Science Chair's Council Summary of the 6th Meeting - Feb 9, 2010 KBT 1202

Attending:

Chairs: David Bercovici, Jeff Kenney, Tom Pollard, Rick Prum, Avi Silberschatz,

Mitch Smooke, Patrick Sung, Meg Urry

Divisional Director: Bill Jorgensen

Provosts: Steve Girvin, Tim O'Connor, Stephanie Spangler

Guests: Michael Donoghue, Kyle Vanderlick

12:00-12:45 Interdisciplinary Appointments (Donoghue, Spangler, Girvin)

Background: There is a constant tension felt by departments between the desire to adequately cover the traditional core areas of each discipline and new developments occurring at the interdisciplinary boundaries between departments. What is the proper balance in hiring? What opportunities does the West Campus offer? How do we mentor, nurture and evaluate junior faculty whose work may be outside the mainstream of their department? In some universities (e.g. Chicago), departments are organized around undergraduate teaching and research is organized around separate interdisciplinary research institutes. Is this a useful model? In short, how can we be 'interdisciplinary without being undisciplined?

Notes from Meeting: Michael Donoghue, Stephanie Spangler, and Steve Girvin led a "brainstorming" discussion on (A.) interdisciplinary (ID) appointments; and (B.) promoting interactions among existing faculty. These are important issues in general for Yale Science & Engineering, and are particularly important now for the West Campus.

A. Interdisciplinary (ID) appointments

We identified many questions which should be considered for ID appointments:

What is the right balance between disciplinary and interdisciplinary appointments? (Just as we now consider the right balance between junior and senior appointments).

Who teaches basic courses?

What is the desired endpoint? ID appointments & programs need to be grant-supported to be sustained.

How will ID work be evaluated during tenure review? There are faculty development issues for Junior people hired into ID areas. Junior people hired into ID areas can have trouble. One working model is the Macmillan Center. Faculty are hired into departments, and are then invited into umbrella programs overseen by Macmillan Center. An example of a successful ID appt in science is a junior theorist in MCDB. Even though this position is "externally funded", some faculty members in the department objected to the hire since, in part, "the provost was pushing

this". The hire has been a big success, and has "transformed the department", as many members, especially graduate students, are now using modeling as part of their research.

Where do ID appointments fail? Bill J., Director of the PSEAC divisional committee, didn't know of any science ID cases that had trouble, although someone knew of a "trouble case" in the Humanities.

What incentives work to promote ID appointments? a.) Seed funding. An example at Yale is the Sackler Institute (and endowed fund) for ID research in biology, physics, & engineering, which has 6 grad student fellowships and seed money for ~10 research projects. b.) Bridges for ID research: Provost's Office, Office of Cooperative Research (OCR).

Who controls ID appointments? Who do you have to convince? Should there be a strategic approach or ground-up efforts from departments? We didn't settle these questions but said the following. This shouldn't be an ad hoc process, as that creates problems. In the new system the provost controls appointments, as there are no longer "slots" that departments control. This can be viewed as an opportunity for ID appointments. Steve Girvin could solicit ID proposals for incremental slots, involving at least 2 depts. Such proposals would need to clearly explain teaching, space, other issues. The view was expressed that BSAC and PSEAC should somehow weigh in on areas that need development. For ID areas which connect to both biological and physical sciences there may need for occasional joint meetings between BSAC and PSEAC or an "overlap committee" formed from a subset of these committees. BSAC set aside resources for a couple of ID appointments, and they have not all been used.

Michael Donoghue plans to return (to SCC) with a few concrete ID ideas.

B. Promoting Interactions Among Existing Faculty:

ID seminars can bring people together, especially graduate students, who are key as catalysts. Two ID seminar ideas:

- 1. Departments should invite someone from another Yale dept to give talk.
- 2. Give 2 ~30-minute talks in 1 hour, from different departments on related theme.

The Yale Science Forum brings together a spectrum of Yale scientists, although some thought either shorter talks or more ID talks could make it more effective.

Interactions would be facilitated if there were one well-organized place to easily see all talk listings (e.g. website). Video monitors in entryways which list talks would also help. (These are more common at other universities.)

12:45-1:30 Unproductive Faculty (Pollard)

Background: How should the university compensate faculty with subpar productivity? Every academic institution worries about how to deal with unproductive faculty. The problem of "deadwood" is acknowledged and lamented, but few institutions have taken decisive action to address the situation. Why are some faculty allowed to take advantage of tenure and reduce their effort without any repercussions? Why are unproductive faculty allowed to collect their pay without doing their fair share of the work? The problem has become more acute in this era when

retirement is left solely to the choice of the individual. The situation raises serious questions about equity. Why should productive faculty carry more than their fair share of an institution's responsibilities? We will discuss possible solutions.

Notes from Meeting: This issue is closely related to retirement but is broader. Tom Pollard says faculty productivity in his dept ranges by order of magnitude, and he lacks effective tools to deal with unproductive faculty. He reported the policy at Johns Hopkins Medical School, with a maximum yearly salary reduction of 20%. The threat from this policy (together with a "chat" with Tom) was enough to fix the problem, since people either changed behavior or changed jobs.

In the Yale Medical School, compensation consists of 3 parts: base, supplement, and bonus. Faculty are generally expected to bring in enough grant money to cover their base and supplement, and the supplement and bonus vary with specialty and performance. Less productive individuals earn close to the base salary, and this acts as a retirement incentive. In contrast to the Yale Medical School, Yale FAS does not have such flexibility with compensation.

Steve Girvin reported advice from General Counsel that any "negative raise" policy would need to be FAS-wide and announced in advance. Avi Silberschatz expressed concerns that such a policy (or even its consideration) would undoubtedly be controversial and newsworthy, and might bring negative attention to Yale.

Given the big steps needed to institute a "negative raise" option, and the potential negative publicity, we decide to encourage chairs to first try the "no raise" (or "zero raise") option. This tool is already available, and given inflation is really a cut in salary. The triennial leave can also be used to reward or punish, since they are not guaranteed, and could be withheld from an unproductive faculty member. The use of zero raises and withholding leaves should be consistent across departments, and there should be checks and balances. Thus involvement from provosts, deans, and/or divisional committees as well as chairs seems appropriate.

We note a need to train chairs for performance review. Bob Alpern was said to have a useful "list of incentives" for faculty. Any performance review program should take into account any "lazy" chairs who do not devote sufficient effort for the review.

We don't have a sufficiently effective "carrot" for bringing in grant money, although a reduced teaching load is used in some departments. (It is legal to reward someone with a history of grant success, but not for getting 1 grant.)

Steve Girvin has explored retirement incentive programs, and has found that they are generally not successful, since the wrong people often retire. There is no obvious solution. Chip Long can discuss financial matters with any faculty member considering retirement. Many faculty learn it isn't as bad financially as they had feared. We briefly discussed a "phased retirement" option, i.e., half salary, with no teaching, for 3 years.

Next Meeting: Tuesday, March 2, 12 – 1:30 pm –KGL 101