

Graduate Student Feedback

On behalf of the BE Student Board
and graduate student body

Barry Canton & Diana Chai

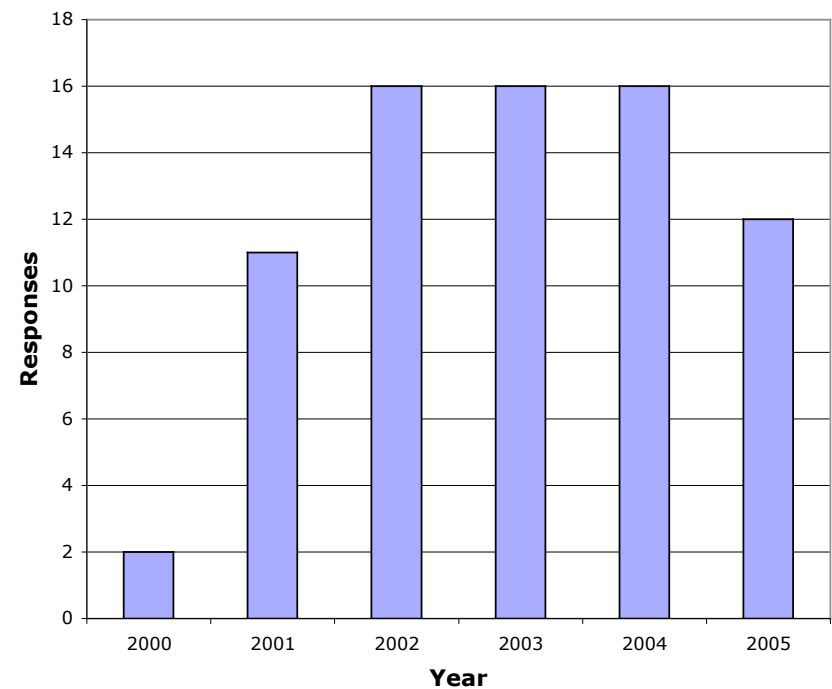
October 15, 2005



Feedback Sources

- 2005 BE survey
 - 56 Bioengineering
 - 10 Tox
 - 6 ABS
- Direct comments
 - ~20 responses
- 2004 BE survey

2005 survey responses



Topics for Review

1. Curriculum
2. Funding support policy
3. Thesis advisor selection process & policies
4. Qualifying exam procedures
5. Admission process and policies
6. Mentoring and advising during years 3+
7. TA experience



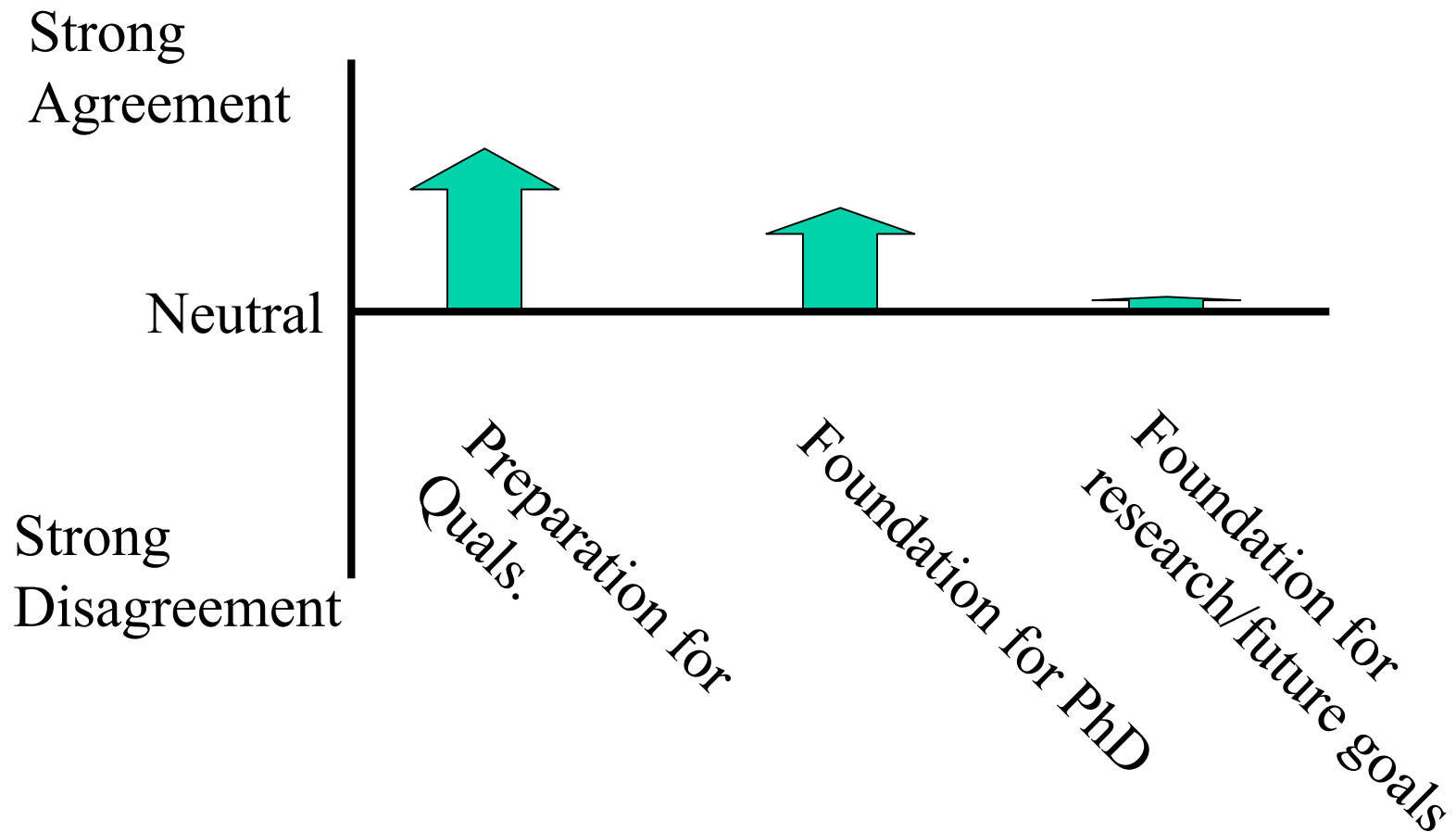
Topics for Review

- Curriculum
- Funding support policy
- Thesis advisor selection process & policies
- Qualifying exam procedures
- Admission process and policies
- Mentoring during years 3+
- TA experience



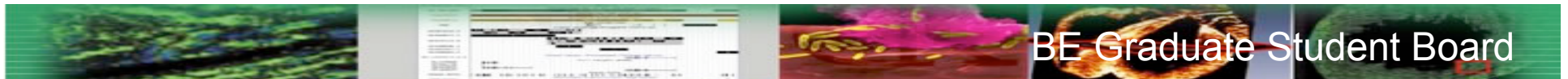
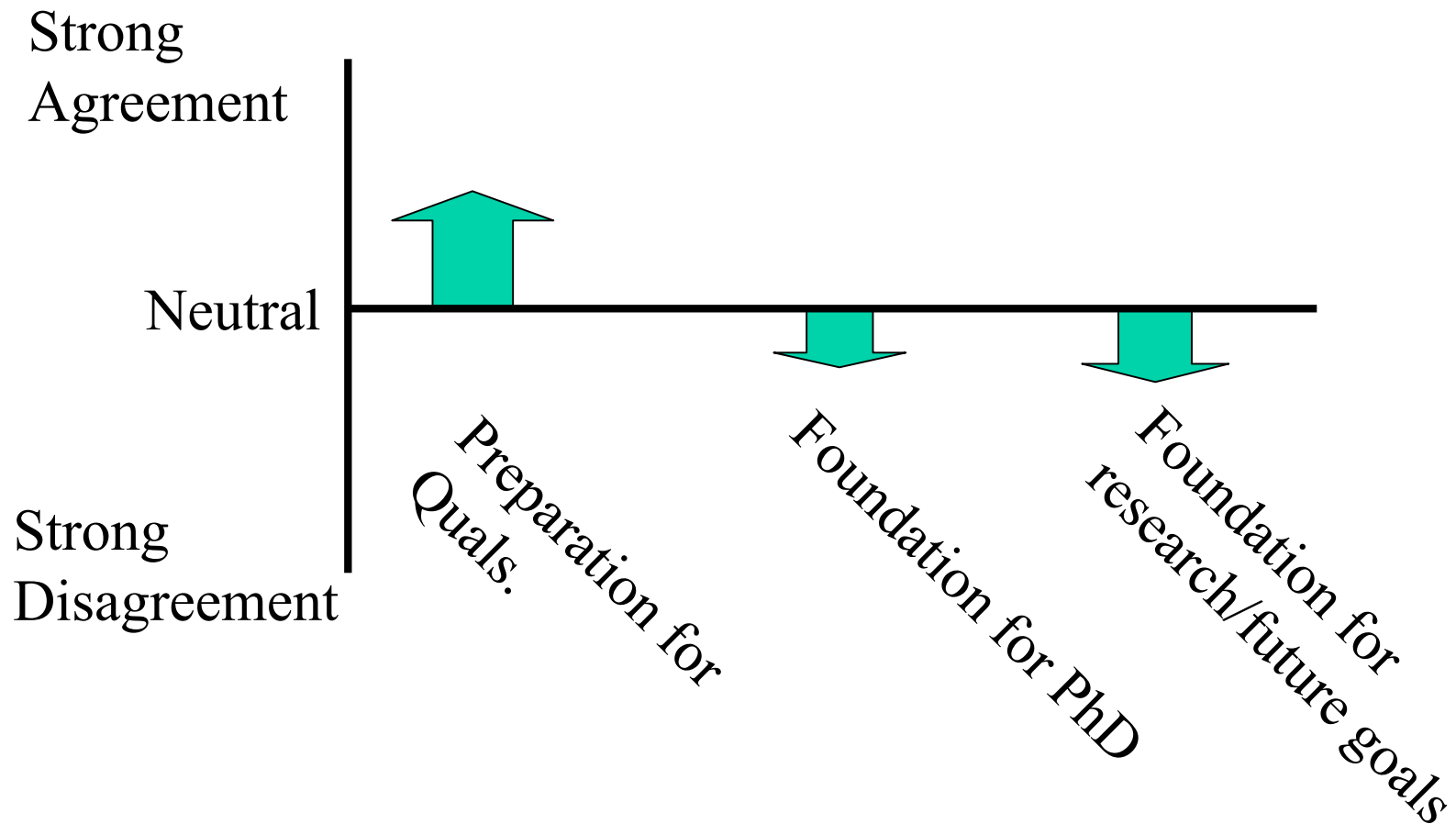
Core Classes

- Bioengineering Track



Core Classes

- Tox./Applied Biosciences Track



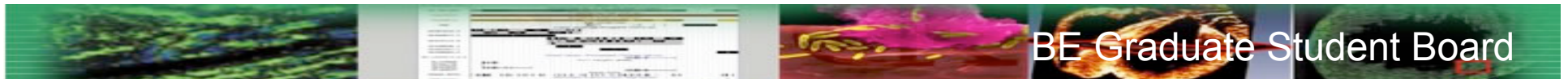
Suggested Curriculum Topics

- Math/Statistics/Data Analysis (10x)
- Methods-based Biology (6x)
- More topics from outside BE - electrical engineering, materials science, computer science (5x)



Core Classes

- BE.400 and BE.420 are integral core classes in everyone's opinion
- Some feel bioeng. core emphasizes mechanics over other crucial topics
- “Core Electives” - pick one of two
 - Mechanics vs. Math/Statistics vs. Methods



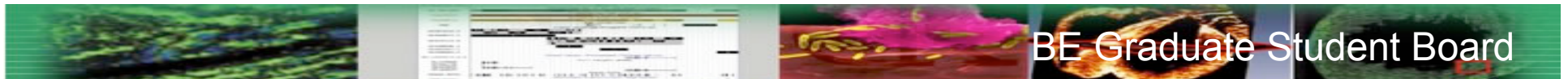
BE.400

- Increase the instructor/student ratio
 - Senior Grad. Students
- Restructure the project
 - Analyze the state of a field
 - Use as a mini-rotation
 - Use as a “starter project” in thesis lab
- Give different subgroups a different figure to study
- Include some of the topics that people wish were in the curriculum



Electives

- Bioengineering and Tox./ABS students all wish for a wider selection of electives
- Many don't find it easy to find a BE elective
- Suggestions
 - make the petition process more obvious
 - reexamine the list of electives



Qualifying Exam

- Written Exam
 - Valuable and worthwhile
- Thesis Proposal/Oral Exam
 - General level of satisfaction and preparedness



Thesis Advisor Selection

- Students are generally happy with the current system
- Divided on having enough time to choose an advisor (3.3+/-1.4)
- Weak support for a rotation system.
 - 27:8 in favor of optional versus compulsory
 - 13 against any rotation system

Recruitment/Admissions

- Recruitment Process
 - Positive Experience
 - Impacts Decision Process
 - Suggestions: Campus visits for international students, advanced notice of interview weekend
- Admissions: Trend towards BME-dominated incoming class



Mentoring in Years 3+

- Career Development
 - 50:50 split between industry and academia (23 academia, 22 industry, 4 other)
 - Majority still feel uninformed and unprepared for career search and making career decisions
- BE Board Initiatives
 - Industrial Seminar Series
 - Students are aware of the series and more than half have attended 3 or more
 - Academic Career Workshops



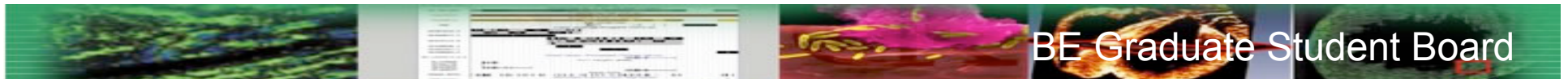
Suggestions to Aid Career Development

- Resource lists (10x)
 - Alumni/corporate contact list
 - Corporate partnerships/recruitment pages
 - Information about career paths
 - Listing of institute resources
- Practical Experience (5x)
 - Job shadowing opportunities
 - Industrial internships
 - Academic experience (more to come)
- Advising (6x)
 - Career search
 - Steps to prepare for a career



TA Requirements

- General Comments
 - Very positive and worthwhile experience
 - Sense of disparity in time commitment and workload
 - Split on whether this disparity is unfair (24 yes, 20 no)
- Suggestions
 - Gathering data on TA workload
 - Use to redistribute number of TA's per class (11x)
 - Set loose guidelines for number of hours, expectations (6x)
 - Formal meetings to discuss expectations and opportunities



Teaching/Course Development

Great Interest in Course Development and Teaching Opportunities

- Seminars/workshops on teaching skills
- Continued role in curriculum development
- Continue/develop OpenWetWare model for course development
- Formal opportunities to partner with professors developing courses or to give lectures



Final Comments

- Most students have positive experiences with the department
- Vested interest in the direction and development of the field
- Research directions: Neurosciences (11x), Systems biology theory (4x), alternative energy (3x), bioelectrical, nanomaterials

