Yale University

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January 29, 2010

To: President Levin & Provost Salovey
From: The Department Chairs and Divisional Directors of Yale Science and Engineering

Dear Rick & Peter,

We are writing to request that you appoint a 'blue-ribbon panel" to make recommendations for improvements in graduate student support at Yale.

We applaud your goal of strengthening Yale science and engineering so that as many programs as possible are in the Top 5. This will certainly require a variety of initiatives and changes across the university. However, one core aspect in need of attention, which is critically important for every department, is the support of Yale's graduate students.

As you know, both the Science Chairs and the leadership of the BBS submitted proposals to the administration last year for such improvements. We recognize that the University cannot act on these recommendations immediately given current financial difficulties. Thus we endorse Peter's suggestion to plan now for improvements to be implemented once funding is available. One way to do this is to appoint a panel to explore this issue and make appropriate recommendations.

While the panel should have its own agenda, we list here the major issues identified by the Science Chairs Council through many discussions over the last several years:

1. **First 2 years**: Funding students on research grants is generally not appropriate during their first 2 years (including the summer of year 1), when students have not yet committed to research, and are instead taking classes and undergoing "generic training". Increased fellowship support for the first two years would (a) circumvent effort reporting issues, (b) facilitate subsequent external grant support, and (c) be less commitment -- but with a better return -- than the 5 year fellowships given in the humanities and social sciences.

2. **High cost to grants of Yale graduate students**: Our very healthy stipends for graduate students help to make us competitive in attracting students. The flip side is that Yale graduate students are now very expensive to support on grants. The combination of stipend plus tuition makes graduate students more expensive at Yale than most peer institutions. These costs make our grant proposals less competitive, hurt faculty recruitment and encourage faculty to hire post-docs rather than grad students. The additional cost of tuition in years 1-4 even results in an undesirable incentive for faculty to prefer advanced students (in years 5-7, which are less expensive to grants) to new ones! Reducing or waiving tuition would help enormously.

3. **Interim funding**: The small or short-term research grants typical in some fields make it hard to support students on appropriate research grants for the duration of a PhD thesis. This problem has been greatly exacerbated in recent years because of concerns about compliance. Some form of interim funding is needed for such situations. The current practice of mortgaging university fellowship funds for emergency/interim support reduces the number of new students in a program the following year and destabilizes programs.

4. **Restructuring TF compensation**: The current practice of having students, who are covered (mostly) on research grants, to also assume TF duties shortchanges grants, and puts students in conflict with advisers and departments who want them to progress on their dissertation research. Providing clear distinctions between teaching and research fellowships with full-stipend TA's for heavier teaching assignments would be a positive step.

5. **Inequity in funding patterns across the divisions**: Students in some departments get 4 years of university support while others get only one. Is this the right approach? If so, its rationale should be made clear.

As always, if we can be of further assistance, please let us know.

Sincerely,

David Bercovici (Chair of Geology & Geophysics)
Menachem Elimelech (Chair of Chemical Engineering)
Bill Jorgensen (Divisional Director of Physical Sciences & Engineering)
Mikhail Kapranov (Chair of Mathematics)
Bill Kelly (Chair of Anthropology)
Jeff Kenney (Chair of Astronomy)
Scott Miller (Chair of Chemistry)
Steve Morse (Chair of Electrical Engineering)
Tom Pollard (Chair of Molecular Cell & Development Biology)
Rick Prum (Chair of Ecology & Evolutionary Biology)
Mark Saltzman (Chair of Biomedical Engineering)
Bill Sessa (Divisional Director of Biological Sciences)
Avi Silberschatz (Chair of Computer Science)
Mitchell Smooke (Chair of Mechanical Engineering)
Doug Stone (Chair of Applied Physics)
Patrick Sung (Chair of Molecular Biophysics & Biochemistry)
Meg Urry (Chair of Physics)