Breakout Reports

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Clinically Relevant Research - don’t get lost in translation

AAMC GREAT Group Meeting Workshop
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Do we need to enhance trainee exposure to concepts and opportunities relevant to research on human health and disease?

- Regardless of the roadmap initiative -
- Great interest in translational concepts by students themselves. ~80%of students are interested in clinical applications of their work.
- Workshop attendees believed unanimously that there was a place for didactic instruction in clinical applications of research.
- MD/PhD programs don’t completely fill this need.

Current funding mechanisms that have been used to meet the need:

- HHMI Program - Med into Grad initiative (4yrs, 4 - 10 x $100,000)(13 awardees, UAB, Harvard, UPenn, Baylor, Wash U)
- Clinical Translational Science Awards - NIH roadmap initiative (Penn, Mayo)
- Markey-Trust - Bridging the Bed-Bench Gap (Wash U, Emory, Cornell etc.)
- Institutional Funding -Cleveland Clinic; Mayo; Sloan Kettering

Should courses in physiology or pathology be required?

- Some existing programs do include a course in physiology but not in pathology
- These courses designed expressly to suit the needs of the Ph.D. program
- Medical courses are not appropriate

Does any increased emphasis on human health and disease have to come at the expense of emphasizing the importance and value of non-targeted research?

- It seems obvious that the emphasis on road map initiatives in the current funding crisis will impact on funding available for non-targeted research.
- This does not reflect in a lack of interest by students in fundamental research and its application.
- Post genomic research provides ensures a focus on basic research
- Important to emphasize to Ph.D. students that fundamental research is the cornerstone of medical knowledge, in addition to teaching them the relevance of understanding disease.

How do we identify clinical research opportunities within our academic medical centers? How do we encourage basic scientists and clinical scientists to cross the street or hallway to talk to each other?

- Identifying consortia of basic and clinical scientists to apply for CTSA and other funding
- Several schools have used these mechanism to introduce Ph.D. programs and masters programs
- Institutional seed grants that require collaboration between clinicians and basic scientists
- Colloquia and seminar series that pair both aspects of a research topic in one seminar or tandem seminars

How can co-mentoring of trainees by basic and clinical researchers help facilitate research collaboration?

- Translational Ph.D. students should be required to have a clinician on their thesis committee.
- Early on the co-mentors must set up the expectations of the project and mutually agree to goals and time investments.
- It has been shown in existing programs that student's do facilitate networking between basic and clinical researchers.

Translational and clinical investigator employment opportunities and the roles of Ph.D. researchers

- There appears to be increased postdoctoral opportunities for Ph.D.s with clinical research interests in academic clinical departments.
- CTSA and NRSA grants support postdoctoral trainees in clinical research.
- Increasing acceptance of Ph.D. scientists in the faculty of clinical departments.

Core elements for translational training of Ph.D.s

- The integration of clinical and basic training
- The engagements of both clinical and basic science faculty
- Use of present courses and tracks in established medical curricula only when appropriate
- Design of specialized courses are needed

A number of existing Ph.D. and Master's programs are flourishing in many of our member colleges

- Stanford disease orientated curricula for Ph.D. scientists (Mellins,Nat Immunol. 2006 Jun;7(6):543-7).
- Penn, Harvard Wash U., Penn State, Mayo translational electives for Ph.D. students including clinical clerkships.
- MS Programs - Masters in Clinical and Translational Research (Emory, U Penn, Mayo Clinic)