

Aging, Work, and Retirement among Late-Career Faculty at the University of California

A Trustee Grant Proposal to

The Alfred P. Sloan Foundation

Sheldon Zedeck, Ph.D., Vice Provost for Academic Affairs and Faculty Welfare

David Card, Ph.D., Class of 1950 Professor of Economics

Marc Goulden, Ph.D., Director of Data Initiatives, Academic Affairs

Angelica Stacy, Ph.D., Associate Vice Provost for Faculty Equity

Karie Frasch, Ph.D., Academic Researcher and Policy Analyst

University of California, Berkeley

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In the last decade there has been a great deal of attention paid to the experiences and needs of faculty in the early stages of academic careers, in terms of recruitment and retention, flexibility around career-life issues, gender, and best practices for supporting faculty career progression. Indeed, there is now ample data to support the crafting of policies and programs, and many changes have been implemented at institutions of higher education within the U.S. as a result of these research studies. In contrast, issues related to late-career faculty, those ages 55 and older, have not received the same kind of focus. Most emphasis in this area has been placed on changing retirement patterns due to the uncapping of mandatory retirement and its projected effect on faculty age structure. Aging and work in the academy, however, is distinct when it comes to topics such as workplace climate, peer relationships, quality of life, productivity, health and disability, dependent-care issues, and a psychological sense of personal legacy and satisfaction among faculty in transition. Relatedly, faculty age structure and faculty renewal are important for their impact on departments, hiring patterns, and institutions as a whole.

With the support of the Alfred P. Sloan Foundation under the *Aging and Work* initiative we seek to advance this area of inquiry through two mutually reinforcing means, the first primarily descriptive, and the second causally focused. Our first approach is to undertake a broad study of issues confronting late-career faculty within the University of California (UC) system through the development, fielding, and analysis of three surveys designed for three different UC populations: Current faculty ages 55 and older, faculty Emeriti, and UC administrators at each UC campus charged with overseeing policy related to late-career faculty. These instruments will be designed in consultation with our advisory board that will include a number of national experts on these issues and will be made available to other institutions interested in pursuing similar studies. The goal of this portion of the project is to create rich

descriptive data that can inform future research efforts in this under-developed field and provide empirical evidence to guide future policy efforts within and outside the UC system.

The second part of the project will leverage the existence of what many scholars have referred to as the single largest series of retirement incentive programs ever offered to faculty—the UC Voluntary Early Retirement Incentive Programs of the early 1990s (verips 1, 2, 3)—to better understand several areas of high analytic interest. The verips led to a surge in exits of 2,000 faculty, over 20% of the tenured and tenure track faculty.¹ Most of the faculty who accepted a verip offer ended their tenure far earlier than would have otherwise been expected, creating a large group of early retirees with widely varying ages and pension benefits, and simultaneously opening up a massive hole in the faculty roster (see *Figure 1* in the Appendix for an example of how the verips affected faculty separation rates at UC Berkeley).

The size and timing of the verip programs provide a unique “natural experiment” that can be used to address two questions that are central to an understanding of the inter-relationship between aging, faculty behavior, and faculty performance:

- (1) How do conditions at retirement – specifically age and the level of pension benefits – affect post-retirement outcomes, including satisfaction, health, and financial security?
- (2) How did the losses of faculty and subsequent opening up of hiring opportunities after the exit of the verip-takers affect the age structure and productivity of individual departments within the University of California?

We propose two inter-related studies that will address these questions using a combination of administrative data from the UC system, the survey of Emeriti faculty who were employed as tenured or tenure-track faculty by the University of California in August 1990, and data from the National Research Council on the rankings of academic departments.

Taken as a whole, these two different, yet synergistic approaches (descriptive and causal), should provide considerable insight into the complexities of late-career issues among faculty and encourage additional high quality scholarship in this nascent field. We hope, too, that the findings from our project will result in the development of new policy initiatives that will benefit late-career faculty and their institutions in times of stability and transition.

Existing Literature and Possible Contributions of the Proposed Project

Mandatory Retirement

The uncapping of mandatory retirement in January 1994 for faculty in the United States is considered a defining moment for academia. Prior to this event, many analysts predicted that the establishment of this new right, the unilateral ability of tenured faculty to choose when to retire, would ultimately result in the dismantling of the tenure system and a general decline in quality and productivity of institutions of higher education. In truth, the impact is not so clear. More than fifteen years later, the tenure system is still in place across the country and is still quite strong within our own institutional setting, the UC system.

As a result of changes to retirement policy, a great deal of the existing literature on faculty aging has been driven by an interest in first predicting and later assessing the impact of changes to federal and institutional policy in regard to mandatory retirement. As is well documented, starting in 1982 the federal policy allowing institutions to require faculty to retire by age 65 was replaced with a mandatory retirement age of 70.² As a result of the 1986 U.S. Age Discrimination in Employment Act (ADEA), federal policy changed again and removed the age 70 mandatory retirement policy, but academic institutions argued for and received a seven-year exemption until 1994. After an influential congressionally-mandated study conducted by the National Research Council concluded that “all but a few institutions will adjust to the

elimination of mandatory retirement without significant effects,” the exemption was allowed to sunset, and as of January 1st, 1994 tenured faculty in the United States acquired the new right to decide when to retire. Interestingly, the National Research Council identified major research universities as most likely to suffer adverse consequences because they observed that faculty “who are research oriented, enjoy inspiring students, have light teaching loads, and are covered by pension plans that reward later retirement are more likely to work past age 70.”³

Accordingly, a body of literature developed prior to and after the 1994 federal policy change sought to assess how faculty retirement behavior might be or has been affected. This literature includes two well known studies, one by Clark, Ghent, and Kreps at three separate North Carolina Universities; and the other by Ashenfelter and Card who studied “16,000 older faculty at 104 colleges and universities across the country” offering TIAA-CREF pension plans. Both studies provide clear evidence that the likelihood of faculty retiring at age 70 has been dramatically affected by the uncapping of mandatory retirement.⁴ As seen in *Figure 2*, institutional data at UC Berkeley demonstrate clearly that a large shift in retirement behavior occurred following the change in federal policy, with many older faculty availing themselves of the opportunity to remain in their faculty title after age 70 (as observed in annual separation rates of faculty age 70 and older in the 1998 to 2008 cohort displaying lower than 20% annual separation rates).

Retirement Incentive Programs

With the dissolution of mandatory retirement, administrators at institutions of higher education who wished to encourage their senior tenured faculty to retire—typically motivated by either a desire to lower the total faculty wage bill or increase rates of faculty renewal—had to rely on incentives.⁵ These most commonly came in the form of phased retirement or buy-out

policies, such as the UC verips. The need for effective incentives has encouraged the development of a number of scholarly studies detailing the types of phased retirement and buy-out policies offered at institutions of higher education and sought to measure their effectiveness and legality.⁶ As part of this line of inquiry, several studies have assessed the impact of verips 1, 2, and 3.⁷ A great deal of attention was given in these studies to determining which faculty characteristics were associated with accepting incentives in exchange for the loss of tenure; poorer health, lower salary, a spouse who has or is planning to retire, and lower productivity were related to the greater inclination to retire.⁸

Occasionally, as part of their assessment of incentive programs, some scholars have sought to examine the larger impact of these policies, including examining post-retirement patterns such as re-employment of retired faculty, professional activities, volunteerism, productivity, and associated psychological issues. For example, Leslie and Johnson argued that faculty with access to phased retirement policies had higher morale; and Kim found that UC faculty who took the verips expressed satisfaction with their choices when surveyed shortly thereafter. But in general, as Pencavel points out in regard to the UC verips, few studies quantify the impacts of these interventions on the institution as a whole.⁹ And most significantly, no study to date has considered the impact of the verips on long-term post-retirement outcomes.

Faculty Productivity

Related to this literature and frequently catalyzed by changes to policies in mandatory retirement, a number of studies have assessed the impact of age on faculty productivity, in regard to various aspects of faculty life, including research productivity, scientific breakthroughs, mental plasticity, quality of teaching, and service contributions. This literature is, of course,

strongly linked to a broader analysis of productivity in the academy that has been undertaken over a number of decades, but particularly so in the last twenty to thirty years.

Out of this productivity literature, two major currents of findings have emerged. First, there is a general acknowledgement that measuring productivity is an extremely challenging enterprise. Specifically, the dependent variables in regard to publications, citations, and intellectual breakthroughs are difficult to quantify and vary considerably by discipline.¹⁰ In association with this difficulty, most analysis has used cross-sectional data sets and these suffer from a number of limitations, including sampling bias issues since faculty who voluntarily leave or lost their positions at different times in their career may be more or less productive than those who remain; and a lack of attention to historical effects, for example the period of verrips in the UC system was highly tumultuous in regard to these issues.¹¹ In general, a number of advances have been made over the last few decades and the work of Long, Allison, and McGinnis; Stephan; Xie and Shauman; Bellas and Toutkoushian; and Leahey all have clearly advanced the field considerably.¹²

The second major current suggests that the association between age and productivity is certainly not as great as the received wisdom regarding the assumed decline of intellectual productivity with age. To date, most studies have suggested a small decline with age, but the effect sizes are considerably less than the disciplinary field effects and variation by institutional type. Specifically, faculty at major research universities are much more productive in regard to articles and citations than those at other institution types.¹³ These studies have also built upon Merton's work of cumulative advantage and disadvantage which suggests that through a faculty member's life cycle an individual can accumulate advantage or disadvantage because of the structure of scholarship.¹⁴ Moreover, Stephan has made clear that in the sciences productivity is

a highly complex phenomenon: “the production of scientific knowledge is far more complex than the human capital model assumes, and that these complexities have a great deal to say about patterns that evolve over the life cycle.”¹⁵

So, too, the studies related to teaching and service suggest that age effects are relatively minimal and fleeting. For example, Marsh found through careful modeling, analyzing a longitudinal dataset of mean teaching evaluation data stored at the course-professor level with a “multilevel approach to growth modeling,” that the teaching evaluations that faculty members receive over a ten-year period display considerable consistency.¹⁶ The idea of either general decline or improvement with time-on-task is not directly supported by these trends.

Life Course Perspective

The scholarship on productivity issues among faculty by age has in fact led to a broader movement among scholars to suggest that a life course perspective is the most promising approach to studying aging, productivity, and retirement behaviors. Blackburn and Clark argued for the advantages of a life course approach in regard to the study of faculty aging and productivity, including its combining of various disciplinary currents related to biology, psychology, and social psychology. They suggested that a life course perspective would be beneficial in working through the complexities of aging and faculty experience in that it is highly sensitive to interactions between the individual and the environment and seeks to take into account historical and cohort effects.¹⁷

Moreover, other practitioners not expressly focused on academics have suggested that the life course approach is particularly promising. Kim and Moen, and Marshall and Mueller have been strong proponents because of its emphasis on linked lives, the interdependence of people, for example, spousal associations in retirement decisions; its sensitivity to ecological context and

patterns of human development; the attention given to cumulative advantages and disadvantages over the life course; and issues of human agency, specifically the ability of individuals alone or in concert to affect the larger social structure.¹⁸

With its series of guiding principals, a life course perspective is well suited to help inform our analysis of late-career UC faculty. Based on even our preliminary analysis of data trends among UC Berkeley faculty, several of the guiding principals of life course theory cited by Glen Elder and others appear to be in operation, including: “Individuals construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstance”; and “The life course of individuals is embedded and shaped by the historical times and places they experience over their lifetime.”¹⁹ As previously noted (see *Figures 1 and 2*), the evidence at UC Berkeley demonstrates that the shifting landscape of retirement policy and incentive offerings has strongly affected individual faculty behavior. Additionally, *Figures 3, 4, 5, and 6* suggest that historical period and cohort effects and individual response to institutional structures are important to consider in a study of late-career faculty within the UC system. Specifically, *Figures 3 and 4* provide clear evidence that compositionally our faculty as a whole have aged considerably from 1979 up through at least 2002. This is in part a national trend among faculty associated with larger demographic patterns of population expansion, access to institutions of higher education, and hiring patterns responding to the increased need for instruction.²⁰ But of course California’s fiscal crisis of the late eighties and early nineties and subsequent development of and offering of the verrips clearly make our institutional history and those of our faculty different from what might have been experienced at other institutions. *Figure 5* makes clear that at UC Berkeley, like most other U.S. institutions of higher education, the demographic composition of our faculty in regard to gender

and race/ethnicity vary by different age cohorts. *Figure 6* provides evidence that separation rates are strongly associated with age – with the highest rates of separation occurring in the late thirties and forties, and in the mid-sixties. The other observation that can be made is that there is now a high degree of variation in the age at which faculty retire from UC Berkeley. Thus a life course perspective which is sensitive to historical and cohort effects and to individual choice along with linked lives is appropriate.

Since Blackburn and Lawrence's call for conducting life course analysis of aging faculty in regard to productivity issues more than two decades ago, limited work has actually been undertaken by scholars either specifically in regard to productivity or more generally in regard to faculty aging and late-career issues.²¹ Since then, mandatory retirement no longer exists and the faculty body throughout the U.S. and within the UC system has aged considerably. Our goal in this study, therefore, will be through the design and analysis of cross-sectional surveys and construction of a longitudinal dataset of pre- and post-retirement faculty within the University of California to explore a wide range of aging related issues and advance the general knowledge. The construction of these datasets will allow us to both produce in-depth descriptive analysis of the broad range of late-career faculty issues and perform several carefully specified studies that will seek to assess the causal role of the policy intervention of the verips in faculty experience and institutional effectiveness.

Methods

Our study will vary from past work in regard to both its overall breadth regarding late-career faculty issues and concentrated emphasis on carefully measuring the direct impact of the verips on post-retirement experience and institutional effectiveness. Thus the overall project will have two major components: The descriptive study and the examination of the verips.

Descriptive Study

Study 1: Current Late-Career UC Faculty and Emeriti UC Faculty

This study will broadly explore late career issues for older faculty (ages 55+) at the University of California and Emeriti faculty through the design and analysis of two surveys (which will have both overlapping and distinct areas of inquiry). The surveys will focus on:

- *current professional activities and productivity*, including time spent on research, teaching, service, administrative roles, and other employment or consulting.
- *career experiences*, such as satisfaction, peer relationships, cross-generational mentoring and collegial interaction, merit review criteria, quality of career life, institutional support, views on changing policy/cultural issues, and sense of the establishment of a legacy in the professional discipline or at the institution.
- *retirement and future career plans* for current faculty, including thoughts about expanded retirement options, and retirement experience (including decision to retire) for Emeriti faculty.
- *family and life*, such as linked lives (e.g. spousal/partner relationships) and dependent care issues (including children and adults with care needs), health, disability.

Our on-going analysis of the federally sponsored Survey of Doctorate Recipients (SDR) on mid- and late-career issues among U.S. faculty, funded by both the Alfred P. Sloan Foundation and the Association for Institutional Research (AIR), will provide us with access to a national comparison group (allowing us to better contextualize our data findings within the UC system). For example, we have found nationally that the presence of children in the household is associated with staying in faculty positions to a later age, affecting both men and women faculty in similar ways. So, too, faculty at Research 1 Universities are considerably less likely on a

year-to-year basis to retire. We anticipate that our survey of UC faculty Emeriti will provide evidence that many of them are highly engaged in a wide-range of professional activities after their date of official retirement. Since the SDR surveys U.S. PhD recipients up through age 76, we can compare our UC faculty to the national patterns in regard to post-retirement professional contributions, including employment patterns after faculty have retired from their tenured positions. Thus our work at the University of California can be understood in the broader context of national patterns of late-career faculty.

Study 2: UC Administrators from Each UC Campus

We will conduct a detailed survey of each campus regarding their implementation of current retirement policies, including the use of post-retirement faculty recall status (e.g., http://apo.chance.berkeley.edu/POST_RETIREMENT_APPOINTMENTS.pdf), development of any retirement incentives, and efforts to address the needs of late-career faculty and facilitate a highly productive environment with collegiality among younger and older faculty. One point of focus will be examining efforts by UC administrators to tap into the talents of our large population of faculty Emeriti, many of whom remain in the local geographical region and remain interested in supporting the University mission. The data collected from this survey can be compared to data from our faculty surveys to ascertain whether UC administrators are supporting our late-career faculty in ways that facilitate both their continued productivity throughout times of transition and involvement in the broader UC community.

Examination of the Verips

Study 1: The Effect of the Verip Programs on Post-Retirement Outcomes

The verip programs offered by the University of California between 1990 and 1993 caused a substantial disruption in the retirement plans of many individuals. Faculty who had

intended to work five or even ten years longer gave up tenure, in some cases moving to another institution, but in many cases retiring permanently from a regular faculty job. At the same time, the unexpected decision by the university to make a second verip offer nearly a year after the first plan, and then a third substantially more generous offer two years later, created an unusual pattern of essentially arbitrary pension benefit levels. Faculty in their late 50's who waited for the third VERIP, for example, ended up enjoying about a 30% boost in retirement benefits over those received by similar-aged faculty who accepted the first or second VERIP.²² Despite the generous terms of the third verip, a surprisingly large fraction of older faculty declined the offer. Many of these presumably worked for only a few more years and never “earned back” the pension benefits they could have received if they had accepted one of the verips.

Our goal in this study is to compare the post-retirement outcomes of older faculty (age 50+) who were employed by UC in 1990 and who either accepted one of the verip programs and gave up tenure early, or did not. Our focus will be on two main characteristics at retirement—age, and pension benefits—both of which were heavily impacted by the verip offers. We will develop a post-retirement questionnaire and conduct a survey of the target group—to be fielded as a module on the UC Faculty Emeriti survey. We will then combine the survey responses with retrospective information from the UC administrative system to determine as precisely as possible the sequence of verip incentives offered to each person, and whether or not he or she accepted the offer at some point. Finally, we will develop a series of statistical models linking post-retirement outcomes to age at retirement and pension benefits, using exposure to the verip programs, and the decision of which (if any) to accept, as sources of variation in age and pension benefits at the point of retirement.

The main outcomes of interest from the survey module will include:

- satisfaction with overall quality of life and with various sub-domains (e.g., finances)
- health (self reported assessment and specific clinical conditions)
- family circumstances (marital status, presence of other family members)

Study 2: The Effect of the Verip Program on the Academic Success of UC Departments

Existing studies of the verip program have largely focused on the effects of the program on the faculty who were offered the verip incentives.²³ As emphasized by Pencavel, however, the verip programs also affected the UC as an institution of teaching and research.²⁴ On average, some 20% of the faculty left their jobs. A variety of evidence suggests that the losses were even bigger in some departments and at some campuses.

The “holes” created by the losses of verip-takers presumably created costs and benefits for the individual academic departments at the UC campuses. On the minus side, the loss of established senior faculty may have reduced the ability of departments to attract younger faculty and graduate students, and to maintain the range of activities that are important for career development of faculty and graduate students (e.g., seminars). On the plus side, existing work suggests that many of the verip-takers were relatively less productive scholars.²⁵ To the extent that new positions were made available to departments to replace the verip takers, the verips may have created a unique opportunity for faculty renewal and rejuvenation.

Our goal in this study is to use administrative data from the UC system, supplemented with departmental ranking information from the National Research Council (NRC), to assess how the losses of older faculty during the verip period, and the eventual replenishment of slots in the following 15 years, ultimately affected the “productivity” of academic departments at the UC campuses. Specifically we will address four main issues:

- (1) How did the losses of verip takers affect the size and age and rank composition of individual departments?
- (2) To what extent were these losses offset by subsequent hiring of new faculty in different age ranges and at different ranks?
- (3) To what extent did the losses of verip takers and the subsequent replenishment over the next 15 years affect the change in a department's ranking by the NRC between 1994 and 2009 (the most recent round of NRC rankings, anticipated to be available shortly)?
- (4) To what extent did the losses of verip takers and the subsequent replenishment affect the relative "quality" of a department, as evidenced by change in average rank and step of the faculty between 1990 and 2010, and by the change in their average salary?

The analysis will be conducted using a series of statistical models for the size, age structure, and rank structure of the faculty in a given department, for the rate of hiring of new faculty (at different ranks and in different age ranges), for the evolution of NRC departmental rankings, and for the evolution of measures of average rank-and-step, and average salary. These models will treat the losses of verip-takers in the 1990-94 period in each department as an exogenous shock, and will take advantage of the fact that within the UC there are multiple campuses with similarly ranked departments in many fields (e.g., economics at UC Berkeley, UCLA, and UC San Diego).

Proposer qualifications

The University of California system has demonstrated an interest in exploring issues of these types, through the repeated development of UC-wide surveys and studies and a willingness to develop tangible policy action based on research findings. Specifically, the Principal Investigator (PI) and Co-PIs of this study have extensive experience developing and launching detailed surveys and research studies throughout the system—including the first-ever UC wide surveys of faculty, doctoral students, and postdoctoral scholars on career-life issues (see

<http://ucfamilyedge.berkeley.edu/sloangrant.html>)—that have informed a number of different policy initiatives, particularly in regard to family responsive policies, programs, and benefits.

Sheldon Zedeck is a well regarded expert on survey design and also is the Vice Provost for Academic Affairs and Faculty Welfare at UC Berkeley, the administrative position charged with the development of and implementation of programs for late-career faculty at Berkeley, the flagship of the UC system. An essential component of these past efforts has been both the strong support of local and central administrations in regard to these initiatives and the generous support of the Alfred P. Sloan Foundation, without which these studies would not have been possible. Furthermore, these earlier studies have resulted in a number of scholarly publications and generated considerable national attention and affected policy and research efforts at other institutions of higher education inside and outside the United States.

One of the clear advantages of conducting a study of late-career faculty at our system is our large scale, with currently more than eight thousand tenure-track faculty (pre- or post-tenure), of whom approximately 40% are ages 55 or older. We also have a range of university types, and a large range of different college and school types. The UC system also provides the opportunity to conduct a study on the longer-term impact of the verrips programs. This part of the project will be directed by David Card, a Professor of Economics at UC Berkeley, who is well known for his sophisticated analysis of policy interventions in response to external pressures, sometimes referred to as “naturally occurring experiments” and/or “exogenous shock,” to shed light on larger questions related to human experience, capital, and market effects. With the construction of detailed longitudinal datasets drawn from personnel records going back as far as 1979, supplemented with additional administrative and external records and linked to our

newly developed survey data, we will be able to conduct a highly nuanced and sophisticated post-mortem of the impact of the verrips.

The current proposed study on faculty aging is sure to be greeted enthusiastically by our system—indeed letters of support included in the appendix from our UC Berkeley Provost, George Breslauer, and the UC Interim Provost Lawrence Pitts (*to come*), suggest that this is the case. Because of the current fiscal downturn and its direct impact on state funding, central and local administrations are sensitized to the importance of this topical area because of both a renewed interest in the possibility of developing additional retirement incentive programs, and an associated need to maximize faculty productivity and support morale in a period of financial constriction.

Advisory Committee

Another asset that our system offers to the proposed study is that we have within our faculty and administrative ranks a number of scholars with expertise in the area of aging, retirement, and survey design and analysis. In addition to Sheldon Zedeck, David Card, and Angelica Stacy, an expert on issues of faculty equity, who are already named on the proposal, we will also have other UC faculty participate on our advisory board, alongside experts from around the country. The current Advisory Committee consists of:

- Andrew Scharlach, an expert on aging issues and the Eugene and Rose Kleiner Professor of Social Welfare at UC Berkeley;
- Ronald G. Ehrenberg, a well-known national expert on late-career faculty issues and the Irving M. Ives Professor of Industrial and Labor Relations and Economics at Cornell University;

- Claire Van Ummerson, an expert on higher education policy and Vice President of the American Council on Education (ACE) and former Chancellor of the University of New Hampshire System;
- Robert J. Willis, a Professor of Economics and Research Professor in the Survey Research Center and the Population Studies Center of the Institute for Social Research and past Director for the Health and Retirement Study, a national longitudinal survey (*invitation in process*);
- Ellen Switkes, an expert on retirement issues within the UC system and former Vice President for Academic Advancement at the University of California.

To this group, we will add additional UC experts and experts from organizations such as the National Institute on Aging and TIAA CREF; and representatives from other research universities interested in conducting similar types of analyses in their own settings, most likely including representatives from Harvard, Stanford, and Columbia who are actively interested in exploring these issues further. This advisory group will provide ongoing guidance on the design and analysis of the three surveys and the longitudinal data set; help us generate high quality research instruments that can be readily shared with others and the necessary data to explore a range of late career issues among faculty; and offer the necessary oversight and expertise to assure methodological rigor and the employment of sophisticated analytic strategies. Because Claire Van Ummerson will be a key advisory member to our project, our UC efforts can be informed by and help inform concurrent efforts at ACE. In addition to securing the help of the advisory committee in the design of the survey instruments, we will also conduct focus groups on an “as need” basis with individuals drawn from the relevant study populations to assure that our efforts are well directed.

Potential Limitations

Despite all of the obvious assets, a study of aging faculty within the UC system is not without limitations. Obviously, this study will be limited by the fact that it will include only a single public university system with shared academic personnel policies in a single geographical state, with similar financial constraints affecting all campuses. Under the most recent Carnegie Classification basic schema (see <http://classifications.carnegiefoundation.org>), based on data from 2003 and 2004, eight of our ten campuses fall under “Research Universities (very high research activity).” UC San Francisco is an exception, typed as a “Special Institution with Medical Focus” (UC Merced was not included because faculty members first arrived at the institution in 2003 and the first graduate courses were offered in 2004). Thus the UC system does not represent the diversity of university and college settings across the U.S. We are also well known for our highly generous and historically well-funded defined benefit retirement plan. Despite these limitations, our ability to construct and administer the necessary high-quality surveys and develop robust longitudinal data sets, our willingness to disseminate findings and share policy and practice, and clear institutional commitment among high-level administrators suggests that the proposed project holds great promise.

Outputs

Our work on this project will result in a number of deliverables. We will:

- Create an advisory group of experts in the fields of aging, retirement, and late-career faculty welfare early on and collaborate with them over the course of the project in the design of survey instruments and data sets, interpretation of research findings and the development of policy recommendations;
- Conduct focus groups on an “as need” basis with intended sample populations to assure that our research efforts are well directed and reflective of their concerns;
- Design, administer, and analyze three surveys: (1) current UC professorial series faculty ages 55 and over; (2) Emeriti faculty throughout the UC system, including the module on verip related issues; (3) UC administrators – make these surveys available to share with other institutions and research groups;

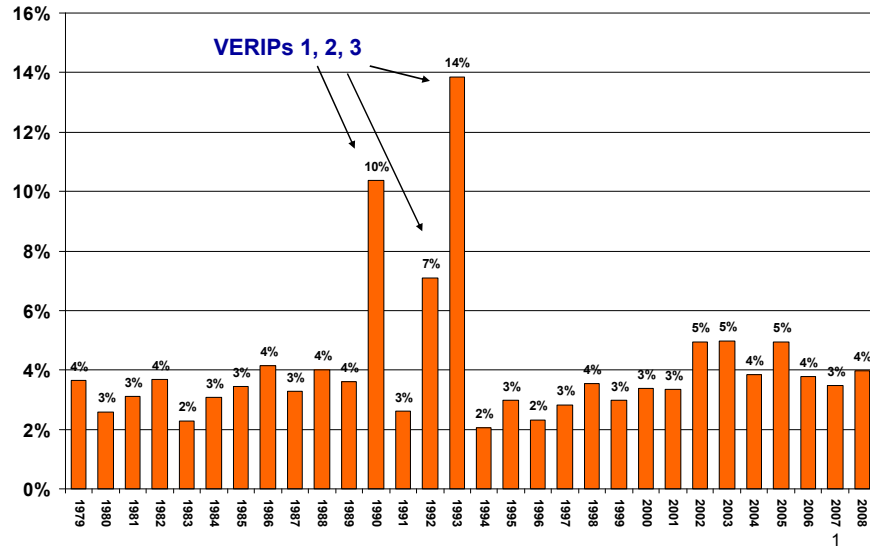
- Construct a longitudinal data sets of UC faculty (pre- and post-retirement), merge secondary data with it at the departmental level, including data from the NRC doctoral program assessments, and conduct analyses;
- Make multiple presentations of data findings within the UC system, at national meetings, and as invited presentations;
- Write scholarly articles that share our work with the broader academic audience;
- Write potential policy initiatives that result from our analyses;
- Recommend new policies and procedures for the UC system that focus on late career issues among our faculty, pre- and post- retirement.

Current and previous Sloan grants

See endnotes for list of materials and products.²⁶

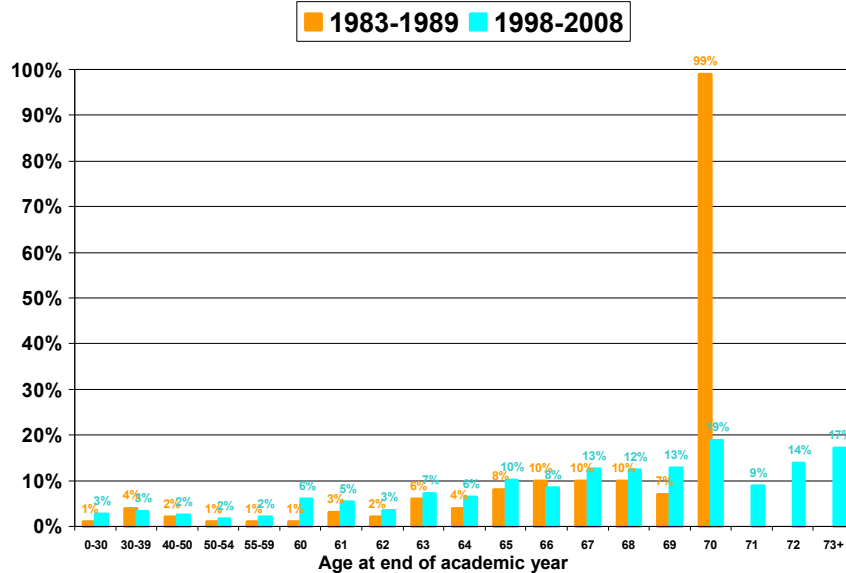
Figures

Figure 1: Annual UC Berkeley Faculty Separation Rates, 1979-2008



Source: UCB Faculty Personnel Records, 1979-2008

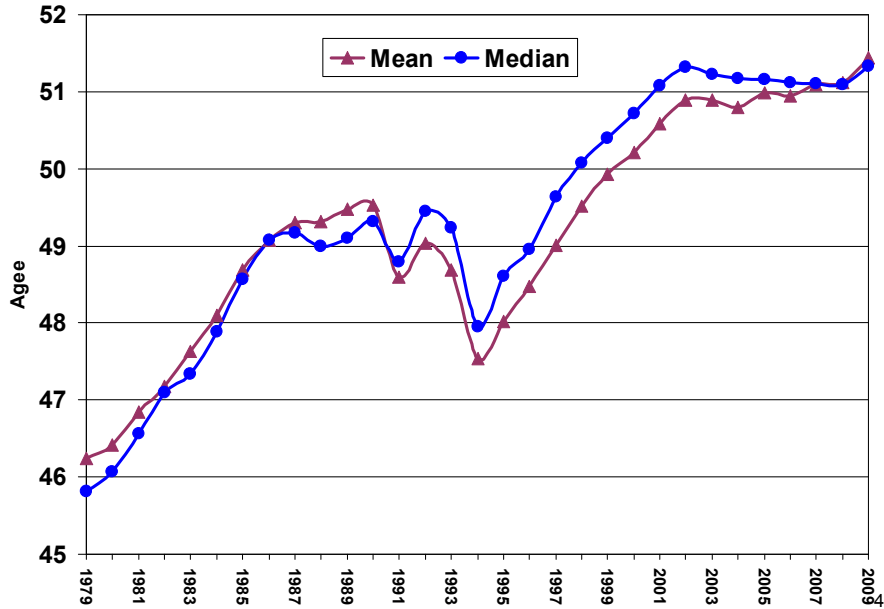
Figure 2: UC Berkeley Yearly Separation Rates at End of Year by Age and Cohorts, Pre- and Post- Removal of Age 70 Mandatory Retirement*



Source: UCB Faculty Personnel Records, AY1983-2008.

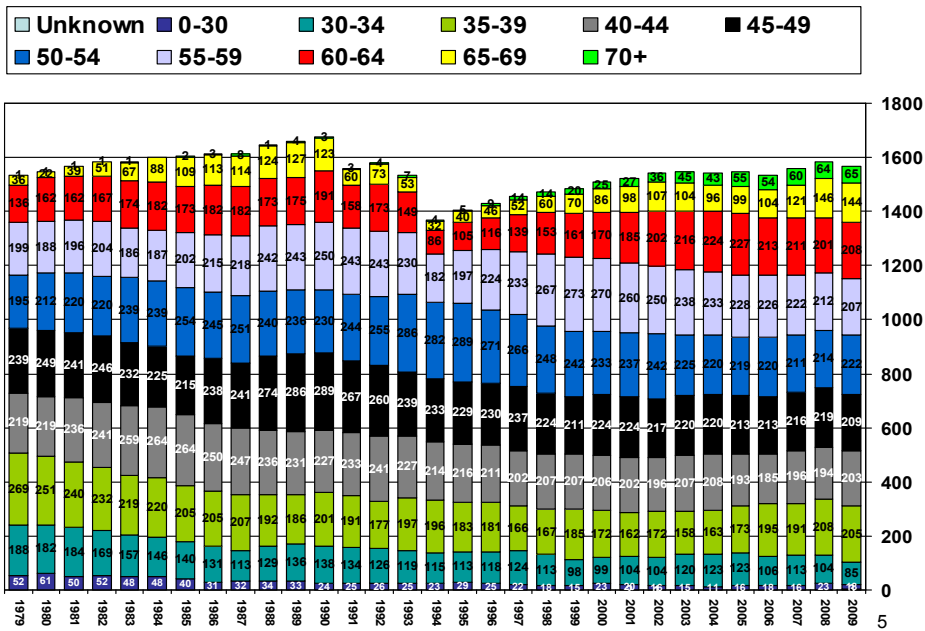
*Age 70 mandatory retirement was removed in January 1994. The data cohorts exclude the years around (1990-1993) and following (1994-1997) the VERIPs because of the dramatic impact they had on retirement behavior.

Figure 3: Mean and Median Age of UCB Faculty, 1979-2009



Source: UCB Faculty Personnel Records, AY1979-2009

Figure 4: UCB Faculty Headcount by Age Categories, 1979-2009



Source: UCB Faculty Personnel Records, AY1979-2009.

Figure 5: UC Berkeley Faculty: Gender/Ethnicity by Age Categories, Fall 2009

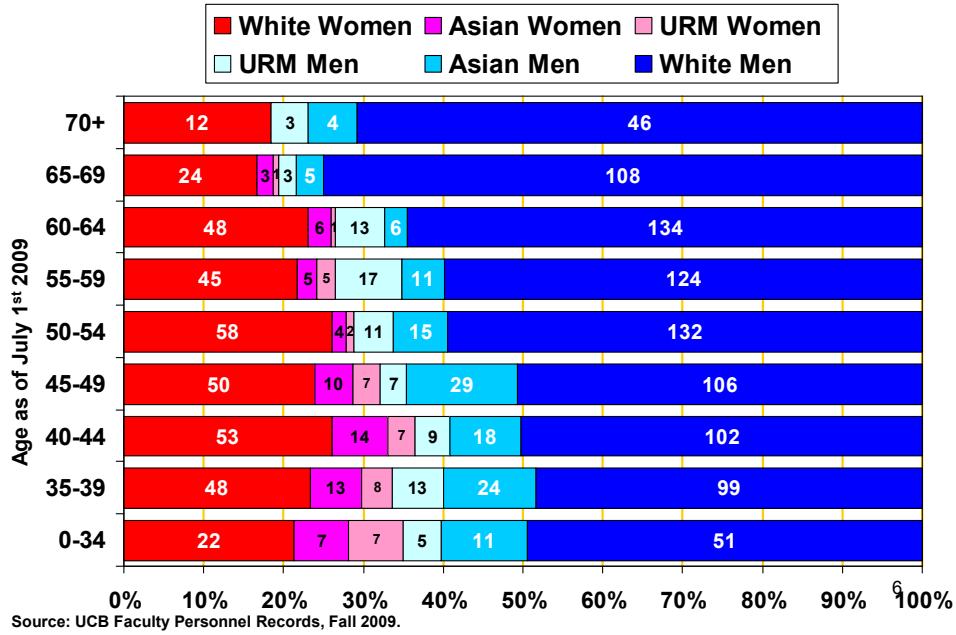
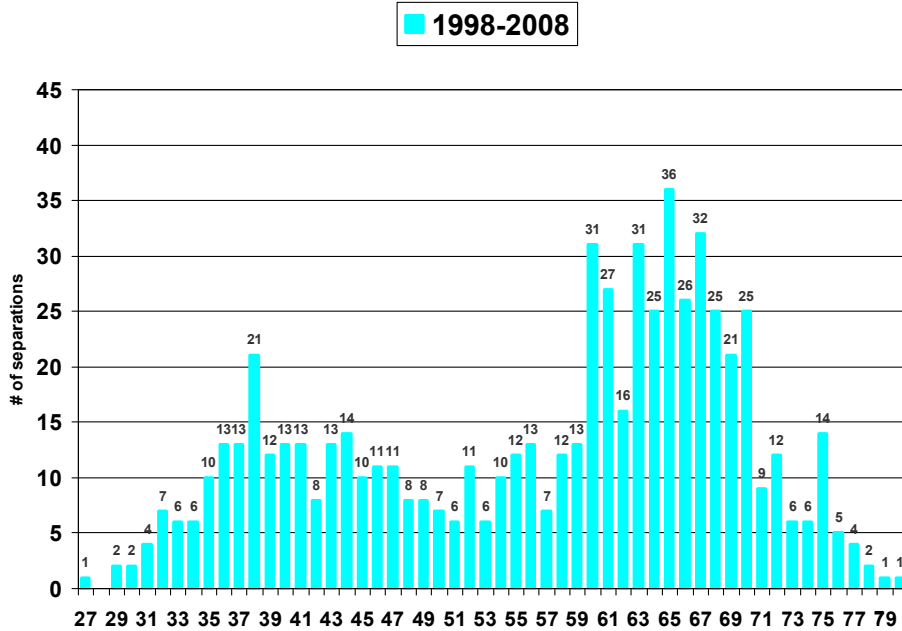


Figure 6: UCB Faculty Separations at End of Year by Age



References

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- ¹ Ellen Switkes, "The University of California Voluntary Retirement Incentive Programs," in *To Retire or Not? Retirement Policy and Practice in Higher Education*, Eds. Robert L. Clark and P. Brett Hammond (Philadelphia, Pennsylvania: University of Pennsylvania Press, 2001, p. 107).
- ² For example, see P. Brett Hammond and Harriet P. Morgan, Eds. *Ending Mandatory Retirement for Tenured Faculty: The Consequences for Higher Education* (Washington, D.C.: National Academy Press, 1991, p. 11).
- ³ Hammond and Morgan, pp. 2-5.
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²² Pencavel, 2001, Table 4.

²³ See Switkes, 2001; Pencavel, 2001 and 2005; Kim, 2003.

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²⁵ Kim, 2003.

²⁶ Mary Ann Mason and Marc Goulden, “Do babies matter? The effect of family formation on the lifelong careers of academic men and women,” *Academe* 90 (2002): 22-27.

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