

Student Workshop: Discussion Summaries and Survey Results

Graduate Cancer Community @ Illinois

April 15th 2013

Student Discussion

Three student discussion groups (Education, Web Resource, and Interdisciplinary Research) were formed at the end of the GCC@I Student Workshop on March 27th, 2013, in Room 5602 of the Beckman Institute. Below are the summaries of the suggestions of each discussion group.

Education

The general consensus was that a formalized education program for graduate cancer research should be developed. The integrative graduate cancer education should have a central administration, but this should not be part of an individual department or a separate program. Rather, it should be a 'track' option in all departments (or perhaps hosted through the Graduate College). Having a 'minor' in graduate school was not appealing to many students. The structure of the program should be as follows:

1. Students are accepted into the program but also have homes in their individual departments (their degrees will still come from the home department, but they will have a focus in cancer research). It is important to have a cohort of students that all take the same introductory course and seminar series together. These students should come from different home departments. This in itself will foster an interdisciplinary setting for the students. The first years will all take an introductory 'umbrella' course that is co-taught by several faculty on campus (an example that was suggested was that of the CMMB/M-CNTC course that was co-taught by Profs. Rashid Bashir [ECE, BioE], Ann Nardulli [MIP], Catherine Murphy [Chemistry], and Taher Saif [MechSE]). The umbrella course will give the students exposure to a wide variety of cancer disciplines, while providing the foundation for understanding cancer biology, disease from a social perspective, and technologies for approaching cancer research.
2. There should also be a seminar series that students are required to attend during their first two years of the program. The seminar series will be 'traveling' and hosted in many departments on campus. For example, if the biochemistry seminar has a cancer focus, then the CC@I graduate seminar will take place during the biochemistry seminar that week. This will give students exposure to many different disciplines, and the attendees of the departmental seminar will gain awareness of the CC@I efforts. Senior graduate students (after their 3rd year) will be encouraged to give seminars in their home departments or through a separate CC@I designated seminar series. This will give students in the program an opportunity to improve communication skills and also inspire the application of discipline-specific research to cancer treatment.
3. The follow-up course for the second and third years of the program should be a project/team based course, in which students are broken into groups of 3-4. They will spend the semester working on a research project together (can be the design of a project in which the outcome is a grant, or can be a hands-on research project depending on the students/advisors involved). 3rd year students will also participate in the course and serve as mentors for the 2nd year students.
4. The training program should encourage students to present their research, and host poster/speaking competitions where the students can be recognized for their research and communication (year-end symposium student awards).

5. There should also be an informal component to grad CC@I activities. For example, organized trips to major cancer meetings could be organized (travel, hotel blocks, *etc.*) to encourage students whose labs may not typically attend these meetings to go. Other activities include
 - (a) Coffee hour — students meet weekly or bi-weekly to have coffee at a designated place and time every week. This can be purely social, but students will have a chance to get to know one another and may share research topics/problems as they come up.
 - (b) Post-seminar coffee — if the traveling seminar series is a success, students can meet at a designated place immediately following the seminar in order to discuss what they heard during the seminar.
 - (c) Brown bag lunches — every week, could be location specific (Beckman, IGB, CLSL have individual lunches). One student could present a short research talk or journal article each week and the students discuss over lunch.

It was emphasized that there should be participation by all departments in the program and would require some coordination. The Graduate College could be used to facilitate this. Administration is a must. Entry into the program should take place within the first 3 years of the graduate program; however the program should be inclusive and not have requirements.

Web Resource

1. The currently does not exist a section of the course directory that lists all cancer-related courses across all disciplines, including both upper-level and more ‘introductory’ courses related to cancer. Additionally, many interesting seminar courses are offered on a per-semester basis, and often announcements for the specifics on these courses are disseminated by email to only a handful of departments or listservs. Requiring only student effort, we would like to compile a list of courses that contains a) all persistent courses related to cancer across all disciplines on campus and b) all per-semester course postings that are related to cancer. In this way, rather than having to sift through emails or ask around, a student could simply access this list before the beginning of the semester, perform a text search for keywords of interest, and have access to these course listings which they may not have received otherwise.
2. While buildings such as Beckman and MNTL have updated lists of ‘superusers’ who are able to train students on accessible instruments within those buildings, there exists no list of campus personnel who are able/willing to train students in the various techniques involved in cell culture. Part of this reason is because people with these specialties are not concentrated in one building or department, but rather are spread across campus. We believe that having an online directory where experienced graduate students, post-docs, lab technicians, and others can voluntarily supply their contact information and indicate that they are willing and able to train other students and post-docs in one or more areas of cell culture. Additionally, this page could contain direct and easy-access links to the Department of Research Safety protocols regarding cell culture as well as links to external articles and YouTube videos that students interested in learning about cell culture may find useful.
3. An online forum or message board for posting research article or review papers related to cancer that students find interesting could be a successful feature of the graduate community website. With minimal resources and upkeep, such a board would allow students to not only post articles, but carry discussions about them as well as rate their merits. “Popular” or “thoroughly discussed” papers would be more readily brought to the attention of other students so that casual browsing of the board will lead users to interesting research. This would help to catalyze discussion between graduate students, especially between students of different disciplines which may not have the opportunity to interact otherwise.

Interdisciplinary Research

Students were generally supportive of both formal and informal mechanisms for encouraging interdisciplinary cancer research. The members of the discussion group were most concerned about solutions to the following issues:

1. Interdepartmental discussion and collaboration. As with the discussion group on education, it was suggested that a moving inter-departmental seminar series might encourage collaboration. The inclusion of casual social events before or after these seminars was proposed as a means of further fostering cross-campus interaction and discussion. Other suggestions included a twice-yearly cancer community research seminar or retreat (similar to the symposium but on a smaller scale and targeting current on-campus research, particularly by students), more advertising on departmental and community listservs, and more interdisciplinary classes with multiple cross-disciplinary instructors.
2. Interaction with clinical sites and collaborators. Although a turnkey solution to enable clinical collaboration is difficult to implement, the group believed there were several feasible, short-term means of doing so: Creation of a tour (similar to that of Research Park) or shadowing program to highlight clinical capabilities and problems for graduate students and faculty. A document explaining what clinical connections exist on campus (*i.e.* with Carle, Mayo, or UIC) and the means of taking advantage of those connections. A seminar series for clinicians to speak to the research community about their work and their patients.
3. Intra-campus transferral of skills. Prompted by the concerns of a group member who experienced difficulty finding a group on campus capable of demonstrating a particular protocol, the group suggested several solutions to the problem of on-campus skill transferral: Establishment of an online forum or wiki to facilitate communication between researchers on-campus regarding protocols and other research-related skills and to provide lists of resources, *e.g.*, classes, facilities, *etc.*. Creation of a one-week “boot camp” or series of one-day workshops on key protocols and concepts in cancer research.

Results of Workshop Survey

- We had equal responses from participants whose research focuses on the Basic Sciences, Engineering, and Social Sciences.
- Responders of the survey felt that the workshop was Very Useful (50%) or Somewhat Useful (50%).
- People particularly found the faculty panel useful as well as the opportunity to interact with students from other departments.
- Participants felt that the location of future large events should be located closer to the center of campus.
- More representation of faculty from the social sciences/humanities was stressed.
- Participants would be interested in participating in a variety of different types of Graduate CC@I events including:
 - Half- or one-day workshop (75%)
 - Lunchtime seminar (75%)
 - Evening Seminar (75%)
 - Lunch or dinner with seminar speaker (75%)
 - 1-2 day symposium (50%)
 - Happy Hour (50%)
 - Week-long workshop (25%)
 - Course (25%)
 - Coffee Break (25%)
 - Journal Club (25%)
- Communication: Participants found out about the workshop via GradLinks listserv, Department e-mail, Other listserv (CC@I), and word of mouth (colleague/peer).