January 17, 2012

ROBERT ANDERSON
Chair, Academic Council

Subject: Analysis of UC pay equity by sex, and among men, ethnicity, 2009-10

Dear Bob,

On November 7, 2011, the Divisional Council (DIVCO) of the Berkeley Division discussed the report cited in the subject line, informed by reports of the divisional committees on Academic Planning and Resource Allocation, Budget and Interdepartmental Relations (BIR), Faculty Welfare, and Status of Women and Ethnic Minorities (SWEM).

While we find the aim of the study commendable, we believe the study’s many methodological shortcomings and flaws undermine its goal. We agreed with BIR’s assessment: “…we conclude that the report may be too limited in scope and design to guide a thorough response by the University.” The BIR report includes a thoughtful discussion of our concerns. Accordingly, I am appending it in its entirety.

Moving beyond the discussion of methodology, we agree that the study underscores ongoing concerns about gender and racial pay equity at UC. We are persuaded by the SWEM’s position, and endorsed its recommendations:

The Committee on the Status of Women and Ethnic Minorities recommends to DIVCO the following:

1) Call for annual pay equity studies, within each unit of each UC campus, to monitor pay equity. Such studies are consistent with the University’s obligations under federal affirmative action regulations.
2) Call for action plans on each campus to identify and correct problem areas in current faculty salary practices that may be leading to cumulative gender disparities in faculty pay.
3) Call for establishing a mechanism to monitor and report the impact of actions taken on disparities in salaries.
In sum, DIVCO feels strongly that the Yahr study lacks the methodological rigor that we expect and is seriously flawed. We do not believe, however, that the shortcomings of this study should serve as an obstacle to moving forward and addressing well-documented pay disparities. We believe that action plans and remedies should be developed and implemented at the campus level, not through systemwide initiatives.

Sincerely,

Bob Jacobsen
Chair, Berkeley Division of the Academic Senate
Professor of Physics

Cc: Alexis Bell and Elizabeth Deakin, Co-chairs, Committee on Academic Planning and Resource Allocation
Benjamin Hermalin, Chair, Committee on Budget and Interdepartmental Relations
Yale Braunstein, Committee on Faculty Welfare
Pheng Cheah, Committee on the Status of Women and Ethnic Minorities
Aimee Larsen, Manager, Committee on Budget and Interdepartmental Relations
Diane Sprouse, Senate Analyst, Committee on Academic Planning and Resource Allocation
Anita Ross, Senate Analyst, Committee on the Status of Women and Ethnic Minorities

Encl. (1)
BOB JACOBSEN, CHAIR
ACADEMIC SENATE, BERKELEY DIVISION

RE: Comments on Report Entitled, “Analysis of UC Pay Equity by Sex and, Among Men, Ethnicity, 2009-10”

This undated report, authored by Professor Emerita Pauline Yahr (the “Yahr report”), is a pay equity study that was done at the behest of the University Committee on Affirmative Action and Diversity. The document reports on a cross-sectional analysis of UC faculty salaries across the various campuses, all observed in a single year (evidently 2009). Using pay data exclusively for white male faculty, the report employs multiple regression analysis to estimate the coefficients of a linear model of “predicted pay” as a function of degree attainment and career longevity. Applying this model to predict the salaries of women and minority faculty in the UC system, the author concludes that women faculty appear to be underpaid given their academic degrees and years in the profession; no conclusion can be drawn for minority male faculty.

While its aims are commendable and it may provide a first look at UC data, we conclude that the report may be too limited in scope and design to guide a thorough response by the University. Some of our reasons for this conclusion are as follows:

• Given that strong documentation of the fact that women earn less than men at the same career stage already exists, the critical issue to be explored is why this disparity occurs. The report appears to omit variables critical for answering this question. In our view, pay-equity issues arise when faculty members in the same unit receive substantially different levels of compensation that cannot be explained by “merit” based factors, such as scholarly productivity, teaching accomplishments, service, education, and longevity of employment. The Yahr report attempts to control only for only two of these factors (education and longevity). The missing factors are the very ones that, in principle, determine advancement within the UC system. We note that there is a vast research literature on this topic dating back to the early 1970s. Most of it appears to show: (a) that there exists a pay gap between white males and women / minorities; (b) that the observed difference shrinks when one controls for measurable productivity differences; (c) that the drivers behind measurable productivity differences remain subject to debate; and (d) that there is frequently a residual (albeit smaller) unexplained difference that could well be a marker of discrimination. We recommend that the study be restructured in a way that allows reviewers to examine not only observation (a), but observations (b), (c), and (d), as well.
In our assessment, if the Yahr report did in fact account for all four of aforementioned observations and still uncovered a residual pay gap, this result could be susceptible to multiple interpretations, many of which do not imply animas or discrimination. Indeed, we might expect a residual gap to appear in units that make particularly strong efforts to attain diversity at the appointments stage.iv

We have also noted a number of issues with the more technical aspects of the study’s design and presentation that we consider to be problematic.v

We recognize that concerns over gender and racial equity are real and serious, and they affect all who have a stake in the University of California. Moreover, we are not aware of any existing study along these lines tailored to compensation patterns among UC faculty. The University is eminently justified in seeking to explore these issues with care and depth. In our view, however, this study inadvertently falls short of that standard. We believe that the University should consider establishing a panel of experts to conduct a thorough and rigorous analysis of equity issues among its faculty that takes into account the issues we have raised in this memo.

Benjamin E. Hermalin
Chair

BEH/al

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i The report concludes, among other things, that average women faculty members’ realized compensation falls below their predicted compensation in 54 out of the 72 UC units studied, a ratio that is statistically distinct (at all conventionally accepted confidence levels) from what one would expect were pay deviations determined by chance. Realized pay for ethnic minority men, in contrast, fell below predicted pay in 42 out of 72 units, which was not statistically distinct from the null hypothesis of pure chance.

ii The study evidently presumes that “merit”-based controls would necessarily be subjective in nature, and would therefore merely reflect existing discriminatory practices (e.g., p. 49). We were uncertain about the validity of this supposition, given the variety of objective performance measures that would seem to be available (e.g., publication / citation counts, invited presentations, course evaluations, committee service, etc.).

iii Blackaby, David, Alison L. Booth, and Jeff Frank’s article “Outside Offers and the Gender Pay Gap: Empirical Evidence from the UK Academic Labour Market,” The Economic Journal, Vol 115 (2005), pp. F81-F107, shows that the within-institution pay gap between men and women is statistically insignificant controlling for accomplishment and history of outside offers. Their study does, however, suggest that there could be gender differences with respect to the receipt of outside offers, with men being advantaged by the perception that women are “loyal servants” of their institutions and, thus, unlikely to jump ship. (This phenomenon does not, however, appear to operate in the Economics Department and Haas School at Berkeley, where retention cases for women have been disproportionately greater than for men.) The
Blackaby et al. article is also a good entree into the field because it cites much of the previous literature. More general introductions to methods and general results on gender issues in labor markets can be found in Altonji, Joseph G. and Rebecca M. Blank’s chapter “Race and Gender in the Labor Market,” part of the Handbook of Labor Economics and Bertrand, Marianne’s chapter “New Perspectives on Gender,” also in a volume of that Handbook.

iv For example, if a unit harbored such commitments, and it accordingly made extraordinary efforts to target women and minorities at the initial appointment stage, one might easily predict that subsequent salary trajectories in that unit would be (at least on average) flatter for those targeted groups than for white males. That would be the cost of reaching out further than usual for diversity. In this case, it would be inaccurate and unfair to interpret observed pay differentials as a product of discrimination by the unit against women or minorities (indeed, just the opposite). We take no position on whether—or how frequently—alternative stories such as this occur in practice. We merely observe that the Yahr report provides no basis for distinguishing between these competing (even antithetical) narratives.

v To note just a few examples:

• The compensation data analyzed by the report suffer from potentially large measurement errors, as they exclude summer salary, stipends, and non-recurring awards. This omission is significant, given the significant role that these non-salary items often play in total compensation.

• The study depends heavily on years since degree and years at UC as determinants of pay, but does not address the issue of whether women take off more partial-release time for family purposes.

• The study periodically drops economics departments entirely from the analysis for reasons that are unclear.

• The linear model employed in the study is at odds with the vast empirical literature on labor earnings in the social sciences. It is nearly universal practice in this literature to estimate salary regressions using the logarithm of salary rather than absolute levels (as employed here). The log specification is not only a better fit for the data, it is sensible on first principles, since salary increases, COLAs, range adjustments (and the like) often take the form of percentage increases, implying exponential growth. Although the study defends its use of levels rather than logs, it does not, in our view, do so on a principled basis, and the explanation offered is not entirely transparent to us.