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National Institute on Aging
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Review of the Centers on the Demography and Economics of Aging

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Prepared by:
Rose Li and Associates, Inc.

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I. INTRODUCTION

The Behavioral and Social Research Program (BSR) at the National Institute on Aging (NIA) conducted an evaluation of its research centers on the Demography and Economics of Aging (often referred to as the "Demography Centers") in 2007 to assess the overall effectiveness of the centers and to determine what changes might be warranted for a future funding cycle, including potential adjustments to program scope, goals, and objectives. One year remains in the current funding cycle of the Demography Centers, and a recompetition is expected, pending NIA approval. Although each center is administratively reviewed every year via progress reviews, an external evaluation of the general effectiveness of the centers was sought to determine further directions for the program as a whole.

The BSR obtained evaluation set-aside funding from the National Institutes of Health (NIH), which was used to retain Rose Li and Associates, Inc. (RL&A) to assist in this activity. RL&A worked with NIA/BSR program staff to (1) establish a project plan and approach, (2) identify qualified candidates for and recruit expert panel members, and (3) establish the schedule for and organize the expert panel meetings, evaluation, report development, and review.

The evaluation consisted of three primary tasks:

(1) Review of extant information about the Demography Centers program, including comparisons across the previous three published requests for applications (RFAs), summaries of centers' activities and accomplishments, and commentary provided by NIA/BSR program staff;
(2) Guided interviews with the principal investigators (PIs) of the centers, which were in some instances supplemented by written responses; and
(3) Deliberations by an expert panel comprising five members, none of whom currently hold leadership positions at a center in the program currently under study. The expert panel was chaired by Wendy Baldwin, with the following members: Richard Burkhauser, Mark Hayward, Linda Martin, and Michael White. (Brief biosketches of the panel members are included as Appendix 1.)

The expert panel met three times by teleconference, on June 20, August 6, and August 9, 2007. The purpose of the first teleconference was to (1) review the panel's charge and background materials that were circulated in advance of the call, (2) allow reviewers to ask questions of NIA/BSR program staff, and (3) solicit reviewers' input about the questions to be asked of center PIs in the guided interviews. A list of materials provided to the panel as background information in advance of the first teleconference is included as Appendix 2. The findings from the guided interviews and other requested information were given to the panel members in advance of the second teleconference. The panel's deliberations during the second teleconference generated the recommendations contained in this report. A preliminary draft of this report was circulated to the expert panel members in advance of the third teleconference, which was convened to resolve any lingering issues and to finalize the panel's recommendations.

The remainder of this report summarizes the findings from each of the three primary evaluation tasks and contains the conclusions and recommendations of the expert panel.

II. BACKGROUND

The purpose of the currently funded NIA P30 research centers on the Demography and Economics of Aging is to support "the infrastructure and pilot data necessary for research and program development in selected areas; research projects in selected areas; the development of innovative national and international networks of researchers, the recruitment of new researchers into the field, the development and enhanced sharing of specialized databases and the rapid application of research results from these databases; and the development of statistical data enclaves for the analysis of large-scale, often-longitudinal, databases with linked administrative data." (June 17, 2003 RFA: Centers on the Demography of Aging). An important objective of the centers program is to provide a research infrastructure not just for the centers themselves but for the larger community of investigators engaged in research on aging.

The purpose of the Demography Centers program generally has been unchanged since the issuance of the first RFA published on January 14, 1994.[1] In the first competition, the centers were funded as P20 exploratory centers in the area of demography and economics of health and aging. P20 grants "support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH."[2] The expectation at that time was that the P20s would lead to specialized (P50) or comprehensive (P30) centers. The amount set aside to fund four to eight P20 centers was $1.5 million total cost per year for up to 5 years.

By 1998, when the second RFA for the Demography Centers was issued, the centers program was recompeted as P30 research and development center grants in the area of demography and economics of health and aging, and the set-aside budget doubled to $3.0 million to support an estimated 6 to 10 centers. The requested amount in the first year was limited to $700,000 compared to $350,000 for the earlier P20 exploratory centers. The P30 center grant is an institutional award that supports a variety of research-related activities organized around one or more common themes or areas of interest. The second RFA stated that an award of a P30 center grant "is expected to lead to a competing application for another P30 or P50 Center Grant award…[It] is a resource designed to encourage the development and maintenance of a significant and enduring high quality research program on population aging. Except for pilot projects included in program development, no funds are provided for the direct support of research projects. The P30 grant also helps to integrate existing projects in a specialized research area, often with a central theme, and to encourage the scientific development of the research area. By making research resources more accessible, this support is designed to enhance the productivity of other NIA-funded population aging research and training grants."

The second RFA encouraged applicants to consider a national or international role in making resources available beyond their own institutions to the larger scientific community. It also

[1] Prior to 1994, the NIA supplemented selected population centers funded by the National Institute of Child Health and Human Development.

[2] Descriptions of all NIH grant mechanisms can be found in Activity Codes, Organizational Codes, and Definitions Used in Extramural Programs, National Institutes of Health, July 2007, http://grants.nih.gov/grants/funding/ac.pdf.

introduced in its list of illustrative topics the areas of biodemography of aging and health systems, in addition to the core research areas mentioned in the first RFA (e.g., general demography, work and retirement, chronic disease and disability) and added a statistical data enclave core as an additional optional activity. The RFA also added the special requirement of institutional support: "The institution and pertinent departments must show a strong commitment to the Center's support. Such commitment may be provided as dedicated space, salary support for investigators, release time, new staff positions, dedicated equipment, clerical support, or other financial support for the proposed Center."

In 1998, the BSR decided to fund more centers at smaller amounts as opposed to fewer centers at full funding. As a result, most centers were funded at levels 30 to 50 percent less than requested amounts. The NIA/BSR originally funded 10 centers, and an 11th center (University of Colorado, PI: Jane Menken) was added later with NIA AIDS funds and with cofunding from the Fogarty International Center. In most years since then, centers have had the opportunity to compete for administrative supplements for discrete projects.

In December 2003, NIA/BSR program staff conducted an administrative review of the Demography Centers requested by the NIA Director as part of the recompetition approval process.[3] Reviewers enthusiastically rated the centers as highly successful, productive, and innovative. They recommended that the NIA/BSR consider (1) supporting infrastructure R01/R24s, which would compete with P30s for funding; (2) restructuring the RFA competitions to pressure existing centers to remain innovative; and (3) competing the centers more frequently than once every 5 years.

The RFA issued in 2003 increased the available center funding to $4 million in each of 5 years for an expected 5–10 center grants, with a first year total cost request ceiling of $788,000. The explicit expectation that the P30 would lead to a competing application for another P30 or P50 grant was dropped, but there was the continued expectation that "scientists supported through this mechanism will either compete successfully for grant support or receive substantial support from the institution by the end of the third year."

In general, each successive RFA appears to reflect more flexibility in components across time. For example, the most recent RFA was more flexible with travel funds, did not limit salary support to junior faculty, and removed the expectation for grant support by the third year as part of the pilot requirements. At the same time, the most recent RFA was more prescriptive about the management of the advisory committees that are intended to assist the center director in decisionmaking, including allocation of funds for pilot studies. The additional requirements include the following: There should be at least five members drawn from diverse expertise; the center PI should chair the advisory committee; the committee should meet at least twice in the first year of funding, with minimally one in-person meeting, to review the research plans and status of current projects and meet at least once per year in subsequent years, with meeting minutes to be prepared and provided to the NIA program official; and the costs of convening and communicating with the advisory committee should be reflected in the budget. However, the

[3] Two panel members (Richard Burkhauser and Linda Martin) participated in the December 2003 administrative review of the Demography Centers.

recommendation in the previous two RFAs that at least one member be from outside the applicant institution was no longer included.

A more detailed comparison of elements across the three RFAs for the Demography Centers program is included as Appendix 3.

Center Impact as Described by NIA/BSR Program Staff

The centers have been the primary engines for answering key questions in demography and economics of aging, and they predate and may equal the impact of a number of influential datasets such as the Health and Retirement Study (HRS), the Panel Study of Income Dynamics (PSID), and the National Long Term Care Survey. There are three areas where the centers have been particularly helpful: (1) Identifying new talent to pursue graduate work and talented individuals at linked institutions who do not focus on aging and providing them with funds that incentivize them to become involved in research related to the demography and economics of aging; (2) providing pilot project funds that create opportunities for highly interdisciplinary or innovative work that can lead to R03 small grants and R01 research grant funding; and (3) encouraging interaction among the different disciplines and particular aspects of disciplines such as through workshops, active networks, and midcareer resources, including important shared research resources that are difficult to efficiently fund otherwise but are of enormous benefit to the field.

A. Structure

In the current formulation of the Demography Centers program, there are two mandatory core functions that all centers must support: (1) An administrative and research support core, which will provide coordination, research planning, logistical, and centralized data and technical support; and (2) a program development core providing for small-scale pilot studies related to program development or methodological innovation. Together these two mandatory core functions help to administer, develop, fund, and monitor the pilot or seed projects that serve as the primary research development engine of the centers.

In general, pilot project topics may be broadly interpreted as long as they are compatible with the center theme. Funds can be used for (1) small-scale projects (in the range of $15,000 to $75,000 direct costs), ordinarily limited to 2 years but which may be extended with appropriate justification; or (2) optional salary support for (a) new faculty development in demography of aging, (b) increasing the critical mass of the scientific research staff, and (c) the development of new program areas and methodologies. Salary support is limited to tenure-track faculty (or equivalent in research organizations) and 5 years per individual. While the NIA staff review proposed pilot projects and often ask for more information, disapproval of projects is rare.

Centers also may support optional core activities such as external, innovative national or international networks, external research support and dissemination, a statistical data enclave, and/or coordinating functions. Although NIA funds only one Coordinating Center, other centers may propose coordinating functions that would exist independently from the Coordinating Center. More details about program requirements are contained in the relevant RFA.

B. Active Demography Centers in 2007

There are currently a total of 13 Centers on the Demography and Economics of Aging at leading universities and policy organizations around the United States. A brief description of the NIA Demography Centers, including major research areas, center activities, and core missions, is contained in issue number 10 of the *NIA Research Highlights in the Demography and Economics of Aging* (see http://agingcenters.org/docs/rh10_NIADemographyCenters.pdf).

The tables and appendices in this report are based on quantitative and qualitative data drawn from program files and the 2007 progress reports. These summary tables are intended to provide a collective sense of the program's scope and coverage. The 13 active center grants in fiscal year (FY) 2007 were funded at a total cost of $6,451,192 and ranged from $246,843 to $914,967 (see Table 1). Six of the 13 centers have been funded since 1994 as P20 centers. The longest-running NIA Demography Centers as a group are funded at higher levels than the newer centers, with a few exceptions. Three centers were funded beginning in 1999, and the remaining four centers were funded beginning in 2004. Five centers have project end dates in 2008. The NIA has committed to providing each of these centers with 1-year bridge funding to align their project end dates with 2009.

Table 1. Demography Centers in 2007 by Funding Amount and Start

P30 Funding Start	PI	Institution	FY2007 Total Costs	Supplemental Annual Funds Included in FY2007 Total Costs	
				NIA AIDS	OBSSR
1994 (as P20's)	Bound, John	U Michigan	$ 914,967*	$ 300,000	
	Hurd, Michael	RAND	$ 473,254		$ 75,000
	Lee, Ronald	UC Berkeley	$ 452,664		$ 80,000
	Soldo, Beth	U Penn	$ 720,244	$ 135,000	
	Waite, Linda	U of Chicago	$ 437,091		$135,000
	Wise, David	NBER	$ 793,052		
1999	Crimmins, Eileen	USC/ UCLA	$ 246,843		
	Garber, Alan	Stanford University	$ 290,314		
	Hauser, Robert	U Wisconsin	$ 461,965		
2004	Alwin, Duane	Penn State	$ 262,012		
	Bloom, David	Harvard University	$ 466,901	$ 148,000	
	Norton, Edward	UNC	$ 275,563		
	Paxson, Christine	Princeton	$ 656,322	$ 135,000	
TOTALS:			**$ 6,451,192**	**$ 718,000**	**$ 290,000**

* Total amount includes funds for the coordinating center and a substantial subcontract to the Population Reference Bureau.

Funding levels are associated with score; critical mass of science at the institution and ability to develop the critical mass; a strategy of wanting to fund as many centers as possible, giving some a toe-hold to accelerate center building; and emphasis on specific topic areas and disciplines of high program relevance. In identifying candidate centers, the NIA primarily looks to existing

programs that have some critical mass of grant activity related to BSR's general scope that could benefit from the existence of a center, including centers that have Population Research Infrastructure Program (PRIP) grants funded by the National Institute of Child Health and Human Development (NICHD). The NICHD currently funds 21 PRIPs, including three developmental infrastructure grants (see Appendix 4 for a list of currently funded NICHD PRIP awardees).

A few institutions received supplemental funds from either the NIA AIDS set aside or the NIH Office of Behavioral and Social Sciences Research (OBSSR). Supplemental funds often come with special reporting requirements or restrictions on the scope of projects that can be supported with such funds. In addition to supporting pilot projects, networks, and startup funds for new hires, the NIA AIDS funding is supporting development of data resources, such as National Archive of Computerized Data on Aging efforts to identify relevant data in its archives that might be put to wider use. The expansion of center activities to include a vigorous HIV program integrating economics and demography would not have occurred without these supplemental funds. OBSSR funds also have been instrumental for infrastructure-building activities such as data sharing, the RAND Summer Institute, and biomarker workshops.

The number of optional cores that a center supports appears to be highly correlated with the award funding level. In general, the centers with more modest funding (less than $300,000 total cost in 2007) supported only the two mandatory cores, with three notable exceptions. Stanford University was able to support an external innovation network with its total cost of $290,314, Princeton University did not support optional cores even with its budget of over $650,000, and the University of Southern California/UCLA with its budget of less than $250,000/year has served as a biomarker core facility (Table 2).

The University of Michigan provides coordinating support for the overall centers program, including coordinating meetings of P30 center directors and center administrators at the annual meetings of the Population Association of America (PAA) and managing a Web site with information about programs at all the centers (www.psc.isr.umich.edu/agingmeta/). In addition to maintaining the all-centers' Web site, the Coordinating Center maintains a set of briefing charts that describe research and other accomplishments of the program, oversees production of a periodic news brief (*Research Highlights in the Demography and Economics of Aging*), and assists in organizing informational meetings as a form of outreach to public and policy communities. Past events have included presentations at the U.S. Department of State, the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, the Fogarty International Center, and other NIH offices; e.g., Office of AIDS Research, OBSSR.

One initiative of the Coordinating Center has been to standardize to a greater extent the information reported by centers in their NIH progress reports to facilitate the reporting of aggregated information, particularly of productivity or output measures, such as publication counts and grant applications submitted and funded for projects that can trace lineage to center-funded pilot projects or other activities, affiliates, and workshops and conferences. Most centers have used the guidelines for reports submitted beginning in 2006. Despite their best efforts, the data that centers report remain inconsistent in terms of, for example, the different ways of

counting affiliates, different definitions of publications, and double-counting of grants with multiple co-PIs. Based on the responses received in 2006, the Coordinating Center distributed to the centers an updated set of guidelines with additional clarifications (Appendix 5). Despite the challenges of eliciting standardized responses, the Coordinating Center has been able to use these reports in a variety of ways, including developing content for the all-centers Web site and e-newsletters and updating slides that describe the program. The standardized progress reports also have been useful to NIA program staff for evaluation purposes. The standard research areas reported by the 13 centers are shown in Appendix 6. Two centers designated all listed research areas as relevant.

Table 2. Cores or Components Supported by Demography Centers, 2007

P30 Funding Start	Institution	MANDATORY CORES		OPTIONALCORES			
		A Admin and Research Support	B Program Dvlpmnt.	C External Innov. Network	D External Research Resources Support and Dissem.	E Statistical Data Enclave	F Coord. Center Function
1994	U Michigan	•	•	•	•	•	•
	U Penn	•	•	•	•	•	
	RAND	•	•	•	•		
	UC Berkeley	•	•	•	•		
	NBER	•	•	•			
	U of Chicago	•	•	•			
1999	U Wisconsin	•	•	•	•	•	
	Stanford U	•	•	•			
	USC/ UCLA	•	•				
2004	Harvard U	•	•	•	•		
	Penn State U	•	•				
	Princeton U	•	•				
	UNC	•	•				

Program Perspective on Center Research Areas

The centers' initial focus on demography and economics has increasingly blended in psychology, physiology, biodemography, and cognition. The NIA's approach to date has been to preserve the foci in demography and economics and reinforce interdisciplinary research. Seemingly unrelated research, such as neuroeconomics, can be reasonably considered a relevant area for Demography Centers. Program staff recognize that determination of relevancy can change as demography and economics have broadened their foci. Although the significant interactions that currently take place between centers has been viewed by program staff as a generally positive development, eradicating much of the isolation of fragmented centers as topics and disciplines have increasingly blended, the growth of such interactions has complicated review efforts.

In terms of collaboration, the centers program as a whole reported nearly 540 affiliates. Ten of the 13 centers reported international collaborations. Centers are collaborating in data collection activities in roughly 20 countries and have research projects in approximately 30 countries in Asia, Africa, Europe, South America, and North America. Three centers did not report cross-center collaborations, five did not report organizing networks, and four did not report on any data or other external resources or services provided in their 2007 progress report. All but one center reported on workshops or conferences held.

The Coordinating Center also has reported that center researchers are informing key social and public policy at the highest levels, including U.S. Governmental agencies and committees such as the Congressional Budget Office; Senate Budget Committee; Senate Committee on Commerce, Science, and Transportation; House Committee on Ways and Means; Social Security Administration; Department of the Treasury; Federal Reserve Board of Governors; Centers for Medicare and Medicaid Services (CMS); National Academy of Sciences; National Science Foundation (NSF); and international organizations such as the International Monetary Fund, World Health Organization, and the Asian Development Bank, as well as the Governments of Mexico, Brazil, Chile, Columbia, Japan, South Africa, and Romania.

C. PILOT PROJECTS

In addition to program staff review, the NIA recently required that grants management staff review and formally approve all pilot projects before they can begin. The change in procedure means that the NIA Grants and Contracts Management Office must revise the Notice of Grant Award and indicate each approved pilot project by name. This requirement is based on the NIA's interpretation of an NIH rule, which does not appear to be consistently interpreted across NIH institutes and centers (ICs). Rarely has a pilot project been rejected by the NIA/BSR because preliminary discussions will either discourage the center from proposing a pilot project with questionable relevance or the pilot project is withdrawn by the center. Different centers employ different selection processes; some have committees review each pilot project proposal, but others require only a review by the PI. NIA program staff members have expressed satisfaction with the pilot projects that have been supported by the centers and appreciate the high-risk, high-gain nature of the pilots.

Based on information from the progress reports submitted in 2007 for the period 2006–2007, the Coordinating Center reported a total of 173 pilot projects awarded between FY2004 and FY2007 by the 13 centers, which were associated with 22 funded grants (out of 51 proposals for outside funding), with a high fraction of the proposals going to the NIH. Approximately 95 pilot projects were active during the 2006–2007 reporting period, a listing of which is provided in Appendix 7 to give a snapshot of the breadth of topics studied. The pilots typically have been funded in the range of $10,000–$40,000 for 1 year, but many are extended, some because of delays in obtaining required approvals or other clearances; e.g., institutional review board or foreign.

III. FINDINGS FROM INTERVIEWS WITH CENTER DIRECTORS

Each Demography Center PI was asked to provide input germane to the evaluation of the centers program as a whole. A questionnaire was developed by RL&A in conjunction with the NIA BSR staff. The questions were then reviewed and supplemented by the five-member expert panel convened to evaluate the Demography Centers program, and shared with the PI's or center directors prior to data collection (see Appendix 8). Each PI was given the option of responding to the questions in writing or during guided telephone interviews. Two PIs opted to respond in writing and were not interviewed by telephone. Two PIs responded to the questions in writing and were also interviewed. Two PIs supplemented their interviews with additional written material. The telephone interviews were conducted between July 11 and July 20, 2007, and each lasted between 40 and 70 minutes. One PI was not able to be interviewed. Thus, this report is based on information provided by 12 of the 13 center PIs.

All interviews were conducted by one person (Deborah Maiese, RL&A) to ensure interviewer consistency. An additional RL&A staff member (Ginny Lerch) took notes and recorded the interviews. The recorded interviews were used solely for the purpose of preparing this report. They were not shared with NIA staff or the expert panel, thus preserving the confidentiality of responses. In addition, every effort has been made in this report to remove references to specific projects, the gender of the respondent, and other potentially identifying information provided by the center PIs.

This section begins by describing some of the organizational characteristics of the centers and then presents the remainder of the interview findings by common themes organized under the broad topics covered by the questionnaire: (1) Outcomes and accomplishments, (2) networks and infrastructure, and (3) other program parameters.

Organizational Characteristics of the Centers: A Diversity of Approaches

Leadership Characteristics

Just as longevity of centers varies across institutions, so does the tenure of the PIs. One PI had assumed that role only 2 weeks prior to the interview while others had been in place since writing the initial grant application. One PI described being in "this business" for more than 30 years. Similarly, there was variation in discipline across the PIs, including economists, sociologists, and one who identified as a "semi-demographer."

At least one center has two associate directors while another reported insufficient funding to support even one associate director. The centers have established steering committees, the primary purpose of which is to review pilot project proposals. Some centers have formal steering committees composed of members from more than one institution. In other centers, the steering committee is more ad hoc in nature.

Institutional Characteristics and Centers Structure

The centers are of different sizes (ranging from 10 to 60 affiliated scientists) and use different operating structures. The location of centers within institutions and their association with other research programs also vary. At least one Demography Center is located in an institutional

gerontology center, providing a logical focus for aging research. Other Demography Centers are part of population research centers that cover the life span and may have infrastructure support from the NICHD. Four Demography Centers are at institutions that also have an NIA-funded Roybal Center designed to conduct applied research to keep older persons independent, active, and productive later in life. One individual is the PI on both a Demography Center and a Roybal Center. At another institution, there is both a Demography Center and an NIA-funded Resource Center for Minority Aging Research (RCMAR).
One PI noted that their center does not have a physical location/campus presence. Regardless of physical location, centers have used Web sites to establish a virtual presence. Three PIs talked about their Web sites and plans for enhancing their Internet presence. These portals are used for posting data and sharing papers that are under development. One PI commented that the Web site can serve an important organizing function for information about projects for use by collaborators.

In terms of the structure for the centers as a group, the role of the University of Michigan as the Coordinating Center has already been mentioned. All of the PIs felt that the University of Michigan does a good job of informing the centers about NIA policy changes and coordinating their communication with the NIA and Congress. Most PIs also noted that the annual meeting was an important function that is well served by the efforts of the Coordinating Center.

Infrastructure Support for Research Grants
It is important to note that institutions with P30 center grants receive other support for research, including NIA grants (e.g., P01s, K awards, and T32s) as well as grants from other NIH ICs. One PI noted that their institution has more funding from the NICHD than from the NIA. According to information provided in progress reports, NIA-funded Demography Centers are directing or co-directing over 400 externally funded grants in aging, ranging from 4 to 95 depending on the institution.

Outcomes and Accomplishments

Impact of the Center Grant at the Grantee Institution and on the Field
Overall, the PIs felt that the P30 grant has had a substantial impact on aging and demographic research at their institutions, providing enormous synergies that allow them to move the field forward. The impact of center grants can be seen in five areas: (1) Jump starting cutting-edge and interdisciplinary science; (2) supporting infrastructure and resource development, use, and sustainability; (3) attracting both young investigators and midcareer scientists to the field; (4) creating training opportunities; and (5) convening conferences and workshops.

Jump Starting Cutting-Edge and Interdisciplinary Science
The impact of the centers grant is felt at both the grantee institution and the scientific fields represented in the centers. As one PI reported, “The dollars we receive get used for very high impact types of things. They have not just impacted aging per se but [sic] the whole demography program here.” Because of the interdisciplinary nature of the research conducted by the centers, the impact of the work is felt in a number of scientific fields. In the words of another PI, “The most important thing about the center grants is integrating disciplines about population health issues in ways otherwise not possible… across social and biological sciences. We have helped

move the biodemographic field by this integration. We have brought together biologists and a set of medical people in geriatrics (and have concentrated on young people and convinced them to come into the field) and social demographers, economists, and psychologists are also involved; it's so extremely interdisciplinary."

By bringing together scientists from different disciplines, the centers have been able to bring a new perspective to issues related to aging and the economics of aging. This has resulted in several cutting-edge projects, such as the work on biomarkers and new approaches to measurement of other health parameters, including in-home collection of blood samples and imaging for survey research, the exploration of relationships between genetics and economic behavior, and the adaptation of existing models of disability to new diseases. One center "expanded to include a vigorous HIV program integrating economics and demography with biologic markers of disease as well as immune 'wear-and tear' in exposed individuals (e.g., grandmothers caring for HIV-infected children or grandchildren). Using field methods of experimental economics, center-supported researchers are developing novel methods of assessing mortality risk."

Center investigators are also undertaking novel data-mining efforts, including the use of 401K, Medicare claims, and private health insurance claims data. Other investigators are developing new databases. One PI described ongoing work in "developing databases in developing parts of the world -- rural South Africa, poorer regions of India…." Another investigator has been developing Internet-based surveys to help answer substantive questions, such as who is enrolling in Medicare Part D. According to this PI, "It is clear that this center has enabled us to go after new areas where data would be useful."

One measure of scientific accomplishment is publications. The Coordinating Center counted more than 900 publications reported by the Demography Centers in their FY2007 progress reports.[4] The quality of cutting-edge research is reflected in prestigious journals publishing the centers' papers. Four PIs noted that research from their centers had been published in the *American Economic Review* and *JAMA*. Publications also reflect the interdisciplinary nature of the centers' research efforts. For example, one center is working on an interdisciplinary handbook on cognitive aging; another is publishing a volume on labor, aging, and health from a conference. One PI lamented the long lead time that economic journals have and the effect that has on bringing findings to the field.

All the PIs found the pilot projects to be an important feature of the centers. The centers provide an environment to mentor junior investigators and resources to jump start research activities. One PI commented, "Our primary activity is the pilot program; it provides seed money that otherwise would not be there for this research. There are other sources of support for various projects in colleges, but not this amount. So this is a high impact program for us." Another PI pointed out that "[we are] not trying to do the equivalent of program grants where things are linked. These are independent projects by junior people who do work with help from senior researchers."

[4] Reporting by Centers remains inconsistent, particularly with respect to publications. There is considerable variation in definition of aging, exact time period covered, and whether working papers are included. The Coordinating Center plans to make future guidelines for progress reporting more specific on these points.

Because many centers have other research support, there are important opportunities to synergize on the NIA's investment in these institutions. The pilot project effort within the centers has proven to be an important resource in this effort. Data from a number of pilot projects have been used in subsequent, successful R01 and P01 applications for NIA support. As one PI commented, "Because we have the Center, we have much more aging related funding research; it works to give people pilots." Several PIs cited successful P01 submissions growing out of center-supported workshops and pilot projects. As noted by one PI, the center "provided the intellectual and structural support for several P01s."

While PIs are enthusiastic about the centers, they also sought to be objective in their interview assessments. Several believed that the centers are having an important impact in the field. However, one PI cautioned that "time will tell regarding the field more generally." This point of view was shared by another PI regarding the pilot projects. This investigator suggested that it may be too early to assess the impact of the pilot projects, which should be looked at 4 or 5 years hence.

Supporting Infrastructure and Resource Development, Use, and Sustainability

Center support from the NIA is used to conduct research, mentor scientists, and provide infrastructure needed to meet center goals. In the case of the Demography Centers, the type of infrastructure most frequently referenced by PIs was major datasets. Data resources cited by the PIs include the following (not an exhaustive list):

HRS
Human Mortality Database (HMD)
Integrative Analysis of Longitudinal Studies on Aging (IALSA)
LSA-Danish Twins Database
Medicare files
Mexican Health and Aging Study (MHAS)
National Transfer Accounts
PSID
Puerto Rican Elderly Health Condition Project (PREHCO)
Surveys of Aging in Latin America (Project SABE)
Wisconsin Longitudinal Study (WLS)

While many of these data resources were developed primarily with other sources of support, the PIs pointed to enhancements that have been made to these datasets using P30 center funds. For example, several PIs talked about their contributions to and the use of the HRS, and one mentioned the collection of international data. The centers have also developed some experimental modules on risk and other new topics for the HRS. One center has played an important role in sustaining the Human Mortality Database by providing workshops and staff support, creating a "state-of-the-art and clean dataset," and making it "available to researchers worldwide…making it the premier source for mortality data for people in industrialized nations."

Another resource important to the research enterprise is the people involved in the center. One PI pointed out that center support afforded them "stability" as well as resources to "employ programmers who have worked with their datasets. The important infrastructure is human

infrastructure. We have professional programmers, long term programmers who are supported in part by the Center."

Attracting New Investigators to the Field

The future of a sound research enterprise depends on a new cadre of researchers. The P30 centers appear to be helping to recruit new investigators to the field of demography and economics of aging. The P30 center was described by one PI as a "resource base [which] is often the first lure for new or isolated researchers." This theme was repeated in numerous ways by the PIs in their interviews and in their written comments. One PI noted that "[we] attract new people to this research… and we are also able to go off into more exploratory innovative directions—hard to do in other types of grants." Yet another PI noted the "flexibility of pilot projects" to meet the needs and interests of new investigators. Similarly, a PI commented that the pilot projects "allowed us to do lots we couldn't do otherwise with seed grants of $25,000." Another PI made the assessment that "the pilot studies have influenced very talented researchers to work in aging research who might not have otherwise."

Many PIs talked about the difficulty of recruiting minorities to their centers; they suggested that the NIA consider providing funding for minority recruitment. Similarly, they noted that under current NIH grants policy, there must be 2 years left on an existing grant in order to receive a minority supplement. One PI suggested that it would be valuable to engage in this activity even if funding were only for 1 year or less.

Creating Training Opportunities

Several PIs commented on how the centers provide training and mentoring for researchers, scholars, and students through a variety of mechanisms, including the RAND Summer Institute and other workshops and conferences. The P30 center funds also have been used to facilitate research-enhancing activities funded primarily by the NIA through other mechanisms.

The RAND Summer Institute promotes interdisciplinary training and collaborations, with about 40–50 individuals at the pre- and postdoctoral level in attendance. The curriculum is divided in two parts: (1) A "mini" medical school for social scientists, with 2 days of lectures in basic medicine and biology; and (2) overviews of social sciences for investigators from non–social science backgrounds, with 2 days of lectures given by leading scientists in psychology, economics, sociology, and demography. Each year, a RAND selection committee receives approximately 100–120 applications for approximately 50 slots at the Summer Institute. Some applicants are from foreign countries; foreign participants are offered partial financial support. Some P30 centers use grant funds to send participants from their institutions.

Other center conferences have also provided an important venue for interdisciplinary training. One PI noted that "there is a steep learning curve and great need for information for the socio/behavior scientists not trained to think of the HPA [hypothalamic-pituitary-adrenal] and other biological science aspects." Training social and behavioral scientists in the use of biomarkers was "a primary function" for one center, according to its PI. Thus, the center held an international biomarker conference in June, which was attended by approximately 100 people.

The agenda focused on the utilization of new biomarkers and international research. The conference was videotaped, and transcripts are available.

One center PI noted that they "have had a number of NIA independently funded postdoctoral students and minority supplements. Some individuals have had various Ks. One person just got a physician scientist award, which was very nice." Another PI talked about how the center grant "interweaves with the NIA T32 and allows trainees to go to workshops and work with other professors."

In addition, the P30 centers serve as informal sources of information for the scientific community. One PI pointed out that they have "many requests by researchers at other institutions to come visit the Center." Several PIs talked about their efforts to collaborate with international scientists, particularly by offering them access to and assistance in using their data resources.

Convening Conferences and Workshops

In addition to the training resources mentioned above, centers support research conferences, workshops, seminars, and meetings that serve functions other than training. In some instances, they were important in drawing attention to an institution's research strength and attracting new investigators to the field of aging research. The conferences and workshops also serve to build the field since many involve investigators outside the center network, including scientists from other countries. Some PIs have sought and received R13 conference grant support for larger meetings.

In interviews and written submissions, PIs described a number of conference and workshop activities and resulting products. One PI "funded a workshop six or seven years ago that led to…an exciting interdisciplinary [P01 program] project involving demographers, biologists, statisticians, economists, and others and has had an impact on the field." Another PI convened a meeting of survey scientists to ascertain the most important biomarkers to be included in future surveys. Biomarkers are "now collected in HRS, MHAS, IFLS, and international surveys." Another center cosponsored a conference with a neighboring institution that is not a Demography Center; the proceedings of that conference are being published. A conference at another center resulted in a handbook.

Center grants also support internal seminars. One center convenes "a monthly seminar that is called the life course health and aging seminar. [We] try to get speakers to come in and give recent research and stimulate conversations among center members." At another institution, all trainees, both pre- and postdoctoral, are required to attend the center's workshops. Another center convenes monthly seminars where researchers present working papers and exchange views on works-in-progress. One PI characterized their internal seminars as the forum through which young investigators are mentored.

Top One or Two Accomplishments of the Centers Program

Center PIs were asked to provide information on the most important accomplishments of the centers program. In general, they answered this question in one of two ways. Some responded literally, citing one or two projects such as pilot projects. Others responded more broadly,

offering more general accomplishments such as bringing new investigators into the field or "luring in accomplished senior individuals who haven't worked in the area before," fostering collaboration, and making contributions to "research, data resource generation, and service to the demography of aging community."
Several investigators mentioned the development of infrastructure and resources as important accomplishments. Among data resources highlighted were the HMD, HRS, IALSA, PREHCO, Project SABE, WLS, and 401K data from employers. Data resources have an impact that goes well beyond the centers. One PI noted that the data resources "are put into the public domain so that the broader research community can benefit. In addition, affiliates reach out to the research community so that these data resources reflect the needs and interest of the broader community." Another PI cited the centers' Biomarker Core as a great accomplishment: "It is an auspicious time—biomarkers are really being used in survey and demographic studies." Another PI noted that the collection of "blood spots in surveys offers an important new approach to survey measurements."

Other PIs referred to research outcomes as critical accomplishments, including the data being generated by the centers. Some PIs noted that the data generated by their centers were important to successful applications for P01 grants in the biodemography of aging. Another PI reported that data from four pilot projects resulted in subsequent grant funding as well as publications. One PI felt that the "large-scale international survey projects that are currently underway" were their major accomplishment. Similarly, publications, including those in prestigious journals and especially if widely cited, were offered as other examples of influential accomplishments.

Several PIs cited conferences as particular accomplishments. Important conferences included the Biodemography Workshop at the 2006 meeting of the PAA; an international, multidisciplinary conference on cognitive aging and the relationship between cognitive aging and health; the RAND Summer Institute; and a monthly seminar on life course health and aging.

Pilot Projects an Important Feature of the Centers Program
The pilot projects were thought to be one of the most important features of the center program, drawing people into the field of aging research and drawing attention to the centers. A few PIs pointed out that more than half of the annual centers funding is used to support the pilot projects. The following summarizes comments made by the PIs about the operation, successes, and challenges of the pilot project component of the centers program.

Pilot Project Application, Selection, and Award Processes
Typically, the center issues a request for proposals for pilot projects. For most institutions, a university-wide solicitation is made once a year; for at least one institution, it is done twice a year. One solicitation described a "multi-stage competition" that includes a preproposal phase. In addition to the formal application processes, several PIs described highly personal preproposal efforts that involved talking to people and encouraging them to submit proposals for pilot funding. One PI talked about working closely with the people who are considering submitting a proposal. These conversations can provide assistance on the substantive focus and budget of the proposed research. One PI commented, "We do a lot of groundwork before things are announced. The most effective way of developing pilot research program is to work with young investigators who are thinking about an idea and getting them to apply, assisting with the

proposals." One investigator, illustrating the cultivation or development process used at their center for pilot projects, stated, "We don't turn down many pilot projects; instead we tell individuals if they are not ready and set up a mentor for that investigator who meets with them for the next year. And then the pilot project is resubmitted after nurturing."
Several PIs commented on "the very large number of high quality applications for our pilot grant program, and only a handful are awarded." Some PIs described getting 15 to 22 pilot project proposals, of which 4 to 7 are put forward to the NIA for a final funding decision. One center stated that they had received applications from 10 different departments on their campus. They see "researchers from diverse areas studying similar issues, who then make connections because of the Center." Other PIs talked about having to hunt for applicants, particularly for international research since foreign clearance requirements are cumbersome.

Across all of the centers, the pilot project proposals are funded on the basis of a competitive system that shares many of the characteristics of the NIH grant review process. Most PIs had an advisory committee to help in the review of the pilot project proposals. In a few institutions, this advisory committee comprised individuals outside of the university. However, the PI has the final decision on which pilot projects are forwarded to the NIA for approval.

The review process can be based on several criteria. Some centers advertise that competitive proposals must propose high-quality research with a potential for high impact. Reviewers often consider the potential for securing future NIH funding. At one institution, young investigators are given additional points. Some centers explicitly earmark funds and give preference to pilot projects that involve interdisciplinary teams. Many PIs noted that pilot funds are used to facilitate new research as well as work that has already been conceptualized. At least one center requires the inclusion of biomarkers. One PI stated that "pilot projects must have biological measurement and a health outcome" because they believe that this combination is likely to have the biggest impact in scientific knowledge.

Budgets for pilot projects typically range from $10,000 to $40,000. At a couple of the institutions, the junior investigators with pilot project funding are mentored by midcareer or more senior investigators. At one institution, pilot project funding has been awarded to senior investigators, including two Nobel laureates in economics, in order to focus their work on aging. The PI of one center has funded pilot projects led by investigators at other institutions.

Pilot Projects Attract New Researchers to Aging Research
One of the accomplishments frequently cited by PIs is the ability of centers to attract new researchers to aging research and then having the resulting research be successful in terms of publications and ability to compete for subsequent grant support.

Many PIs were proud of their ability to attract new researchers, largely through the use of pilot project funding. One PI reported that 82 percent of the people affiliated with the center were not on the initial grant. Similarly, another PI reported a 50-percent growth in the number of people affiliated with the center. Still another PI estimated that roughly one-third of the people in their center have recently joined. Some of the new investigators had a longstanding interest in aging; others had more of a peripheral interest. Some of the centers' growth has come from attracting new people to their university, but other growth has occurred by encouraging colleagues at their

own institution to refocus their research interests on aging. When probed about researchers leaving their center or university, several PIs gave examples of investigators going to other academic and private institutions pursuing aging research. While growth in researchers working on aging has been impressive, most PIs acknowledged difficulties in recruiting minorities to this field.

Measures of Pilot Project Success

Research success can be measured on several dimensions. Scientists often refer to the importance of high-impact/high-quality work. One indicator of success in high-impact/high-quality research is the quality of journals publishing scientific findings. In the case of centers' pilot projects, PIs noted that some project findings were published in prestigious journals, including the *American Economic Review, Nature, Science*, and *JAMA.* One of the pilot project recipients has been listed in *The New York Times* as a one of this country's top economists.

Success also can be measured in terms of continued support for the research. Two PIs provided information on their subsequent success in grant funding after receipt of pilot project funding as evidence of this success. As a group, the Demography Centers have submitted 51 applications for outside funding that originated from pilot projects funded since 2004, of which 22 have been successful in securing funding.

When asked to assess the success of the pilot projects, several PIs noted that insufficient time has passed since they were initiated to assess them. They recommended looking at pilot projects 4 or 5 years after their completion to assess accomplishments.

Most Important/Influential Pilot Projects

When asked to identify their most important or influential pilot projects, some center PIs listed exciting and promising work in progress while others discussed completed projects that have resulted in publications in high-impact journals or have led to significant subsequent grant funding. The projects mentioned covered a diversity of research foci, in a wide range of disciplines including demography, health and retirement economics, cognitive aging, epidemiology, biobehavioral linkages, health, and measurement. An illustrative sampling is provided here.

- Descriptive studies (401K plans, ecological conditions of New Orleans between 1830 and 1930, physical activity among the elderly)
- Demography (aging and population structure, mortality risk of smoking and gender differentials);
- Health and retirement economics (economics of long-term care, retirement planning, obesity effects on employer-sponsored health insurance)
- Cognitive aging
- Epidemiology (epidemiology of bariatric surgery, mutation of HIV strains and transmission pathways)
- Biobehavioral (biogenetics; psychological, genetic, and neurological influences on behavior)

- Health conditions, services, expenditures (CVD and disability, diabetes management, financial incentives for motivating weight loss among older veterans, Medicare spending)
- International studies (elder care in China, Elderly health conditions in Latin America)
- Measurement (biological measurement in a hunting/gathering society and in surveys, elderly respondent-interviewer interaction, food insecurity questions in the National Health and Nutrition Examination Survey and biological indicators of food deprivation, health vignettes in cross-person and cross-national comparisons of self-rated health, measuring glycosylated hemoglobin)

Networks and Infrastructure

Demography Center PIs were asked about networks in which their centers participate. The term "network" was interpreted in various ways by the PIs. Some referred to intra-institutional relationships with other Centers, departments, schools, or campuses. Other PIs referred to interinstitutional relationships, some of which involved interactions with other P30 Demography Centers and others that involved institutions in other countries. Regardless of the type of network, the level of network activities reported by the centers was significant. One PI cautioned that it is important to choose people and projects wisely so that they form a coherent program.

Intra-Institutional Collaborations
Intra-institution networks include those built across campuses, colleges, department, institutes, and disease-specific centers, such as an Alzheimer's Disease Center. Several PIs talked about their research on aging as complementing work at their institution being done with children, youth, and families, which is supported by other NIH ICs, most notably the NICHD. Indeed, one center PI anticipated that award of an NICHD PRIP will afford additional networking potential. Similarly, some but not all Demography Centers reported interacting with other NIA P30 centers, such as the Roybal Centers and RCMARs. Several examples of other strong intra-institutional collaborations involving the Demography Centers included those with medical schools and with various colleges in a university.

Interinstitutional Collaborations
The PIs provided several examples of strong interinstitutional collaborations. Some relate to specific research projects whereas others refer to collaborative activities such as resource development or shared planning of a workshop. Several PIs noted that they have collaborations with universities that do not have an NIA Demography Center. These include Duke University, Loyola University, Oregon State University, University of California at Davis, and University of Texas.

Among centers reporting interinstitutional networks, several include international partners. Countries represented in these research networks include Australia, Bolivia, Brazil, Canada, the Czech Republic, Chile, China, England, Finland, Germany, Greece, Korea, India, Indonesia, Ireland, Israel, Japan, Malawi, Mexico, Nepal, Netherlands, New Zealand, Philippines, Russia, South Africa, and Thailand. A few PIs described their networks in terms of continental

collaborations (e.g., Africa, Asia, and Europe) without specifying the countries involved. One PI noted that one of their international projects involves teams from some 25 countries making for an international network of 50 to 75 people. Several centers host international scientists working in the United States.

One important function of these international networks is to ensure comparability across surveys, which will enable measurements from U.S. surveys to be examined in the context of international data. Some international collaborations involve interdisciplinary work; e.g., foreign medical researchers working with U.S. economists. Center staff participate in networks established by other organizations, such as the Inter-University Consortium on Political and Social Research (ICPSR) which provides tools for comparative international survey research. One center is a member of the Research and Training Network, which is a European Union–funded collaboration of universities in Europe.

Interdisciplinary Research

Ongoing collaborations at the centers involve scientists from a range of disciplines. These include anthropologists, epidemiologists, economists, gerontologists, physicians, psychologists, social psychologists, sociologists, and survey methodologists. Interdisciplinary research is an important aspect of the Demography Centers. One PI captured the essence of the centers' mission as follows: "We expose demographers to research going on in health and aging; expose health policy, behavioral health, and health sciences researchers to demography. Bridging between demography and other health sciences has been one of the accomplishments." Another PI stated, "From our perspective, the most important thing about the Center grants is integrating disciplines about population health issues in ways otherwise not possible… across social and biological sciences. We have helped move the biodemographic field by this integration."

While interdisciplinary research is important, the PIs also discussed challenges and barriers to interdisciplinary research. They reported problems finding funding to continue the interdisciplinary collaborations begun in their centers. Although PIs felt that both the NIH and the NIA have made the importance of interdisciplinary research clear, they raised questions as to whether NIH review groups value interdisciplinary work and whether journals will accept interdisciplinary publications. One PI raised issues related to a loss of focus in interdisciplinary research that has proven challenging: "Things may be too diffuse. We have had trouble getting the whole to be greater than the sum of the parts, getting something more out of the diverse group of researchers than a diverse group of projects. [We] can see success from individual projects for funding and publications, but I am less able to point out interdisciplinary collaboration successes." This particular PI welcomed suggestions on ways to transition from being a consultant on a project representing the perspective of one field to a true interdisciplinary collaborator.

Value Added of Centers Mechanism

Infrastructure for research at center institutions is supported by the P30 grant as well as other sources of research and research training support. For example, center PIs referred to a number of training grants (e.g., NIA T32s, K awards, Agency for Healthcare Research and Quality Health Services Fellowships, Robert Wood Johnson Foundation fellowships) as providing support for the training of new investigators. These funding sources fulfill a variety of

infrastructure needs. Because centers provide a home for a number of investigators from different disciplines, there are economies of scale and shared technology within centers. Moreover, as noted above, centers can provide resources to the intellectual community at the grantee institution as well as other collaborating institutions. One PI characterized the center as a "service center, helping and encouraging a range of investigators with grant preparation, data collection, and analysis." Another PI commented, "It creates other awards across a broader range of project and... helps maintain the culture of resource sharing…."

Respondents were unanimous in their belief that the center grants provide considerable benefits that would not otherwise be possible through a series of R01s. In the words of one PI, the center grant is "completely different in terms of networking. The Center has put me in contact with many different people in different departments across campus. I can spread money around campus and encourage new projects in aging. If I had an R01, it would only be one investigator's work and the people working under him." Another PI noted, "R01[s] have specific aims, whereas networks are more flexible incubators. In addition, the infrastructure provided by the Center creates a stable environment. This has been especially important when funding for individual grants is scarce." Respondents noted that R01s are more "compartmentalized" and less broad in focus. Moreover, they "don't pay for the glue" to hold groups together and lack center benefits, including shared resources, outreach, conferences, and seminars.

At least three PIs mentioned the important benefits of added legitimacy that the Demography Center's existence provides, including "a strong voice in hiring decisions with my department" and greater influence in management decisions such as resource (funding, space) allocation at the institutional level. One PI commented, "The status of a 'center' affords us recognition and reputation …Credibility and respect among one's peers is key to forming alliances, promoting research, and garnering support."

Data Enclaves

Some Centers manage data enclaves that allow access to restricted data. According to the University of Michigan, "The term 'restricted data' refers to data sets that cannot be distributed to the general public because of respondent confidentiality concerns or because third-party licensing or use agreements prohibit redistribution. The data enclave maintains respondent confidentiality by providing a controlled, secure environment in which eligible researchers can perform analyses using restricted data resources." Restricted data would include, for example, Social Security earnings histories that can be matched to the HRS data. The ability to link earning histories to other data provided by individuals could pose risks to confidentiality but could also allow "researchers to accurately calculate future social security benefits for those not year retired. This is essential for those modeling retirement behavior." Thus, making the data available to researchers under controlled conditions through a data enclave affords the research community an important resource while protecting respondents. As stated by one PI, "The value of these enclaves is great with the increasingly stringent rules for confidentiality and security of data."

Use of the data enclave varied across centers. One PI reported being a "heavy user" of the data enclave and linked datasets and that the data enclave provided an "extraordinarily valuable resource." However, others reported not using data enclaves or being unfamiliar with them. One

center PI recommended that the NIA look closely at the demand for various types of data enclaves and whether some other means of access might be possible: "Our most secure enclave (no interactive access) has been used very little, but a 'cold-room' – with controlled personal access – is over subscribed. We probably need a better balance of resources. My impression is that current cohorts of researchers are over-committed to personal interaction with data – which is much easier than remote, indirect access – and to on-site access, rather than having to travel to some other site for personal access to data."

Similarly, opinions about the value of data enclaves varied. It was recognized that creating a data enclave takes careful thought and effort. For example, it requires putting together data from multiple studies and harmonizing measures to support integrated analyses. One PI questioned the cost effectiveness of the public investment in data enclaves, but another PI expressed a more positive viewpoint with specific reference to an HRS enclave: "The data enclave increases overall access…, thereby increasing the Federal government's 'return' on this asset. In particular, it increases access for young researchers. This is a good thing in its own right and also represents an investment in these young researchers' careers. If Federal funding continues to be tight, as seems likely, the value of the HRS enclave will increase in the future."

Other Program Parameters

Discussions with PIs of the P30 centers brought out a range of issues and perspectives. The following section provides a summary of the PIs' comments on the focus and structure of the program, as well as a range of administrative issues, including the role of the NIA in postaward processes, the duration of grants, and the amount of support that centers receive.

Program Scope

The majority of PIs had no suggestions for improving the most recent RFA for the Demography Centers. One considered the existing scope to be appropriate: "We do not think the Center programs should formally broaden beyond demography and economics. As currently construed, Centers can and do reach out to other fields. The focus is population-based, social science research." However, this same PI went on to state, "Demography has grown as a field because it is, by nature, interdisciplinary. The barriers to working across fields are very low. Not all Centers, however, will be in the same position to support all kinds of work. Mandating such efforts more than has already been done would be destructive."

On the other hand, a number of PIs advocated against too narrow a focus on traditional demography. Other PIs suggested that future solicitations be crafted in such a way as to "leave things open" to accommodate new ideas broadly related to demography and the economics of aging. One PI added, "The program needs to be broad and innovative. The NIH is known to be cautious. They need to take risk and be innovative." There also were calls for the NIA to be more explicit about its intent to fund interdisciplinary research in future centers, to encourage life course studies as opposed to limiting the focus to the aged, and to clarify the relative weight accorded to public service as opposed to providing within-center resources. One PI thought it would be helpful if the NIA clarified whether it wants fewer but larger pilot projects or smaller ones.

When asked about the kind of process that would be most effective in determining acceptable breadth if the NIA were to expand the focus of a future RFA, several PIs suggested that a group be convened to examine the NIA's goals in building knowledge in the area of demography and the economics of aging. This group might then be able to recommend targeted areas for program expansion. In terms of the membership of this advisory group, it was suggested that the NIA guard against parochial interests by including emeritus scientists or by including scientists working in related fields. For example, the group could include scientists working in adult development who are not demographers or economists who are not working in gerontology. Some PIs suggested including additional disciplines, such as anthropology, biology with an emphasis on genetics, psychology, neuropsychology, epidemiology, health services, behavioral economics, medicine, and public health.

At least three PIs mentioned interest in the cognitive sciences. One PI saw that one problem "is figuring out what centers are about and whether psychology is a part of that." Thus, clarification about whether psychology is considered within scope would be welcome.

Program Structure

In terms of the structure of the centers, one PI noted, "The cores are highly structured, and these cores do not fit our structure." This PI would prefer that the NIA be less directive about the optional cores and suggested that applicants be permitted to formulate their own structure (including naming of the optional cores) as appropriate or to combine some of them (such as the External Innovative Network Core with the External Research Resources Support and Dissemination Core). Many of the PIs asked the NIA to maintain flexibility in the center program to be able to address new and emerging ideas.

The overwhelming majority of PIs interviewed considered the Coordinating Center to be doing a good, great, or superb job. Their organization of the annual meeting, coordination of the centers' response to the NIA strategic plan, and dissemination of research findings through a subcontract with the Population Reference Bureau were all mentioned as value-added activities on behalf of all the Centers. Nevertheless, one PI, who did not know the amount of funding allocated for the coordinating function, questioned the cost/benefit ratio of the investment while another wondered if conference calls and the agenda for the annual meeting were fully vetted with the center PIs.

Concerns Related to the Pilot Project Review and Award Process

Several PIs described how the requirements for pilot project submissions have evolved over the years that the centers have been in operation. Several characterized the process as becoming "increasingly bureaucratized." The application has "ramped up from two pages to a document with a formal budget, IRB clearance, etc." According to one PI, the process can take up to 9 months to complete. These PIs noted that the amount of funding provided to these projects is small, but the application requirements seem to be growing: "Our center has managed pilots for 10 years. Over that time, we've seen a significant increase in the administrative cost to our PIs and to staff at both [our institution] and NIA. Our pilots are typically quite small--$5,000-30,000. Now in some cases, the PIs question whether these amounts are worth the effort that goes into the approvals." One suggestion was for the NIA to consider allowing PI approval of pilot projects with budgets below a specified threshold to allow PIs more flexibility to jump start pilot

projects or to support the summer projects of researchers. For example, a modest amount of funds (e.g., $20,000) could be set aside for microgrants to be awarded in amounts less than $5,000 each without further NIA approval.

Most PIs felt that the review processes in place at their institutions were sufficient for approving pilot projects. Several PIs raised questions and even concerns about the role of NIA staff in the approval process. One PI stated, "I am not sure of right balance between local and program level (NIA) approval of pilots—but this is an issue." Another PI referred to the NIA review as "micromanagement." While one PI talked about having to defend some pilot project applications to NIA staff and being successful in doing so, no PIs described pilots that had been disapproved by the NIA. One PI said that the NIA had considered scheduling the pilot project reviews for once or twice a year. This would appear to defeat the purpose of making timely awards for high-priority projects. Several PIs indicated that they wanted to have maximum flexibility in approving pilot projects.

Similarly, PIs with foreign collaborations expressed concern about administrative issues. Foreign clearance was frequently cited as a barrier to international collaboration. PIs described delays of up to 2 years in obtaining this clearance. One PI reported that the delay in clearance was incompatible with the programmatic imperative to use pilot project funds quickly and flexibly: "I have abandoned projects and had to find other sources of funds. The money is going unspent and piles up." It might be useful, as noted by one PI, for the NIA to provide additional clarification about the State Department requirements for clearance for investigators planning international collaborations.

A number of the PIs talked about having carryover funds from one year to the next. They attribute this carryover to the review process for pilot projects, the time it takes for the researchers to use the pilot funds, and to the delays in foreign clearances. One PI characterized their center's carryover problem as not having enough pilot projects and wished that to not be the case, but many other PIs had more candidate pilot projects than they could possibly fund with available funds.

Funding Concerns

In an era of constrained funding, it was not surprising that the center PIs expressed concern about the level of support for the centers. Several PIs talked about the NIA's budget cuts. One PI reported that the center "had to cut out big chunks - used vast amount for infrastructure and then the rest for seed projects." Another PI even characterized the center as "a net liability" to the institution, dependent on the university for infrastructure such as in computing and database management. While providing support for research, training, pilot projects, and other activities, several PIs mentioned expenses not covered by the center grant. Because grants do not cover teaching time, faculty members need to leverage their own time to make more efficient use of funds. For some Centers, it would be useful if P30 grant funds could be used to support faculty salary, particularly for new researchers.[5]

[5] Under current guidelines, optional salary support is limited to tenure-track faculty (or equivalent in research organizations) and 5 years per individual.

There was a general sense that a 5-year project period is the minimum necessary to build the infrastructure for the center. Several of the 2004 awardees received 4 years of support and expressed concern about the availability of bridge funding.[6]

With additional funding from the NIA, the PIs reported that they would expand the number of pilot projects awarded; send students and junior faculty to training and other activities to support networking; and offer more or larger workshops, seminars, and conferences and videotape them to make them as broadly available as possible, including at international sites. Several PIs talked about seeking R13 grants from the NIA to support conferences and suggested that it might be more efficient to include these in the P30. PIs also mentioned a host of other areas where more funds, if made available, would be directed, including

- Institutional resources for storing and accessing sensitive biomarker data from multiple projects;
- An international infrastructure for health data;
- Administrative demands such as approval of pilots, human subjects reviews, international pilots, and cross-Center and cross-campus collaborations, which often require establishing subcontracts; and
- A Web site to house information on measurement comparability across surveys to educate demographers and support appropriate analyses.

One PI of a Center with NIA AIDS supplemental funding found the associated restrictions on allowable project scope to seriously limit their ability to fund promising lines of work: "It would be useful to know if the Office of AIDS Research will be providing support to the centers program this round, and this information is most useful if it is stated in the RFP. If they are, this may influence our proposal."

Value of Administrative Supplements

In terms of other sources of support, NIH administrative supplements were described by virtually all center PIs as "great." These supplements are particularly effective for investigators trying to respond to new developments that nevertheless fall within the scope of research of the parent grant. Moreover, they provide funding in a timely fashion. Another PI said, "[Supplements] were especially helpful in the early years of this P30 and their (almost) disappearance has been a real impediment to innovation." A third PI commented, "[The] supplement competition is one way program officers hear about new ideas. That can be good in itself." At least two PIs had not had much experience with the administrative supplements, and one PI appreciated its availability but considered the amount inadequate for their purposes.

Leveraging Funds from Other Sources

Several investigators in the P30 centers have funding for research projects that come from various sources, including university funds. One PI noted that the dean's funds are used to

[6] On May 1, 2007, NIA program staff informed the four Centers with project period end dates in 2008 that they would be permitted to apply for 1-year bridge/closeout funding through summer 2009. As with all requests for bridge/closeout funding, grantees are not guaranteed an amount equal to their last year of funding. Instead, BSR and the NIA grants management staff review requests in the context of factors such as need and unspent funds. If the BSR's proposal for a successor demography and economics centers RFA is approved by the NIA Director, the RFA is expected to be released during winter 2007/spring 2008 for funding beginning summer of 2009.

support the foreign part of a study because clearance takes so long when using Federal funds. Some PIs pointed to support that their center receives from the university, including space, a data archivist, and administrative services.

In terms of leveraging other funding, many PIs responded that they do not have the time to pursue other monies. Nevertheless, several PIs have been successful in obtaining funding from the NSF, Department of Labor, the CMS, and the Social Security Administration. Some PIs said that overhead rates at their universities were an issue for foundation support. Therefore, most PIs were not looking to foundations for support. One PI, however, said that their international partners have been successful in securing funds from international foundations to support data collection and analysis.

Grants Management

One PI "strongly recommended that the centers be administered under FDP [Federal Demonstration Partnership] rules with annual progress reports via eSNAP.…FDP allows for automatic carry forward of unexpended funds from year to year. Automatic carry forward would be a very large benefit to us in terms of administrative effort." This PI reported that FDP with eSNAP works well for R24 and P01 grants and would significantly relieve the reporting burden now required of the P30 Demography Center grantees.

Reporting Requirements

Annual progress reports are a lot of work for Centers—some run upwards of 100 pages of tables and text. One PI suggested that the NIA may wish to address what was perceived as "an asymmetry between the amount of text we can use in competing renewals and the demands for detailed reporting in non-competing renewals" and complained that "…BSR frequently asks for separate reports about matters that are covered in the non-competing renewals, leaving us to wonder whether those reports are actually read and used by program staff."

The Coordinating Center has suggested specific guidelines for standardizing reporting on some items (e.g., publications, research grants, pilot projects) to facilitate progress reviews and strongly urges that the NIA issue more specific guidelines for the content of the annual progress reports so that they can be of greatest value to NIA program staff. It may be useful to review NICHD guidance to their PRIP (R24) grantees on content of progress reports. Once the guidelines are set, it would help to keep them in place for a few years to help establish a routine.

Concerns About Review

It was recognized that the growing interconnectedness of Centers can complicate recruitment of appropriate reviewers who do not have any apparent conflicts of interest. When PIs were asked for suggestions on how to overcome this challenge while maintaining an objective and qualified review panel, those who answered stated that it is "impossible to use traditional rules" under these circumstances, that the conflicts were more in appearance than substance, and that institutional ties were much less of a concern than personal ties. One PI suggested an approach more akin to that of the National Academies, where "the goal is to obtain highly competent and balanced panel membership, and…there is a facilitated, public discussion of each member's interests early in the meetings of the panel and annually thereafter." Other concrete suggestions

proffered by PIs included greater reliance on reviewers who are (1) emeritus; (2) from outside the United States; and/or (3) at NICHD Centers that do not have a strong aging component.

NIA Role
Overall, the PIs were appreciative of the NIA's efforts to support the centers. One PI noted, "The BSR staff do a superb job running the program. However, the demands placed on them are unrealistically high. Additional staff should be hired to help deal with the large volume of work they must undertake to keep BSR vibrant."

The PIs made several recommendations where the NIA/BSR might be able to intercede to help highlight the work of the centers. Because it can be difficult to find outlets for interdisciplinary work, the NIA might sponsor a journal supplement to showcase the work that has been done through pilot projects. Other venues, however, could be used to highlight the centers' research. For example, the NIA could convene a conference to have center investigators present their research. One PI suggested that each center could alternate hosting such a conference and invite members from other Demography Centers to attend.

NIA staff serve an important service function by providing guidance to center staff on a range of issues. One PI asked if the NIA could work with the center PIs to turn promising projects into commercial ventures. This might entail support through the Small Business Innovative Research (SBIR) mechanism. One PI described the challenge of "shifting personnel off the budget to meet the administrative requirements of such a venture." Another PI asked for clearer NIA guidance on State Department requirements for obtaining clearance for international projects.

PIs also raised concerns about having sufficient lead time to prepare a response to the RFA: "At minimum, we need 4 months between RFA and the submission deadline."

IV. CONCLUSIONS AND RECOMMENDATIONS

The expert panel met on August 6, 2007, to review the summary information from program files and the PI interviews, to address questions to NIA/BSR staff, to discuss their assessment of the overall effectiveness of the Demography Centers program, and to chart future directions for the program, including potential changes to scope, goals, and objectives. See Appendix 8 for the evaluation questions that panel members used to guide their discussion. The panel's conclusions and recommendations follow.

Centers on the Demography and Economics of Aging Add Value
The panel enthusiastically agreed that the Demography Centers program has been outstanding and has had a tremendous impact on aging research. The centers as a whole have met the stated objectives for the RFAs, and the results to date have been even more creative and influential than what was expected at the outset of the centers program. Panel members cited as example the large number of important datasets collected or supported by the centers. Significant expansion into promising new areas of research, such as the collection and analysis of biomarker data together with sociodemographic information, the development and exploitation of longitudinal datasets, and the efforts to broaden research teams through active outreach to disciplines outside

demography and economics, also has been notable. The Demography Centers program has provided a visible infrastructure that enhances collaboration among researchers, attraction of new investigators to the aging field, and cohesiveness and visibility of aging research. The Coordinating Center has played an important and effective role in strengthening the Demography Centers program by enhancing communication and collaboration among the centers and by underscoring their combined and cumulative record of productivity and accomplishment.

Interdisciplinary and Single-Disciplinary Emphases Are Appropriately Balanced
The panel recognized the healthy tension between interdisciplinary and disciplinary foci of individual centers. Both large disciplinary questions and interdisciplinary intersections must be pursued to realize progress in a field. Although there appears to be variability in balance between disciplinary and interdisciplinary research across Centers, the panel considered the Demography Centers program as a whole to be appropriately balanced. The specific elements of the centers have been and should continue to be guided by the excitement of ideas rather than a bias toward a particular disciplinary approach.

Research Scope Should Be Rooted in Population Research but Informed by Other Fields
The panel recommended that the centers continue to be rooted in population research but informed by psychological, biological, and other fields as appropriate. The panel emphasized the importance of having a core in population research as well as the flexibility to grow from that base and include models informed by other disciplines. The panel did not see the need to expand the RFA focus beyond demography and economics of aging. The current scope of projects is appropriate, and the pilot projects and networking features build in the ability to expand boundaries, if and when necessary. The panel considered the fact that PIs on the whole did not mention constraints on their movement into promising areas as another indication that the RFA is adequate in its current form, with the field well positioned to capitalize on opportunities to pursue the most promising and innovative topics.

Review Concerns Are Heightened With Respect to Interdisciplinary Research
The panel noted the frustration registered by several PI s regarding the review and publication of interdisciplinary research. Interdisciplinary research has been a touchstone of the BSR, but there are concerns about whether NIH peer reviewers truly value interdisciplinary research. There are also concerns regarding actual versus potential conflicts of interest and how strict interpretation of NIH conflict-of-interest rules may actually impede the process of a fair and quality review. The panel considered situations in which personal conflicts may be of generally greater concern than institutional conflicts and contended that gradations of conflicts based on the strength of associations within institutions should be considered. The panel observed a very real tradeoff between the purity of reviewers with respect to the absence of any conflicts of interest versus the quality of the review group. The challenges of constituting a suitable review group, free of all apparent conflicts of interest, for the Demography Centers are further complicated by NIA plans to recompete all the Demography Centers in the same cycle, thus severely constraining the availability of suitable reviewers. This is a fundamental problem across the NIH and not specific to the Demography Centers. Rather than trying to solve this problem, the panel noted that the NIH is currently soliciting comments from the research community about NIH review and considered it appropriate to remand this issue to this NIH process. The panel also suggested that

the NIA consider, to the extent possible, a more actively managed review in which biases are declared and balanced.

Administrative Aspects of Pilot Projects Are Ripe for Streamlining
Although center PIs are clearly able to articulate the value of their pilot projects, there is an overall sense of frustration regarding the current approval process for pilot projects. The panel suggested that these administrative aspects of the pilot core are ripe for streamlining and that such a revision will increase the flexibility of the core and increase productivity. The panel emphasized the importance of the pilot projects and recommended that the process by which pilot projects are directed to the NIA for formal approval be reconsidered. The panel suggested that a more efficient approach may be to request that centers provide information on an annual basis about their process for awarding pilot project grants, as well as a list of pilot projects that have received support or that are expected to be funded. BSR program staff should be consulted about any pilot projects of questionable scope.

More Streamlined Reporting Process Should Be Explored
The panel endorsed the suggestion by one PI to adopt a more streamlined reporting process, such as the FDP process currently permitted for regular research grants with expanded authorities, entitling them to automatic carryovers and electronic progress reporting. Currently, P30s are considered complex mechanisms and are not subject to expanded authorities. The panel encouraged the NIA to reach out to the FDP to investigate the feasibility of piloting the FDP process as part of the next Demography Centers RFA. The panel agreed that such a development could increase research productivity by streamlining the administrative process, as well as decrease the reporting burden that was noted by PIs. The panel also suggested that consulting with the centers and refining specific reporting guidelines along the lines that the Coordinating Center has begun for progress reports could reduce the size and burden of required reports and should continue to be encouraged.

Enhance Opportunities To Support Minority Investigators
In terms of attracting new investigators to the field, the panel agreed that it would be valuable if minority supplement requests could accommodate shorter time spans than the 2 years currently stated in the NIA guidelines but with institutional assurances that the minority scholar will be integrated into a broader research program that will outlast an abbreviated minority supplement award period. The recruitment and involvement of minority researchers is often challenging, and their timing does not necessarily coincide with having at least 2 years remaining on the parent grant. Permitting shorter, simpler terms for minority supplements would increase the flexibility for center PIs to engage more minority researchers when opportunities arise in the context of a larger research enterprise that would not compromise on the full duration, intensity, and richness of the experience for the minority investigator. The NIA should consider a no-cost extension of the primary award in order for the minority researcher to continue his/her involvement in the main body of research for a meaningful length of time.

Continue To Encourage Complementary Funding
The panel understood the importance that center PIs placed on timely conferences and workshops and their desire to be able to hold more such activities if additional funds were

available. The panel considered it reasonable for centers to appeal to other funding sources to support these additional functions if the P30 funds are limited.

The panel also recommended that NIA/BSR staff organize a session for center PIs about SBIR opportunities as an avenue for possible supplemental funding. Presentations by NIH SBIR staff at the annual meeting of the PAA and/or at other professional meetings could be organized to help explain the fundamental issues regarding commercial ventures and address the PIs' apparent desire for such information.

The panel praised the NIA for its efforts to obtain supplemental funding from the OBSSR and the NIA AIDS office for selected Demography Centers. This funding has broadened and deepened the particular centers' focus on HIV/AIDS in the population. The panel encouraged the NIA to continue to seek out such complementary funding for the next RFA.

No Major Changes Needed to Demography Centers RFA

The panel did not have any major suggestions for changes to a future RFA and considered the modest suggestions by PIs in this regard to be an indication that the previous RFA has been on the whole well conceived. It was noted, however, that the RFA should be issued in a timely manner in order to ensure that PIs have enough time to prepare responsive applications.

APPENDIX 1

Biosketches of Panel Members

Wendy Baldwin, Ph.D. (Chair), is Program Director for Poverty, Gender and Youth at the Population Council in New York. Previously she was Executive Vice President for Research at the University of Kentucky. From 1993 to 2002, she served as Deputy Director for Extramural Research at the National Institutes of Health, with responsibility for advising the director on extramural policy issues, and developing and overseeing policies and procedures for extramural research and training programs. Before that, Dr. Baldwin completed 20 years of service with the National Institute of Child Health and Human Development as Chief of the Demographic and Behavioral Sciences branch, and as the Deputy Director.

Richard Burkhauser, Ph.D., is the Sarah Gibson Blanding Professor of Policy Analysis in the College of Human Ecology at Cornell University. His research focuses on how public policies affect the economic behavior and well-being of vulnerable populations, e.g., older persons, people with disabilities, and low-income households. He has published widely on these topics in journals of demography, economics, gerontology, as well as public policy.

Mark Hayward, Ph.D., is Director of the Population Research Center, and Professor of Sociology at the University of Texas at Austin with particular interest in research on the influence of socioeconomic achievement on the health of older Americans. His current studies examine: early life influences on socioeconomic and race disparities in adult morbidity and mortality; the demography of race/ethnic disparities in life expectancy; and the health consequences of marriage, divorce and widowhood. He is the author of several books and journal articles about health as a determinant of racial inequality in retirement; the connection between childhood health and adult morbidity; and the socioeconomic origins of the race gap in chronic disease morbidity.

Linda G. Martin, Ph.D., is Scholar in Residence at the Institute of Medicine, National Academies in Washington, D.C. Her research focuses on trends in health of older people in Asia and the United States. She was formerly the President of the Population Council in New York. Prior to that, she was Vice President for Research Development at RAND, and Director of the Committee on Population, National Academy of Sciences.

Michael White, Ph.D., is Director, Population Studies and Training Center and Professor of Sociology at Brown University. Most of his research investigates issues that stand at the intersection of sociology and public policy. He is presently involved in a wide range of research projects in a variety of geographic settings. His current research includes studies of immigrant adaptation in schooling, family and the labor force. He also is working on new methods for analyzing residential segregation. Dr. White also has held appointments at Princeton University, and the Urban Institute. He is past chair of the NICHD Population Studies Committee and is currently serving as President of the Association of Population Centers.

APPENDIX 2

Background Materials Provided to Panel Members in Advance of June 20, 2007, Teleconference

The NIA Demography Centers, *Research Highlights in the Demography and Economics of Aging*, No. 10, March 2007

Overview Slides of the Demography Centers Prepared by the Coordinating Core, 2007

Report from the December 15, 2003, Administrative Review of NIA Centers on the Demography of Aging

Comparison of Elements Across RFAs Issued Since 1994

Updated Guidelines for Standardized Reporting, Feb 2007 memo from Bob Schoeni and Lora Myers to NIA P30 Demography Centers

Table with FY2007 Funding and Cores Funded

Table with summary information reported by Centers at request of the Coordinating Core, FY2006

APPENDIX 3
Comparison of Elements Across Demography Centers RFAs Since Inception

	2003	1998	1994
	AG-04-001	AG-99-001	AG-94-005
Publication Date	17-Jun-03	15-Sep-98	14-Jan-94
Letter of Intent Receipt Date	22-Sep-03	16-Oct-98	1-Feb-94
Application Receipt Date	22-Oct-03	20-Nov-98	31-Mar-94
Anticipated date of award	1-Jul-04	1-Jul-99	30-Sep-94
Purpose and Subpurpose			
Support the infrastructure and pilot data necessary for research and program development in selected areas	●		
Support the infrastructure necessary for research, new program development in selected areas		●	●
Support research projects in selected areas	●	●	
Support the development of innovative national and international networks of researchers	●	●	
Support the development of innovative networks of researchers			●
Support the recruitment of new researchers into the field	●	●	
Support the development and enhanced sharing of specialized databases and the rapid application of research results from these databases	●	●	●
Support the development of statistical data enclaves for the analysis of large-scale, often-longitudinal, databases with linked administrative data	●	●	
Expected to lead to a competing application for a P30 or P50 Center Grant award		●	●
As a target, it is expected that scientists supported through this mechanism will either compete successfully for grant support or receive substantial support from the institution by the end of the third year	●		
Designed to encourage the development and maintenance of a significant and enduring high quality research program on population aging.		●	●
Helps to integrate existing projects in a specialized research area, often with a central theme, and to encourage the scientific development of the research area.		●	●
By making research resources more accessible, this support is designed to enhance the productivity of other NIA-funded population aging research and training grants.		●	●

	2003	1998	1994
Funds may also be used to develop trends in the burdens and costs of diseases in the older population in general, and in racial/ethnic groups		●	
Research Objectives			
Scientific initiatives in the demography and economics of health and aging increasingly require integration and collaboration with each other and also with allied scientific fields such as genetics, biology, clinical medicine, and epidemiology	●	●	●
Progress in research on population aging can be accelerated and significantly enhanced by the widespread collaboration of investigators at multiple institutions and by the creation of innovative networks of researchers	●	●	●
Each proposed Center should focus on one or more scientific themes or areas directly relevant to population aging.		●	●
Applicants may address several of the topic areas below; They are not intended to be prescriptive; applicants may redefine these areas, merging and combining topics according to their own perspectives of the future course of the population sciences related to aging	●	●	●
Comparative international research is encouraged	●	●	provided the research is clearly relevant to US population aging
Wherever possible, special attention should be given to the demographic and economic aspects of the health and well-being of special older populations such as the oldest old, Blacks and Hispanics, and older women	●	●	●
Objectives and Scope			
A. Biodemography of Aging	●	●	
B. Trends in Chronic Disease and Disability	●	●	●
C. Health Systems	●	●	
D. Living Arrangements	●		
E. Race, Ethnicity and Socioeconomic Status	●	●	●
F. Policy Simulations	●	●	●
G. Work and Retirement	●	●	●

	2003	1998	1994
H. Disease-Specific	●	●	●
I. General Demography	●	●	●
Center Components			
Administrative and Research Support Core (MANDATORY)			
Maximum amount that may be requested for average annual direct costs over 5 years, excluding the indirect costs associated with consortia, for this core:	$360,000	$320,000	$160,000
The objective of this core is to accomplish the following:			
Plan, coordinate, review and manage the Center's activities, including the funding of pilot studies	●	●	●
Purchase and provide facilities or services such as centralized data libraries, including the purchase of hardware such as workstations, high capacity storage devices, and data files, and development of user-friendly data files and salary for data managers	●	●	●
Percent of requested funding that cannot be exceeded for the purchase of hardware or equipment	15%	15%	10%
Cost effective data processing for the Institution's research and training on population aging	●	●	●
Facilities and services should have the potential for general use at the institution, and must not be for the sole use of any single project. Any overlap with activities funded or proposed through NICHD center grants must be clearly specified. Salary support may be requested for the scientific director, core technical staff, consultants, and advisors.	●	●	●
Travel funds should be requested to attend an annual NIA-sponsored meeting of scientific center directors,	●	●	●
Travel funds may be requested for researchers to attend scientific meetings, for training of technical and scientific staff, for new program development, and for travel related to outreach and network functions.	●		
Establish and manage Advisory Committee to assist Center Director in decision-making, including allocation of funds for pilot studies	recommended	recommended	recommended
Program Development Core (MANDATORY)			
Maximum amount that may be requested for average annual direct costs over 5 years, excluding the indirect costs associated with consortia, for this core:	$180,000	$160,000	$80,000
The purpose of this core is to allow the institution to develop sufficient preliminary information to permit the submission of applications for peer-reviewed research or career development projects	●	●	●

	2003	1998	1994
Center application must request funds to initiate small-scale (in the range of $15,000 to $75,000 direct costs) pilot research that is consistent with theme of the Center grant and that will lead to new program development	●		
This core must include at least one small-scale project that will lead to new program development (or methodological innovation)		●	●
Funds many be requested for small-scale projects, which may include pilot or feasibility projects. These small-scale projects are ordinarily limited to 2 years but may be extended with appropriate justification	●	●	●
Adequate detail should be provided in order to allow for the evaluation of the scientific value and significance of the proposed activities.			●
Optional salary support for (a) new faculty development in demography of aging; (b) increasing the critical mass of the scientific research staff; and (c) the development of new program areas and methodologies. Salary support is limited to tenure track faculty (or equivalent in research organizations), and five years per individual	●	●	
Optional salary support for increasing the critical mass of the scientific research staff and the development of new program areas and methodologies. Salary support is limited to tenure track junior faculty (or equivalent in research organizations), and five years per individual.			●
Amount of total direct costs annual salary support (salary and fringe benefits) that cannot be exceeded; institution is expected to supplement any such salary costs with funds from other sources	$84,000	$75,000	$50,000
It is expected that scientists supported through this mechanism will either compete successfully for grant support or ultimately receive full support from the institution by the end of the 3rd year.			●
External Innovative Network Core (OPTIONAL)			
Maximum amount that may be requested for average annual direct costs over 5 years, excluding the indirect costs associated with consortia, for this core:	$113,000	$100,000	$35,000
Explicitly is for the development of networks beyond the applicant institution's boundaries	●	●	●

	2003	1998	1994
Funds may be requested for:			
The development of innovative national and international research networks on topics consistent with the Center's goals (listed in the RESEARCH OBJECTIVES section) will serve to enhance research not only at the institution, but more generally within the field, as well as in relation to other relevant disciplines. Such networks might include electronic bulletin boards, workshops, funding for pilot projects, and the development of common research resources	●	●	●
The development of innovative international networks that advance the goals of the 1997 G8 Summit language, which encouraged cross-national research to address the challenges of population aging into the 21st Century (see Denver Summit Communique at http://www.g8denver.org/).		●	
Outreach activities that will encourage and nurture the development of minority researchers. Such activities may include, e.g., sponsoring workshops on minority populations and issues, developing networks of minority researchers, and providing mentorship opportunities	●	●	●
Technical assistance activities intended to support users of large NIA funded databases who are outside the NIA Demography Centers, including the development of a "virtual" Center for those at other institutions	●	●	
External Research Resources Support and Dissemination Core (OPTIONAL)			
Maximum amount that may be requested for average annual direct costs over 5 years, excluding the indirect costs associated with consortia, for this core:	$225,000	$200,000	$100,000
Objective is the communication and dissemination of research resources, findings and new concepts and techniques within and beyond the institution	●	●	●
Funds may be requested for, but are not limited to			
The dissemination of new methodologies and important databases to the larger scientific community (e.g., research and training workshops, development of user-friendly extract files with imputed variables, newsletters, and electronic bulletin boards providing technical support)	●	●	●
The timely dissemination of well-synthesized research results to the Federal government, scientific community, and policy making community (e.g., briefings, working paper series, research briefs, newsletters)	●	●	●
The dissemination and development of new research techniques and concepts to the larger demography and economics of aging and health research communities		●	●

	2003	1998	1994
Statistical Data Enclave Core (OPTIONAL)			
Maximum amount that may be requested for average annual direct costs over 5 years, excluding the indirect costs associated with consortia, for this core:	$225,000	$200,000	
Objective is to increase emphases on cross-national research must deal with international laws on confidentiality and transmission of health data across borders	●	●	
Funds may be requested for, but are not limited to:			
Development of leading-edge analytic methods; development of new statistical techniques to mask individual identities in microdata while maintaining the maximum research value of the data	●	●	
Development of methodology for linking administrative data with longitudinal data sources and distributing the linked files	●	●	
Statistical analyses of risk disclosure for public use files	●	●	
Methodological research on the merits and drawbacks of various identity masking strategies	●	●	
Establishing a secure data enclave for analysis of longitudinal data with sensitive linked administrative records	●	●	
Coordinating Center Function (OPTIONAL)			
Funds that may be separately requested for these functions in direct costs (plus indirect costs)	$113,000	$100,000	$25,000
Objective is to promote collaboration and networking among the NIA Demography Centers	●	●	
Funds may be used to arrange annual meetings, sponsor multi-center activities or workshops, or produce bibliographic or other special reports that would be of benefit to all NIA Demography Centers	●	●	●
Coordinating Center functions include, but are not limited to, establishing a multi-center website, coordinating conferences, preparing annual reports and research briefs of center research findings, and funding multi-center activities, including travel to workshops	●	●	
Other centers may propose coordinating functions that would exist independently from the Coordinating Center, such as the development of a series of research briefs which highlight research findings from all the NIA Demography Centers	●	●	
Funding			
Est. funds committed to fund applications (TC/yr for 5 years)	$4.0M	$3.0M	$1.5M
Expected number of awards	5 to 10	6 to 10	4 to 8
Mechanism of support	P30	P30	P20

	2003	1998	1994
TC limit (excluding allowable per annum escalation for inflation and funds requested for coordinating center functions)	$788,000	$700,000 in Yr 1	$350,000 in Yr 1
Expected range in direct cost (DC) of awards	not stated	$100K to $500K	$75K to $250K
per annum inflation increase allowable in subsequent years	3%	3%	4%
additional amount allowable by separate request for the functions of a coordinating center (in Direct Cost plus any indirect cost)	up to $113K	up to $100K	up to $25K
Except for pilot projects, no funds provided for the direct support of research projects		●	●
Although the center grant is primarily designed to support a research center at a specific institution, some centers may also wish to assume a national or international role in making research resources available to the larger scientific community, and galvanizing scientists at several institutions through the development of networks		●	●
Centers are also encouraged to collaborate with other NIA-funded Centers, including the ROYBAL, Alzheimer's Disease Centers, and the Claude D. Pepper Older Americans Independence Centers		●	
Eligibility			
For-profit or non-profit organizations; Public or private institutions, such as universities, colleges, hospitals, and laboratories; Units of State or local governments; Eligible agencies of the Federal government	●	●	●
Minimum number of peer-reviewed and externally funded, currently active research projects directly and centrally within the area of demography or economics of health and aging required	two	one	one
Subprojects on P01 projects may be counted as individual projects.	●	●	●
Special Requirements			
Advisory Committee			
The Administrative and Research Support Core should include an Advisory Committee that oversees the functioning of the Center and assists the Director in making the scientific and administrative decisions relating to the Center, including the allocation of funds for pilot studies	●	●	●
The Advisory Committee should consist of at least five members drawn from diverse expertise	●		
The PI of the Center should be the chair of the Advisory Committee	●		

	2003	1998	1994
During the first year of the Center, the Advisory Committee should meet at least twice (one of these meetings may be a conference call, but at least one meeting must be in person) to review the research plans and status of current projects. During the out-years of the Center, the Advisory Committee should meet at least once per year, either in person or by conference call. Minutes of these meetings should be prepared and provided to the NIA Program Official.	●		
Advisory Committee to include one or more members outside of the applicant institution		recommended	recommended
The Administrative Core budget should reflect the costs associated with communicating with and convening the Advisory Committee.	●		
Annual Meeting			
Demography Center (P30) Principal Investigators and Core leaders will be required to attend an annual meeting held at the Population Association of America, or at another site agreed to by the PIs and the NIA	●	●	●
Travel budget of the Administrative and Research Support core should therefore reflect appropriate allocation for this activity	●	●	●
Funds should be requested for the PI and one additional key personnel (e.g., the co-director, a Core leader, the Center Administrator, etc.)	●		
Approval of Pilot Projects			
Specific aims of any pilot project, in addition to the pilot project budget and Curriculum Vitae of the pilot investigator, must be submitted to the NIA Program Official for approval before funds may be expended	●		
Institutional Support			
The institution and pertinent departments must show a strong commitment to the Center's support. Such commitment may be provided as dedicated space, salary support for investigators, release time, new staff positions, dedicated equipment, clerical support, or other financial support for the proposed Center	●	●	
Other			
In the mandatory Administrative and Research Support core, travel funds should be requested to attend an annual NIA-sponsored meeting of scientific center directors, and may be requested for researchers to attend other scientific meetings, for training of technical and scientific staff, for new program development, and for travel related to outreach and network functions		●	

	2003	1998	1994
Additional Review Criteria			
For all applications:			
The potential for significant scientific progress in the specific areas or themes addressed by the application, and the overall strategy for developing research in the demography and economics of health and aging generally and specifically within the areas or themes	●	●	●
The level and extent of funded research directly relevant to the demography and economics of health and aging	●	●	●
The scientific qualifications, leadership, and research experience in aging research of the Principal Investigator and professional staff		●	●
Successful training activity in the area of population aging including the recruitment and training of junior investigators	●	●	●
The scientific merit of the proposed pilot or new program development projects and the adequacy of the review procedures to assess the scientific merit of future studies	●	●	●
The value to the institution's researchers of the support and maintenance functions for e.g., databases and methodologies	●	●	●
Evidence of (concrete) commitment of the institution's administration to develop and support research and training on population aging; provision of new resources (e.g., co-funding or new positions)	●	●	●
The scientific value and public good that might result from any proposed external outreach and network building activities	●	●	●
Adequacy of provisions for the protection of human subjects from research risk	●	●	●
Inclusion of women and minorities in research	●		
Care and use of vertebrate animals in research	●		
The adequacy of the proposed plan to share data	●		
The reasonableness of the proposed budget and the requested period of support in relation to the proposed research	●		
For competing continuation applications:			
Reviewers will assess the degree to which original aims have been met and the potential that the competing continuation application will result in significant continuing progress	●		

	2003	1998	1994
Award Criteria			
Applications recommended for further consideration by the National Advisory Council on Aging will be considered for funding on the basis of:		●	●
Overall scientific, clinical, and technical merit of the proposal as determined by peer review	●	●	●
How well the application meets the goals and objectives of the program as described in the RFA, including increasing the concentration of funded activities in population research		●	
Appropriateness of budget estimates		●	●
Adequacy of provisions for the protection of human subjects		●	●
Availability of funds	●	●	●
Program needs and balance or programmatic priorities	●		●
Policy considerations			●

APPENDIX 4
NICHD R24 Population Research Infrastructure Program (PRIP) Centers and R21 Developmental Infrastructure Grants (*) by Last Year of Project Period

2008 Johns Hopkins University
University of Pennsylvania

2009 Princeton University
University of Wisconsin
*Ohio State University

2010 Bowling Green State University
National Opinion Research Center
University of North Carolina
RAND
*University of Colorado

2011 Brown University
University of California Los Angeles
University of Michigan at Ann Arbor
University of Minnesota
Pennsylvania State University

2012 State University of New York at Albany
University of Maryland College Park
Population Reference Bureau
University of Texas Austin
University of Washington
*Fenway Community Health Center (MA)
*University of California, Berkeley

APPENDIX 5
Guidelines for Standardized Progress Reporting
Developed by the Coordinating Center for NIA P30 Demography Centers, Updated February 2007

The following is a general outline for P30 reports. Text is organized by cores with the usual NIH headings: specific aims, results, plans. Not all centers use all cores—the outline can be adjusted accordingly. Text (exclusive of appendices) need not exceed 1-3 pages per core.

In addition to text, centers should provide **5 standard appendices**:

Appendix 1: Summary information for current reporting year

Appendix 2: People

Appendix 3: Projects

Appendix 4: Publications

Appendix 5: Pilots

Details about the appendices are given at the end of the outline. Please read carefully. It can be very difficult for us to find specific information that is embedded in the proposal text; we rely heavily on the appendices to extract key facts in standard form. Additional appendices (beyond the 5) are welcome, but not required.

Non-competing renewal text outline:

OVERVIEW
Describe signature themes, significant developments during the year (e.g., major research grants, books, conferences, new data resources, new hires), cross-center activities, international collaborations, training-related activities, honors to affiliates, outreach by affiliates to policy-makers and the public.

Cross-center collaborations and interdisciplinary research are hallmarks of the P30 program. Please highlight these innovative activities in the overview and throughout the report.

CORE A – Administrative and Research Support

1. Specific Aims
   Brief list of core functions
2. Results
   Describe activities, any changes from original plans, changes in key personnel
3. Plans

CORE B – Program Development

1. Specific Aims
   Brief list of core functions
2. Results
   Include summaries of ongoing and/or completed pilot and supplement projects
      Summaries should be no longer than NIH proposal abstracts
      For completed projects, state key findings and report on:
         Publications resulting from pilot
         Proposals for outside funding submitted, awarded
         Other valuable outcomes—e.g., data resources generated, training opportunities
   Provide information about human subjects approvals (IRB File No., title of project, P.I. expiration date) for all currently active pilot projects and supplement projects

3. Plans
   Include a description of new pilot projects. If projects have been pre-approved by NIA, the description can be abstract-length. If projects are being submitted for the first time in the non-competing renewal report, see below.

IMPORTANT: All pilot projects must be reviewed by NIA/BSR Program Office and have local IRB approval before work can begin. Projects with a foreign component also must have foreign clearance. Program Office will review project proposals at any time of year, either as part of the non-competing renewal report or independently. For the NIA review, please provide

   NIH biosketch for the P.I.
   Full description of the project
   Budget on PHS 398 forms

If the project has a foreign component, NIA/BSR will request additional information on a foreign clearance form.

CORE C – External Innovative Network Core

1. Specific Aims
   Brief list of core functions
2. Results

Describe each network and any workshops, web sites, publications or other activities during the reporting year

3. Plans

CORE D – External Research Resources Support and Dissemination Core

As for other cores

1. Specific Aims
2. Results

If the center supports a working paper series, list papers produced during the year.

3. Plans

CORE E – Statistical Data Enclave

As for other cores

1. Specific Aims
2. Results
3. Plans

Non-competing renewal appendices:

Appendix 1: Summary information for current reporting year

- Number of affiliates
- Research areas (check all that apply and also indicate 3-4 that are most important at your center)
  - Biodemography, longevity and genetics
  - Population, economic and policy forecasting
  - Health, chronic illness and disability
  - Health care and health policy
  - Income, pension, saving, work and retirement
  - Family support systems
  - Socioeconomic status and health
  - Minority populations
  - Dementia/Alzheimer's Disease
  - Comparative international research
  - Age structure of populations
  - Cost effectiveness of interventions
  - Migration and geographic concentration of older people
  - Relationship between health and economic status
  - Health disparities by gender and race
  - Global aging

If you have others, please list.

- Number of externally funded grants in aging (total from "Appendix: Projects" below). Please give us a count that does not include duplicates (i.e., a grant isn't double counted because two or more affiliates are involved as P.I. or co-P.I.)
- Number of publications in aging (total from "Appendix: Publications" below)
- International collaborations – list countries where affiliates are actively engaged
- Cross-center collaborations – list centers and activity; of particular interest are collaborations with other P30 demography centers
- Networks - list
- Data and other external resources/services provided
- Workshops and conferences (title, location, date)
- Special recognitions or service by affiliates

  Honors (e.g., Nobel Prize, National Academy of Sciences, president of professional organization)

  Government advising (e.g., testimony before Congressional Committee)

  High level appointments in public organizations (e.g., Council of Economic Advisors, Assistant Secretary at Treasury Department)

Appendix 2: People – list affiliates and their school/department

Appendix 3: Projects* - list grants in aging held by affiliates (sponsor, grant number, title, P.I, project period); ideally these would be organized by type of grant: NIH U01, P01, R01, R21, R03; NSF; other federal; non-federal.

Most institutions have searchable databases for externally funded research**.** These are a good way to compile information about grants without the need to contact P.I.'s directly. If you normally organize your list of grants by P.I./co-P.I., there may be duplication (i.e., a grant with multiple co-PI's will be listed under more than one person's name). That's fine, but we'd appreciate your giving us a total count without duplicates for the Summary Appendix—see note above.

Appendix: Publications* on aging by affiliates (full citation, arranged alphabetically by author); ideally organized by journal articles (peer-reviewed), books/chapters, working papers (non-peer-reviewed). Point out publications in high-impact journals, e.g., Nature, JAMA.

A search of one or more online bibliographic databases will produce an up-to-date list of publications for faculty affiliates. Options: Web of Science (journal articles), Medline (journal articles medical focus), WorldCat (books), OhioLink (book chapters). Results need to be culled to eliminate non-aging pubs. Multi-year searches for a large number of researchers

are time-consuming, but after the initial investment, annual updates should be relatively easy.

Note about reporting grants and publications: To the extent that affiliates have access to resources provided by a P30 center, all of their grants and publications in aging are a measure of productivity at the center. We encourage centers to produce complete lists each year. Such lists are useful for promoting the program within NIH. They will be valuable to your center in preparing future competing renewal proposals. They can be displayed on center websites and linked to the all-centers site. We realize that compiling the lists for a large number of affiliates may be time-consuming—some centers are small, while others have upwards of 100 affiliates at different levels of participation. If your center chooses to report on a partial set of affiliates, please define the group that is included.

Appendix: Pilots - Cumulative record of pilots during current funding period 7/03-6/--

- Number supported to date
- Number that have led to proposals **submitted** to NIH and other sponsors
- Number that have led to proposals **funded** by NIH and other sponsors
- Cumulative list of pilot projects active during current funding period (title, P.I., project period)

Thanks for your attention to the appendices. They contain a wealth of information that NIA can use to describe and promote the P30 demography centers program.

APPENDIX 6
Research Areas Reported in Centers' Progress Reports for the Period 2006-2007

Research Areas	Centers ongoing since 1994						Centers ongoing since 1999			Centers ongoing since 2004			
	NBER	RAND	UC Berkeley	U Chicago	U Michigan	U Penn	Stanford U	USC/UCLA	U Wisconsin	Harvard U	Penn State U	Princeton	UNC
Biodemography, longevity and genetics	●		●	●		●		●		●	●		●
Population, economic and policy forecasting	●		●			●	●		●	●			●
Health, chronic illness and disability	●		●	●	●	●	●	●	●	●	●	●	●
Health care and healthy policy	●		●	●	●	●	●			●		●	●
Income, pension, saving, work and retirement	●	●	●		●	●			●	●		●	●
Family support systems	●		●	●	●	●	●	●		●	●		●
Socioeconomic status and health	●		●	●	●	●	●	●	●	●	●	●	●
Minority populations			●	●	●	●	●	●		●		●	●
Dementia/Alzheimer's disease					●	●		●	●	●	●		●
Comparative international research	●	●	●		●	●	●	●	●	●		●	●
Age structure of populations			●			●			●	●			●
Cost effectiveness of interventions	●					●	●			●			
Migration and geographic concentration of older people					●	●	●			●			
Relationship between health and economic status	●	●	●	●	●	●	●	●	●	●	●	●	●
Health disparities by gender and race		●	●	●	●	●	●	●	●	●	●	●	●
Global aging	●		●			●	●		●	●		●	

APPENDIX 7
Pilot Projects Assumed Active in 2006–2007 As Identified in 2007 Progress Reports

Center	Pilot Project Title
Harvard U	Pre-Tertiary Management of Acute Coronary Syndrome in a Low and Lower-Middle Income Country
	Dynamic Brain Function as Biomarker for Mental Aging
	Estimating the Effect of Education on Dementia Mortality Using State Compulsory Schooling Laws as Instrumental Variables
	A Prospective Study of Amyotrophic Lateral Sclerosis
	Antiretroviral Adherence across Age Groups in a Resource-Limited Setting
	A Community-Based Study of the Health Status of Older Ugandans
	A Cross-National Investigation of Social Capital in Relation to Individual Health and Subjective Well-Being
	AIDS: Aging and Education
	Cognitive Functioning under Stress: An Examination of How Physiological Responses Affect Decision-making in Older Adults
	The Impacts of Migration on the Health and Well-Being of Elderly in Rural China: An Interdisciplinary Pilot Study
NBER	Disability, Transfers, Income and consumption
	Gender-Specific Pricing in Pension Annuity Markets
	Pilot Household Survey of Aging, Health and Socioeconomic Status
	Housing and Retirement
	Payday Loans, Consumption Shocks and Discounting
	Experiment on Gym Attendance
	Using Survey Questions on Risk Preferences to Assess the Risk of Personal Accounts
	Research on Medicare Prescription Drug Benefit Take-Up
	Savings Impacts of Matching the IRA and 401K Contributions of Low and Moderate Income Families: Large-scale Randomized Experiments in Conjunction with H&R Block
	Socioeconomic Status and Genetic Heritability
	Retirement Saving Among Lower-Income Households
	Social Identity and Preferences

Center	Pilot Project Title
	Health Effects of Air Pollution Changes in Beijing
	Mortality, Mass Layoffs & Career Outcomes
Penn State U	The Association between Genetic and Environmental Factors and Hypertension
	The Effect of State Home Care Policy on Unmet Need for Personal Care
	The Effect of Health Insurance on the Health of Middle-Aged Adults
	The Contribution of Incarceration to Racial Differences in Mortality
	The Effect of Neighborhood Environment on Diet and Health among Urban Elderly
	Daily Stress and Well Being among African Americans
	Intergenerational Relationships and Elder Care during Social Change
	Socioeconomic Disparities in Women's Health in the U.S.: Investigating Early and Midlife Determinants of Mortality
Princeton	Mortality, Income, Wealth and Rank in Academia
	Using Behavioral Economics to Understand Uptake in Employee Benefits Programs: The Psychology of Healthcare Spending
	Intertemporal Choice and Cognitive Control
	Genotyping and Psychosocial Phenotypes in MIDUS II
	ActiveTwo 64+8 Channel EEG/ERP Acquisition System
	Mechanisms and Measurement of Motivated Taste Change
	Household Economics Wellbeing and AIDS
RAND	Using Vignette Methods to Make International Comparisons of Research Issues in Aging
	A Cross National Comparison of Self-Employment at Older Ages
	Differential Mortality in Europe and the U.S.: Estimates based on subjective probabilities of survival and their reliability
	Effects of Social Institutions on Health Inequalities in Mid- and Late-Life
Stanford U	Elder-care, Gender, and Son Preference: The Role of Cultural Transmission and Diffusion During the Process of Rural-Urban Migration in China
	Affective Forecasting Across the Lifespan
	Health Insurance among the Elderly in Colombia

Center	Pilot Project Title
	The HIV/AIDS Pandemic and Africa's Orphaned Elderly
	Increasing Physical Activity among the Elderly: A Meta-Analysis of the Effectiveness of Pedometers
UC Berkeley	Medicaid Eligibility Rules, Home Equity, and Mobility
	Demography of Gene Expression: Models and Hypothesis
	Manufacturing Extended Families: The Effects of Rapid Industrialization on Elderly Co-Residence in China
	Research Group in Experimental and Behavioral Economics of Aging
	Delayed Health Care Among the Near-Elderly
	Designing a Rigorous Evaluation of the GRET [Health] Insurance Program in Cambodia
	Neuroendocrine Biomarkers, Social Relations, and the Costs of Cumulative Stress in Taiwan
	Early Life Influences on Later Life Health Outcomes in the US, by Race and Gender
U Chicago	Middle-Life Physical Markers, Socioeconomic Status, and Exceptional Longevity: An exploratory study of a new data resource
	Development of a Valid Measure of Stressors, Perceived Stress, and Social Context in the Hutterite Population
	A Longitudinal Study of Health, Retirement, and Long-Term Care Insurance
U Michigan	The Impact of AIDS, Poverty, and Social Upheaval on the Elderly: The Case of Cambodia
	Access to HIV Testing and Treatment by Age and Sex in South Africa
	Weathering and Telomeres: A Novel Approach to the Study of Racial Disparities in Health
	Employer Provision of Retiree Health Insurance
	Measuring Developmental Idealism and Family Life in the Aging and Elderly Population in the United States
UNC	Obesity, Physical Activity, and the Built Environment
	Developmental Determinants of Young Adult Risk Factors for Aging-Related Chronic Diseases
	Structural Models of Consumer Optimization Behavior: Labor, Retirement and Health
	Exploring Paths to Differential Disability Trajectories
	Using Genetic Information to Identify Causal Effects of Obesity
	Labor Market Rigidities and the Employment Behavior of Older Workers
	Why is the Labor Force Participation Rate of Older Men Rising?

Center	Pilot Project Title
	Age-Related Changes in Emotion-Based Decision-Making
	Intergenerational Links and Population Aging
U Penn	HIV/AIDS and Intergenerational Transfers in Malawi
	Trust and Transfers in South Africa: Linking Surveys
	Does Poor Health Induce Myopia? An Investigation of Mortality, Morbidity, Aging, and Time Preference
	Impact of Prescription Co-payments on Antidepressant Use and Adherence in Dual-eligibles: Implications for Medicare Part D
	Race/ethnic and immigrant differences in disability: What Can We Learn from the 2000 Census of Population?
	The Muslim Mortality Puzzle in Bulgaria
	Contribution Patterns Under the Chilean Retirement System
	The Efficiency and Characteristics of Investment Choices Offered by 401(k) Pension Plans
	The Literacy Gap between Those with High Levels and Low Levels of Educational Attainment among Older Adults: A Comparative Study of 20 Countries
	Understanding Barriers to Hypertension Control in the Elderly
	Financial Incentives for Weight Loss
	Building and Maintaining Bibliographic Database for AIDS Research in Malawi
USC/UCLA	Predicting Dementia Risk in Elderly Twins from indicators of Early Life Infection
	Examination of the Relationship between Allostatic Load and Geriatric Frailty across Demographic Subgroups of the Older Adult Population: The MacArthur Study of Successful Aging
	Comparison of Different Methods for Measuring HbA1c in Epidemiologic Studies
U Wisconsin	Sexuality among Mature Adults
	Do Income Supports Affect Mortality among the Elderly?
	The Impact of HIV/AIDS on the Elderly in South Africa and Malawi
	The Volunteering-Health Relationship in the WLS
	Studies of the Retirement Process
	The Health Care Impact on Women from their Husbands' Transition to Medicare
	Elders' Understandings of Clinical Information Technology Governance

APPENDIX 8

Evaluation Questions for Center Directors and Panel Members (vers. 6/27/07)

Evaluation Questions		Center PIs	Panel Member
Outcomes and Accomplishments			
1	How do you view the impact of the Center grant as a funding mechanism at your institution? A. What has the grant allowed you to do that you would not have been able to do otherwise? B. What evidence/examples do you have that your Center has contributed to either your institution or to the field more generally?	X	
2	What do you consider to be the top 1 or 2 accomplishments of your Center (e.g., impact in particular topic area, sharing of novel or valuable data resource, major conference or workshop) and what is the basis for your assessment?	X	
3	Can you give examples of your Center's most important/influential pilot projects? Have they led to successful grant applications or other significant outcomes?	X	
4	Did your Center grant and/or pilot projects lead to recruitment of new investigators to the field of demography and/or economics of aging? A. About how many investigators now working within the Center were not on the original core team? B. Have you recruited any new "standout" researchers, young investigators, or minority researchers? C. What are you doing to educate/attract mid-career researchers to these fields?	X	
5	Is there appropriate balance between interdisciplinary and single-disciplinary emphases when you consider the Demography Centers as a group? Are foci sufficiently clear or too diffuse?	X	X
6	Did the Centers as a whole meet the stated objectives of the RFA?		X
7	Are the accomplishments of the Centers Program significant on the whole? Can you comment on the impact of the Demography and Economics Centers program on your respective field(s)?		X
8	To what extent can you comment on the value-added of the Demography Centers (differentiating as appropriate by funding duration), and what would NOT have been accomplished had center funds not been available? What evidence do you look for in helping to assess if the Centers are (or are not) adding value to the field?		X
Networks and Infrastructure *NOTE: For questions 9-14, please distinguish as appropriate between (a) infrastructure and outreach within the institution (internal networking); and (b) external networks with specific goals proposed under Core C. All centers do (a) but not all have dedicated funding for (b).*			
9	Does being a Center affect your ability to function within a network? (which one?) Does being a center affect your ability to advance your work within your institution?	X	
10	How much contact is there between your Center and other NIA/BSR-funded Center programs (e.g., Roybals, RCMARs)? With NIH-funded P01s? With NICHD PRIPs? Please describe or give examples.	X	
11	If applicable, what has been the role of the network in reaching out to researchers not involved with the center?	X	
12	Does the Center grant give different results in terms of networking and infrastructure than a series of R01s?	X	

13	Are there interdisciplinary collaborations (please distinguish between intra- or inter-institution collaborations) that were established by having NIA Center status? Is there any specific example to cite?	X	
14	Can more be done, including by BSR/NIA, to promote meaningful and significant interdisciplinary collaborations (intra- and inter-institution)? Please provide examples.	X	X
15	Some centers have data enclaves that allow access to secured data to researchers from across the nation. What is your opinion of the value of these enclaves?	X	
Other Program Parameters			
16	What, aspects of program design, process, or management (e.g., RFA elements, review criteria, financial administration) are keeping Centers in the BSR program from achieving their goals? What steps could be taken to enhance program performance?	X	X
17	Are there any aspects of the Center program that are not currently available that you would like to develop within your program? Are there any aspects of the BSR program that you would like to see changed?	X	
18	What are the barriers to your applying to the centers program?	X	
19	Is there anything you would want to change in future RFAs?	X	X
20	If NIA were to expand the focus of future RFAs beyond demography and economics of aging, what kind of process would be most effective in determining acceptable breadth?	X	X
21	How does your Center determine which pilots and aspects of resource infrastructure (e.g., statistical enclaves and production of shared research) will be sent to NIA for review? Are too many pilot projects turned down, or do you think the number of projects going forward to NIA is appropriate? Please provide specific examples.	X	
22	Thinking about the Coordinating Center, what roles does the Center perform that add value to the overall BSR center program? Are there other responsibilities that should be added to the Coordinating Center? Are there roles that could be dropped? Can you provide examples of how you have interacted with the Coordinating Center?	X	
23	The growing interconnectedness of centers can complicate recruitment of reviewers who do not have any apparent conflicts of interest. Do you have any suggestion on how to overcome this challenge while maintaining an objective and qualified review panel?	X	X
24	Is the level of support adequate to carry out the Center objectives? What more could be done at your Center if you had been awarded additional funds?	X	
25	Do you think using administrative (or competitive) supplements is an effective way to grow and adjust the Center program in light of unexpected opportunities?	X	
26	Are there opportunities for internal and/or external leveraging Center funds that should be explored? Please provide concrete examples (e.g. potential industry partners, foundations)	X	