Leading Multidisciplinary Teams

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Broad Institute of Harvard and MIT: an inter-institutional partnership

- A collaboration of Harvard, MIT, and the Harvard hospitals
- Joint governance, a single administration

Broad Institute of Harvard and MIT

- Scientific Mission
  - Create and make broadly available comprehensive tools for genomic medicine
  - Pioneer application to understanding & treatment of disease

- Organizational Mission
  - Enable collaborative, multidisciplinary projects that cannot be readily accomplished solely within individual labs
  - Empower scientists through access to cutting edge tools, ideas

Neither virtual nor a silo

- Core Faculty and scientific staff
  - Core Faculty and staff with a long-term commitment to multidisciplinary, collaborative efforts

- Associate Members and laboratories
  - Main activity at home institution, but with members of their labs active participants in research programs

Programs + Platforms

insight commentary

Organizational challenges in clinical genomic research

Jill S. Altshuler[1] & David Altshuler[2]

A review of large-scale multidisciplinary research revealed 3 common characteristics to success:

1. Clear and compelling mission to the work
2. Selection of team members - people who commit at expense of individual achievement
3. Organization - leaders must be able to motivate and facilitate disparate teams without having formal authority

Large-scale Clinical Genomics

- Genetics
- Genomics
- Operations
- Software engineering
- Computational Biology
- ELSI and compliance
- Medicine
- Project Managers

My path

- PhD - 1998
- Research Scientist / Project Manager - 1998 - 2001
  - Lead technology development and implementation
  - Manage TSC project collaboration
- Scientific Director, HapMap - 2001-2004
- Platform Director, 2004-present
  - Staff of 60 (project managers, software engineers, technicians)
  - PI of 3 NIH grants (total $50 M)
  - Platform operating costs of ~ $45 M / year

On a daily basis:

- Manage staff
- Conference calls for grants , big projects
- Stand-in for director
- Finance
- Write grants
- Consult to academics
- Consult to biotech, investment community

What made a difference

- Feeling valued by senior leaders
- My own tendency towards being a “consensus builder”
- Soft money during early development, didn’t need to strike out…
- Environment respectful to non-faculty positions
  - Allowed PI status
  - Platform Directors “sit at the table”
  - Achieved national recognition, eventually
  - Resources to build a great team
  - Training in management
- Salary, flexibility
- A very patient husband

Challenges

- A lot of push back from my PI
- Salary on an academic scale
- No training in management
- Some lack of respect in pockets:
  - New post docs/ fellows
  - Faculty outside Broad
- Mistaken for a student or secretary

Is this a new model?

- Genomics was probably a natural place for this model to take hold
- In some ways, it has to be for large projects to succeed

- Can other institutions get a way from a 2-class system? ("faculty" and "not")?
- Will resources be made available?

Genders by Role at Broad