

**Cancer Biology Training Consortium
Chairs and Program Directors Retreat & Annual Meeting
Basin Harbor Club, Vermont
September 30 - October 2, 2007**

Reports and Minutes

Agenda

Monday, October 1

Postdoctoral Fellow Sessions

Group 1: Cancer Biology Curriculum for Postdocs: Should there be one?

Group 2: How to Pursue Translational Research in Cancer Biology as a Long Term Career Objective

Groups 1 and 2: How Can this Organization Improve Your Lives as Postdocs?

Rebecca Riggins, David Myer, Greg Simon, Gabriella Ion, Christopher Farrell, Don Courter, Feng Shen, Warner Bair, Eric Schneider, Kolbrun Kristjansdottir, Yuxin Feng, Chu Zhang, Shannon Gibson, Patrick Roberts, Ann Vernon Grey, Donna Herber, Daniel LaBarbera, James Amos-Landgraf, Paige Baugher, Donna Frazier, YoungJin Cho-Cunnick

Faculty Sessions

Group 1: Final Review - Cancer Biology Curriculum Manuscript

Amato Giaccia, Susan Kane, Edmund Lattime, Frank Torti, Alan Eastman, Geoffrey Greene, Ann Riegel, Scott Weed, Ann Roman, Steven Balk, Sunita Chaudhary, Jess Cunnick

Group 2: How to Enhance the NCI Cancer Biology Training Reviews

Lynn Amende, Channing Der, Lester Gorelic, Dorkina Myrick, Dihua Yu, Bruce Blumberg, Robert Pauley, Cindy Farach-Carson, Sohaib Khan, Don Ayer, Susann Brady-Kalnay, Steven Nordeen

Group 3: Developing Careers for Cancer Biology Postdoctoral Fellows – Techniques and Strategies

Dario Altieri, Beverly Delidow, Susan Marriott, Barbara Knowles, Timothy Lane, Laurett Rivera, Dennis Watson, Yoji Shimizu, Stratford May, Matthew O'Connell, Susan Wallace

Group 4: Cancer Biology Training in the MD Medical Curriculum

Steven Akman, Wade Gibson, David Helfman, Michael Lotze, Kathleen Green, Arthur Mercurio, James Trempe, Lewis Chodosh, Marja Nevalainen

NCI Discussion

Lester Gorelic and Dorkina Myrick

See ***NCI discussion notes*** PDF document.

CancerTraining.org Web Site Demonstration

Sheridan Wilder

Executive Board - Private Session

Poster Session

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Tuesday, October 2

Postdoctoral Fellow Session

Survival Strategies for Young Investigators and Discussion: Next Organizational Steps for Postdocs

Faculty Session

Business meeting: Review of 501(c)3 status, membership, etc.

General Session: Reports from all Groups, Next Steps & Future Plans

Faculty Group 1 Report - Final Review - Cancer Biology Curriculum Manuscript
Reporter: Amato Giaccia

Faculty Group 2 Report - How to Enhance the NCI Cancer Biology Training Reviews
Reporter: Steven Nordeen & Bruce Blumberg

Faculty Group 3 Report - Developing Careers for Cancer Biology Postdoctoral Fellows – Techniques and Strategies
Reporter: Matthew O'Connell

Faculty Group 4 Report - Cancer Biology Training in the MD Medical Curriculum
Reporter: Marja Nevalainen & James Trempe

Postdoc Group 1 Report - Cancer Biology Curriculum for Postdocs: Should there be one?
Reporter: Kolla Kristjansdottir

Postdoc Group 2 Report - How to Pursue Translational Research in Cancer Biology as a Long Term Career Objective
Reporter: James Amos-Landgraf

Postdoc Report - Essential Skills for Postdocs Report
Reporter: Chu Zhang

Postdocs Report - How Can this Organization Improve Your Lives as Postdocs?
Reporter: Warner Bair

Postdocs Report - Survival Strategies for Young Investigators and Discussion: Next Organizational Steps for Postdocs
Reporter: Rebecca Riggins

Next Steps & Future Plans

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**Faculty Group 1 Report
Final Review – Cancer Biology Curriculum Manuscript**

See ***CABTRAC – CB Phd Training Manuscript*** PDF document.

**Faculty Group 2 Report
How to Enhance the NCI Cancer Biology Training Reviews**

See ***Improving Training Grant Outcomes*** PDF document.

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**Faculty Group 3 Report
Developing Careers for Cancer Biology Postdoctoral Fellows – Techniques and Strategies**

Overarching Premise:

Cancer remains of prime importance as a health burden on society. Cancer also presents a significant financial drain, and must be the subject of continued improvement in terms of prevention, detection and therapy. Established investigators in Cancer Biology can facilitate the recruitment and retention of young scientists into research in Cancer Biology.

Recommendations:

1. Emphasize and support an academic track of career development.

- Postdocs can be exposed to alternative career paths, but there should be a focus on the benefits of an academic career track, especially the intellectual rewards and academic freedom
- Advisors should help postdocs to see that an academic path is *both supported and obtainable*

2. Empowerment (this was the largest point of discussion)

- Advisors should train postdocs with the skills necessary for career advancement
- Grant writing skills are paramount. Postdocs should make use of career development awards, and be aware that the “clock is ticking” from the moment they graduate
- Postdocs should use funding possibilities other than NIH to hone their grant writing skills to lead to RO1 support – ACS, DoD, Leukemia and Lymphoma Society etc.
- Advisors should involve postdocs in aspects of grant writing regarding projects relevant to their own research; this should include the development of long-term project goals. Postdocs must be able to see the “big picture” and conceptualize future directions

3. Written and verbal communication skills are essential!!!

- Postdocs must be able to present a *formal* seminar in preparation for interviews; presentations must be free of lab jargon
- Postdocs must understand what is required for a *job talk* – both the formal seminar and future directions at a “chalk talk”
- Postdocs must learn how to construct a CV, cover letter and statement of research interests
- Co-mentoring may assist in readying postdocs for interviews; practice interviews may also be valuable

4. Advocate Cancer Biology as an Institutional Discipline

- Advocating cancer biology is important for faculty retention and for grant success
- Training programs should share T32 data to look at different programs and compare to other fields of investigation
- Institutions should provide a structured environment to aid in recruitment (and retention) of faculty
- Institutions should encourage collaboration between faculty; they must identify and remove any barriers that impede this
- Institutions must build shared resources to foster translational research

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**Faculty Group 4 Report
Cancer Biology Training in the M.D. Medical Curriculum**

1. Rationale for development of a focused Cancer Biology component in the M.D. curriculum:
 - Cancer is a major public health problem.
 - One half of men and one third of women will get cancer in their lifetime.
 - The majority of practicing physicians will have to deal with cancer care in their practice.
 - Cancer Biology has developed into a distinct discipline that cuts across every area of the health science and should receive greater attention in the M.D. curriculum.

2. Emergent, Model Cancer Biology M.D. Curricula:
 - A second year, month-long integrated course focused on Cancer Biology (Johns Hopkins Univ., Univ. of Miami)
 - A fourth year, 3-5 day mandatory practicum taught during an intersession. The focus was on what newly graduated M.D.s need to know about Cancer Biology as they move into their intern and residency years. (Univ. of Pittsburgh, Univ. of Pennsylvania)

3. Action Items for Group 4
 - A subcommittee was formed to closely examine and compare the content, timing, length and depth of the Cancer Biology model curricula. (Wade Gibson, David Helfman)
 - A subcommittee was formed to develop a survey tool to poll all U.S. medical schools on how Cancer Biology training is distributed throughout curricula. Specifically, is Cancer Biology training dispersed throughout different organ systems courses or is it the subject of an integrative course. (Mike Lotze, Steve Akman, Kathy Green)
 - Formulate a strategy for the integration of M.D. and Ph.D./Postdoctoral training. While recognizing the distinct goals of M.D. and Ph.D. programs, how extensively can Cancer Biology training be integrated? Should Ph.D. thesis committees be assembled to include oncologists or clinical faculty with experience in cancer care? Should postdoctoral and predoctoral fellows be required to attend tumor boards and clinics?

4. Funding questions:
 - How will changes in M.D. curricula be paid for?
 - Can a specific funding strategy be developed via organizations interested in cancer research and education? (Howard Hughes Medical Institute, Robert Wood Johnson Foundation, American Cancer Society, American Association of Cancer Research)

5. Survey reports will be written and distributed. In addition to the membership of CABTRAC, to whom should the reports be sent?

6. The National Board of Medical Examiners will be contacted to obtain information on how oncology questions are developed for the USMLE-2 and how institutional performance is assessed. (Mike Lotze)

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**Postdoctoral Fellow Group 1 Report
Cancer Biology Curriculum for Postdocs: Should there be one?**

First General Question: *Does a postdoc get a different experience if he/she is paid by training grant or not?*

Presumably, there is outside oversight to make sure University is following training guidelines – compliance.

- 1) For most people the answer was yes, most postdocs had available research seminars and/or journal clubs run through training grant.
 - Some postdocs mentioned that under training grants they can take the time to teach, grant writing etc,
 - Some fellowships require guidance committees– comes from T32 guidelines.
 - Another benefit is that training grants have travel money. Very valuable.
- 2) However, a subset of postdocs said they are on T32 grants, but did not gain opportunities or experience any difference from a non-training grant.

Second General Question: *Do we consider ourselves cancer biologists?*

Some do, some don't. We agreed on considering ourselves "Cancer biologist in training".

Define what cancer biology and a cancer biologist are. Can you be a cancer biologist who does only basic science or only translational biology or do you have to bridge both?

Third General Question: *NCI designated that they wanted to generate cancer biologists – focusing on Postdoc rather than GradStudent education. But are we actually doing any training?*

Two aspects: Initial training vs. ongoing training:

1) Initial training. Suggestion: Annual introduction to cancer biology. Several postdocs mention that they struggle when background is not in cancer biology. They could attend graduate student courses but this would severely impact work since courses are usually several times a week in the middle of the day. Maybe initial training could be institutional, an annual intensive 1-3-day course including techniques.

2) Ongoing training. Most postdocs agreed that there are several opportunities available, including ongoing research seminars and journal clubs. The optimal setup would be journal clubs led by faculty and separate research seminars led by postdocs. Most postdocs are giving annual seminars in some form.

Suggestion: Have key faculty contacts as a mentors. Institute mentoring committee so that each postdoc has other professors than his/her advisor to learn from and consult with. (Already being done at Vanderbilt.)

Overall: We realized that we have vastly different backgrounds; some have been trained as cancer biologists through their graduate training, while others are switching fields. We have very different needs in terms of initial training (new people need it; other would not want to waste their time relearning what they know so they do not want it a mandatory part of the training grant). We also realized that each University has different environments set up for training grant post docs. We especially noticed a difference for the smaller Universities in rural settings, where there are few postdocs. These postdocs could benefit from more conferences and workshops.

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**Postdoctoral Fellow Group 2 Report
How to Pursue Translational Research in Cancer Biology as a Long Term Career Objective**

Postdoctoral representatives from a number of cancer biology training programs were invited to attend and discuss the current and future role of translational research as it pertains to their current training and future occupational objectives. Lynn Matrisian began the discussion by informing the fellows of NIH's initiative regarding Special Translational Research Accelerating Projects (STRAP). This initiative would allocate 30% of the NCI's budget to fund multi-disciplined teams of researchers with a central focus to identify, test, and move into the clinic, new drugs, biologics, therapeutics, or preventive intervention. The goal of this initiative is to speed up and smooth out the process of moving bench discoveries to bedside interventions. The group discussion touched on many issues related to translational research. We all agreed that the fundamental concept of translational research to facilitate the rapid movement of research findings to clinical trials and eventual clinical treatment options should constitute a significant portion of federal funding. We discussed several advantages to becoming involved in translational research including the training opportunities and the impact of our skills on the goals of the STRAP program. We also discussed several reservations we had regarding translational research, especially on the amount time spent in training and the impact on our future employment.

As postdoctoral trainees we discussed the positive role translational research could play in our training as scientists as well as the impact we could have on moving the research forward. We recognized that translational research teams often involve not only cancer biologists, but also engineers, pathologists, chemists, and clinicians, providing an opportunity to receive intensive training across disciplines. This could include assay development, imaging techniques, clinical practices, and pathology. We also discussed how translational research teams provide training in areas not typical of academic postdoctoral training, including development of teamwork skills and exposure to other scientific fields. We agreed that fundamental to translational research is an unvarying workforce that is trained at the doctoral level to critically analyze data, establish crucial assays, efficiently trouble shoot issues, and move the research forward. An additional benefit to large funded projects is that outside funding through independent fellowships would not be required for postdoctoral trainees and thus funding would be consistent over the postdoctoral training period.

There were several issues that the represented postdoctoral scholars raised regarding the negative impact of translational research on their training. Foremost was the amount of time spent in training in a postdoctoral position and the amount of time spent involved in a particular project. Translational research projects are often long-term projects that extend beyond a conventional 2-4 year postdoctoral training period. This results in lower wages over a longer time and subsequent difficulty in finding an academic position. We believed that the success of translational research hinges on a consistent employee base to create an efficient environment to move each facet of the research forward. The impact of a postdoctoral fellow leaving a particular position could be devastating to a project, costing money and time in retraining, delaying or hindering progress in any aspect of the research team. We also discussed the lack of guaranteed employment. With limited training in one particular area of a translational project elimination of that aspect would result in elimination of the position. There was also a concern over how much time a postdoctoral trainee would be given to develop an independent project. With many limitations on funding and the percentage of time one must spend on a particular project, funding exclusively through a STRAP project would mean no time for independent research for the fellow.

The group's biggest concern was how involvement in translational research would position them for future employment. Academic hiring practices emphasize first author publications and ongoing independent research projects. We felt that translational research projects would hinder employment opportunities for postdoctoral trainees as neither of these criteria would be fulfilled at an adequate level. First, in translational research teams, publications are often delayed due to the long-term development of the

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Postdoctoral Fellow Group 2 Report (continued)

project. Second, papers that emerge from translational projects often involve many authors. In these cases first authorship is often not achievable by a particular fellow due to the shared teamwork nature of the science. Lastly, the group believed that involvement in a translational research team would limit the amount of time, access, or ability to generate independent research projects that would transfer with them to a tenure track position.

There were several ideas put forward to ameliorate many of these concerns. First, large STRAP programs could incorporate funding for “coordinating centers” that could aid in postdoctoral training and organization of the different disciplines. STRAP funding could incorporate longer term funding of high-level staff scientist positions through the STRAP center. This would encourage a more consistent workforce, but would still make it difficult for postdoctoral fellows to move into academic positions. Second, we felt that fellows should be given time and resources to develop independent projects. The projects may or may not complement the translational research but would most importantly improve the prospect of eventual employment. Finally, we felt there needed to be continued discussion at the institutional level on the hiring practices of academic institutions with the primary emphasis is placed on publication record and independent research. We felt translational research projects emphasize the opposing values. Translational research results in publication of collaborative papers with many authors as opposed to limited authored or first authored papers. Additionally, multiple investigator collaborative projects are not accessible for young scientists to move to a new institution as an independent project. One possibility put forward was for the inclusion of young scientist tenure track positions in the STRAP funding, offering early career scientists the ability to be involved in important translational research and to have the prospect of a tenured position and independent research. There were no resolutions on these issues but additional discussion is needed on the ever increasing postdoctoral training time and need for a highly trained consistent work force to achieve the goals of STRAP or other translational programs.

**Postdoctoral Fellow Report
Essential Skills for Postdoctoral Fellows**

(to be added)

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**Postdoctoral Fellow Groups Report
How Can this Organization Improve Your Lives as Postdocs?**

Many institutions and cancer biology associations (such as AACR) currently offer educational and career development workshops and seminars which CABTRAC should not duplicate.

The problem that workshops and seminars available from cancer biology associations present is that they often take place only at research conferences that are not attended by all cancer biology postdocs. Travel to these conferences maybe limited to postdocs based on budgetary constraints. Even to attendees of the conference, these workshops may not be available. These workshops often conflict with other aspects of the conference that the postdoc must attend and seating availability is sometimes limited.

Workshops and seminars put on by specific institutions benefit only the cancer biology postdocs that attend that institution, are not put on by all institutions, and are often not made available to postdocs outside of the institution. CABTRAC can therefore aid in the education of cancer biology postdocs by obtaining videos of approved educational and career development workshops and seminars and post them on their web site, cancertraining.org. This would provide cancer biology postdocs with a centralized location in which to find good quality training videos focused on teaching them the skills they need. The web based approach will give postdocs the chance to learn this information even if their institution does not provide it, without traveling, and on their own time, not taking time away from their bench work.

CABTRAC can further assist cancer biology postdocs with their web site by providing a list of what essential skills a postdoc should possess and to continue to post postdoc job opportunities.

CABTRAC can continue to provide networking opportunities for cancer biology postdocs by inviting postdocs back to their annual CABTRAC meetings as well as by setting up CABTRAC sponsored meetings for postdocs and faculty at national conferences, such as AACR.

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**Postdoctoral Fellow Group Report
Survival Strategies for Young Investigators
and
Discussion: Next Organizational Steps for Postdocs**

- 1.) Engage in virtual networking to maintain and expand the discussions we began at CABTRAC 2007
 - generate an email list of all those willing to continue our discussions
 - establish a group with individual profiles on some mutually agreed-upon social or professional networking site, which might include FaceBook, Nature Networking, or LinkedIn
 - through the networking site we will maintain contacts and a blog or forum for continued discussion, the posting of requests, advice, *etc.*
- 2.) Re-convene at the AACR Annual meeting in April 2008 in San Diego, both as an independent group and through AACR Associate Member activities
 - the initial plan is to meet for drinks and/or dinner one night during the conference
- 3.) Educate postdocs at our home institutions about the importance of postdoctoral associations (PDAs) and what CABTRAC can do for them
 - work more closely with our existing PDAs, or recruit enough willing postdocs to start one if such an organization does not exist
- 4.) Make contacts with faculty in charge of training at other universities and institutes with cancer training programs, *e.g.* MD Anderson and others who were not represented at CABTRAC 2007
 - our goal here is to gain as broad as possible an understanding of what “cancer biology training” should entail
- 5.) Dialogue with postdocs and senior scientists in pharmaceutical companies and the biotechnology industry
 - our intent is to understand what specific attributes industry looks for in postdocs and research scientists, in order to refine cancer biology training in the academic setting

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Business Meeting Minutes

Financial Update

Amato Giaccia, Vice President and Treasurer

See **CABTRAC Finance Update** PDF document.

Question to group: Should we increase the annual dues amount?

Answer: Keep at \$500 per year/per institution

Group agreed that website development is the most important budget expense.

Organization Update

Frank Torti, President

See **CABTRAC Organization Update** PDF document.

Nomination, Voting and Election of Board of Directors and Officers

Dario Altieri, James Broach and Hung Fan nominated and unanimously elected to board of directors for term ending 2008.

Amato Giaccia, Michael Lotze and James Manfredi nominated and unanimously elected to board of directors for term ending 2009.

Lynn Matrisian, Frank Torti and Dihua Yu nominated and unanimously elected to board of directors for term ending 2010.

Frank Torti nominated and unanimously elected president for term ending 2008.

Amato Giaccia nominated and unanimously elected vice president and treasurer for term ending 2008.

Lynn Matrisian nominated and unanimously elected vice president and secretary for term ending 2008.

Sheridan Wilder nominated and unanimously elected assistant secretary and assistant treasurer for term ending 2008.

Proceedings

Lynn Matrisian, Vice President and Secretary

Proposed in addition to inviting alternating graduate students and postdoctoral fellows to the annual meeting and retreat, also invite MD/PhD and/or Residents.

Proposed adding a graduate student and/or postdoctoral fellow to board of directors.

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Proceedings continued

Board of Director to hold meeting at America Association for Cancer Research (AACR) annual meeting each year.

2008 Retreat and Annual Meeting venue and agenda.

- - Barbara Graves, University of Utah, to sponsor
- - Location near Salt Lake City to be selected
- - Proposed adding a “diversity session” into the 2008 agenda
-

2009 Retreat and Annual Meeting to be held in Southeast... Kiawah Island