to attend for a small fee. You can also allow recruiters to come who will pay their own way (i.e. St. Jude). And finally, it is important to have a dynamic keynote speaker who will engage the attendees and boost interest in the event. And of course, be sure to do LOTS of advertising!

In addition to the career symposium planning we talked about the CABTRAC website ([cancerbiologytraining.org](http://cancerbiologytraining.org)) on which job postings and career field contacts will soon be posted. Check back for details frequently and be sure to “Like” the CABTRAC page on facebook. Help spread the word!

Training in Cancer Biology (Sarah)

Moderators: Dr. Frank Torti, WFU

Jim Broach, Princeton University

Resource: *Ph.D. Training in cancer biology*. Torti FM, Altieri D, Broach J, Fan H, Lotze M, Manfredi J, Matrisian L, Yu D, Giaccia A; Cancer Biology Training Consortium. *Cancer Res.* 2008 Nov 15;68(22):9122-4. PMID: 19010881

This session sought to determine the relevancy of the article that was written at CABTRAC 2 years ago to today's cancer biology training field. All in attendance agreed that the article is still highly relevant and would only benefit by adding more. However, the relevancy of the article is perhaps in its succinct nature.

In addition, we discussed upcoming trends in cancer biology training with the field of Systems Biology in mind. After Dr. Broach discussed how the statistical analyses of high throughput experiments are often poorly understood by the labs that perform them, we talked about ways to integrate statistics and biology. (More emphasis was given to this on the second day as well in a talk by Dr. Reinhard Laubenbacher from the Virginia Bioinformatics Institute). The University of Texas has what they call a "stats clinic" where researchers may take their problem to the "doctor" to find a cure. The clinic is usually open once a week, and it's first come, first serve. It is important to remember however that many statistics problems should be addressed *before* an experiment is done to be sure it is properly designed. Other ideas include an "as needed" statistics course for both students and PIs. A lot of the initial statistics training appears to be forgotten by both groups, and they need to go look up techniques when it comes time for an experiment. In addition, two ideas Dr. Laubenbacher had were training a math undergraduate in biology (dual major) or training either a biology or math single major in the opposite technique for their Ph.D. or postdoctoral fellowship.

Many other ideas were discussed on how to engage cancer biology students and improve training. My personal favorite from Dr. Danny Welch of the University of Alabama was to allow students to meet on a periodic basis with an actual cancer patient and their physician. The two would talk the students through the discovery, diagnosis, treatment, side effects, etc. of the process. There are similar opportunities here at Wake Forest including tumor boards (the Prostate Cancer COE meets weekly and has a research or clinical talk, Wednesdays at 5:00 in the CC). However, I think the patient involvement would be most interesting to see.