Commission on Graduate Education:
The bits that get me excited…

John Boothroyd, Ph.D.
Professor
Microbiology and Immunology

[slides adapted from Mark Horowitz’s presentation to University Senate]
# CGE Members

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<th>H&amp;S</th>
<th>SOM</th>
<th>GSB</th>
<th>Law</th>
<th>SOE</th>
<th>EarthSci</th>
<th>Other</th>
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<tr>
<td>Keith Baker History</td>
<td>John Boothroyd Micro/Imm</td>
<td>Jim Baron</td>
<td>Deborah Hensler</td>
<td>Stacey Bent ChemE</td>
<td>Steve Graham Geophys</td>
<td>Artie Bienenstock</td>
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<td>Mo Fiorina PolySci</td>
<td>Julie Parsonnet Med</td>
<td>Chuck Holloway*</td>
<td>Mark Kelman</td>
<td>Andrea Goldsmith EE</td>
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<td>Roberta Katz*</td>
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<td>Ellen Markman Psyc</td>
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<td>Mark Horowitz* EE/CS</td>
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<td>Robert Waymouth Chem</td>
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<td>Moriah Thomason GSC</td>
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* co-chairs
N.B.

• Scope included ALL graduate degree programs
  – 7 Schools
  – Ph.D., Masters, and Professional
  – 15 different degrees with many different versions of each
The Charge:

- Prepare our graduates to be **leaders in finding solutions** to the large-scale, complex problems of the 21st century

- Prepare them for an **expanding range of careers**

- Prepare them to **think critically** and **communicate effectively** in a complicated world

- Leverage on Stanford’s **unique** environment (**depth and breadth**)

- Don’t hold back: develop **new** approaches that are **creative**, **collaborative**, and **multidisciplinary**
Features of Graduate Education at Stanford and Implications for the Recommendations

• Diverse needs and approaches across disciplines, schools and degrees
  – Diversity is a strength that needs be preserved
  – One-size does NOT fit all
  – We focused on adding opportunities not reducing them

• Strong coupling of teaching and research
  – Support of one helps the other

• Each School, Department and even Discipline is its own culture
  – We focused on building bridges not hostile take-overs
  – We have much to learn from each other
CGE Final Report: Three Sections

- Fostering intellectual innovation
- Optimizing the graduate experience
- Improving organizational responsiveness and flexibility
Fostering Intellectual Innovation

• Support the intellectual growth of the faculty
  – Enhance ability to support new and innovative research
  – Facilitate intellectual engagement with faculty from other schools/departments

• Support the continuing evolution of departments
  – Require periodic external reviews of all departments
  – Encourage cross appointments rather than internalization
  – Recognize the benefits of evolving internal school structure and departments
Fostering Intellectual Innovation, cont’d

• Increase opportunities for cross and interdisciplinary education
  – Articulate commitment to cross and interdisciplinary ed
    • Provide incentives for faculty
  – Make cross and interdisciplinary classes happen
    • Funding, capacity, encouragement/rewards issues
    • Remove disincentives currently in place
  – Ease access to out of school students
    • Move all schools to the same academic calendar
    • Create topic based views of class database
  – Create a summer program
    • Model after Sophomore College
    • Focus on cross and interdisciplinary topics, with broad faculty
Optimizing the Graduate Experience

• Embrace and leverage diversity of programs and people
  – Diversity is the key to Stanford’s success
    • CGE wants to create new opportunities, not force uniformity
  – Take additional steps to expand student and faculty diversity
  – Ensure we continue to be the top choice of foreign students
  – Create programs to encourage students to interact
    • Leverage large on-campus graduate housing

• Create opportunities for students to develop into effective leaders
  – Provide opportunities for students to acquire competencies in communication and organizational skills
  – Create opportunities for students to practice leadership skills
    • Including project based classes, seminars, etc.
Optimizing the Graduate Experience cont’d

• Improve student mentoring
  – Departments need to define roles of faculty advisors
    • Advising needs to be part of faculty evaluation
  – Provide Ph.D. students more than one mentor

• Improve student support
  – Enable students to focus on academics, not survival
  – Address problems faced by minority, female, international
Improving Organizational Responsiveness/Flexibility

- Create a Vice Provost of Graduate Education
  - Agent of change with control over incremental resources
    - Funds and authority to implement report recommendations
  - Administrative coordinator and facilitator
    - Only those functions that can’t be handled in schools
      - Should not be used as a way around a Dean
      - Does not control graduate admissions, fellowships, etc
    - Organization focuses on graduate student issues
      - Coordinate information on graduate programs
      - Collects best practices from departments/schools
      - Allows departments to learn from other departments
  - Monitor woman/minority issues and best practices
Next Steps

• First steps for the administration
  – Hire VPGE
  – Work on raising funds to support this effort
• Inspire, solicit and seed new initiatives
• Experiment, analyze, refine
My Top Three:

- Leverage “one campus” advantage to facilitate interaction of students across all seven Schools
- Make the “faculty” less compartmentalized in their teaching, research and thinking
- Provide a broad training in how to be effective leaders to all

Make Stanford’s graduate training unique and simply the best in the world.