Future of Bioscience Graduate and Postdoctoral Training

Curricular Reforms

Chairs: Kenneth Gibbs (NCI) & Edith Lord (Rochester)
Challenge

• Update graduate curriculum to equip students with the skills needed for a successful biomedical career

• Curriculum: courses and supplemental educational activities provided by university over the course of training to enhance skills, knowledge and professional development

• Guiding principles:
  • Research is, and should remain, central in doctoral education
  • Educational experience is the shared responsibility of student, faculty, university, funding agencies
  • Goal: creative, independent, critical thinkers and problem solvers
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<th>Scientific</th>
<th>Quantitative</th>
<th>Professional Development</th>
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Implementation Considerations

• **Stakeholders:** students, faculty, administration, funders, employers, public

• **Delivery**
  • Away from didactic, content-based teaching toward learner-centered education
  • Modular courses, “just in time” education
  • Reapportion content-based course time

• **Assessment**

• **Barriers:** Faculty time and incentives (at institution and funder level); cost of initiatives; academic and research culture
Research Enterprise Dynamics

Funding Agency (Policy & Priorities)

Institution

Department

Research Group

Individual

Gibbs et al, PLOS ONE (2014)