

Demographic and Behavioral Sciences Branch (DBSB)

Long-Range Planning 2006-2007

Highlights from an Expert Panel Meeting

December 13, 2006

**Demographic and Behavioral Sciences Branch
6100 Executive Boulevard, Room 8B07
Bethesda, MD 20892-7510**

**Contact: Christine Bachrach
Phone: (301) 496-1174
Email: cbachrach@nih.gov**

DBSB Long Range Planning 2006-2007 Highlights from Expert Panel Meeting

The DBSB, part of the Center for Population Research within the NICHD, initiated a long-term planning process in October 2005 to shape possible directions for its future research. As part of this process, the Branch convened an expert panel on December 13, 2006 to consider the Branch's portfolio and to offer ideas for future activities. The members of this interdisciplinary group (see Appendix for a roster of participants) were invited to discuss three issues:

- Scientific opportunities that the DBSB should consider pursuing during the next five years;
- Public health issues that the Branch could address; and
- Areas within the Branch's portfolio that could be de-emphasized.

This document summarizes the panel's discussion and summarizes key points in seven topical areas: population movement, biosocial linkages and health, family, innovation and interdisciplinary research, data collection and data sharing, translation, and training. The expert panel recommendations will help inform the development of a DBSB strategic plan for 2008 through 2012.

Strengthen and expand research on population movement on multiple scales – international, internal, local.

The expert panel discussed the importance of many aspects of research on population movement, including:

- Integrating research on mobility across different scales, e.g., residential, interstate, interregional, and international; integrating studies from the micro-scale of family and household to the macro-scale of societies
- Studying the relationship between location and mobility of the foreign-born and U.S.-born populations and the effects of these patterns on assimilation and adaptation
- Considering movement that is involuntary, such as that driven by neighborhood gentrification or military or company relocations
- Studying how social networks are affected by moves and the implications for people and communities; studying the impact of mobility on personal, family, and community motivational systems, and on the ability of extended families to provide support
- Examining population diversity and its relationship to mobility, and linking research on population and neighborhood diversity to research on the development of racial, ethnic, and place-based identity
- Advancing theories about migration and its causal factors, addressing intentions, how moves interact with other life decisions, and how cultural frameworks influence the migration process; moving beyond the neoclassical or economics-of-labor models, and placing more emphasis on people as agents; advancing theory relating to the effects of migration on families and communities
- Improving data and methods, by increasing availability of longitudinal data on movers and stayers and improving data on the effects of migration on families and communities, while addressing data sharing and confidentiality challenges; developing strategies for obtaining

information on intentional frames related to mobility and advance methods for studying patterns of segregation and group mixing; and supporting advances in simulation modeling

Promote research on biosocial linkages and health

The expert panel discussed the importance of many aspects of research on biosocial linkages and health, including:

- Integrating biomarkers into studies in order to facilitate research on the pathways by which social, family, and other environmental factors affect the body; studying how the body responds to environmental factors and events and the effects of psychosocial factors on health, as well as the effects of health on social/economic outcomes
- Studying the proximal mechanisms through which disadvantaged contexts and adverse experiences exert their effects on health, and the contributions of stigmatization to health disparities through immediate stress and coping responses and through long-term effects, including longitudinal studies that document the long-term health effects of early experiences
- Studying how and why individuals respond differently to the same environment, and recognizing the meanings people make of events and exposures (e.g., the roles of culture and cognition) in these pathways
- Paying greater attention to the effects on children of their school environments, particularly the long-term health consequences of bullying; learning more about the long-term effects of physical and psychological abuse, eating habits, the short-term use of alcohol and drugs, and exposure to toxic compounds, as well as about the consequences of having older parents for the health of offspring
- Addressing confidentiality issues as well as the need to make data available to a wide variety of researchers, specifically in studies that collect biomarkers; developing statistical tools appropriate to the complex, nonlinear, and interactive relationships among biological and environmental factors
- Training researchers who are conducting biomarker studies to understand the contexts in which they are working and to be sensitive to and supportive of community members
- Facilitating research that spans the social, behavioral and biomedical sciences through:
 - The Population Research Infrastructure Program (PRIP)
 - Workshops for training new investigators and enabling information-sharing among experienced researchers
 - Centralized Web resources providing information on technological developments
 - New mechanisms to help investigators form, and successfully develop, interdisciplinary research teams.
- Proactively encouraging the development of the next generation of biomarker technologies, and facilitating communication and engaging relevant scientific fields to learn which assays are most valuable, for what reason, and how to do them
- Reaching out to the medical community; urging biologists to incorporate behavioral and social sciences into medical studies; and facilitating the inclusion of more social science journals in PubMed to improve interdisciplinary exchange
- Increasing the number of international studies to test the applicability of models, especially in relation to environmental interactions

Advance research on families

The expert panel discussed the importance of many aspects of research on families, including:

- Addressing the causes and consequences of family change and variation at both micro and macro levels, while continuing to support research that examines families as causes, consequences, and intermediaries of well-being and other variables
- Recognizing that families and households are not the same thing (i.e., families may spread over long distances, including across national borders, with members leaving and coming back); recognizing that “multiple partner fertility” makes family relationships complex and increasing research on relationships with siblings and grandparents
- Ensuring that large-scale data are available to use for long-term studies, including nationally representative collections, ethnographies, and micro-simulation models to help integrate findings about complex processes; addressing the need for long-term longitudinal studies that permit research on the transition to adulthood and data sets that include males, couples, and prisoners
- Collecting data on *families* not *households*, while experimenting with different modes of measurement; collecting data on multiple family members to capture differing perspectives and attitudes
- Studying who is considered a family member, who could potentially be, and who is chosen as, “family”; within these “families of choice,” measuring relationships within and outside the household and ties across long distances
- Studying how people find their partners, including examination of new technologies (the Web), the workplace, colleges, and the church, and situations that may mix people from very different backgrounds
- Continuing to study low fertility, which is especially timely with the aging of the U.S. population, and teen pregnancy, which, although decreasing, is still much higher in some subpopulations; determining what contextual factors contribute to these disparities and why fertility but not sexually transmitted disease has declined among teens
- Examining the stresses involved for families in which members are moving from one socioeconomic level to another; defining measures for privilege, assets, and “wealth”
- Incorporating interdisciplinary contributions into theories of the family and family change

Promote innovation in theory and methods, especially through interdisciplinary research

The expert panel discussed the importance of many aspects of research innovation and interdisciplinary research, including:

- Strengthening demographic research by encouraging broader theoretical underpinnings and integrating insights from multiple disciplines; adopting dynamic theories of culture that have developed in anthropology and sociology
- Encouraging interdisciplinary research through: collective design of data sets by interdisciplinary teams, outreach that enables other disciplines to use demographic datasets in their research, and interdisciplinary training programs
- Addressing challenges to innovative and interdisciplinary research, including the effects of tight funding lines, structural features of the review process, and the conservative behavior of many reviewers

- Pursuing innovation through outreach to communities involved in studies; exploring the opportunities and trade-offs involved in community-based participatory action research
- Continuing to encourage innovative and interdisciplinary research through the PRIP; fostering increased communication and collaboration among centers receiving PRIP support
- Giving careful consideration to PRIP funding, recognizing that PRIP has successfully created visibility and a critical mass of population researchers within universities, encouraged innovation, promoted communication across disciplines, and leveraged resources, but that reaching out to non-traditional disciplines will become increasingly difficult if the level of funding available to individual centers declines further
- Integrating spatial science into demographic studies, recognizing that a spatial focus is necessary to understand people's health care access, biophysical environment, and social contexts; taking advantage of advances in statistical methodologies, measurement technologies, and new ways of conceptualizing space and the role of space in social processes
- Applying agent-based modeling and other simulation methods in order to enhance the insights available from existing data on individuals and families
- Pursuing potential applications of bio-economics for research on demographic choices; embedding ethnography in demographic studies

Provide careful oversight of large data collection projects and expand data sharing efforts

The expert panel discussed the importance of many aspects of data collection and data-sharing efforts, including:

- Continuing support for large data collection projects, which are highly valuable to the field and provide an ideal vehicle for supporting research across a broad range of disciplines; although cost-effective, these projects must be appropriately balanced with funds for analysis and smaller data collection projects
- Seeking external advice regarding the continuation of large data collection projects; setting criteria for ending such projects, including cost, representativeness, the scientific/public health value of the data, and the appropriateness of existing vs. new projects to address new scientific questions
- Evaluating overlaps among supported datasets, including considering what is *not* being collected, whether the longitudinal data sets duplicate each other, and what to continue in terms of value added; ensuring that major data sets include a standard set of comparable measures
- Promoting studies that follow processes of development over longer periods of time and exploring the transfer of studies to other institutes as participants become older; recognizing the importance of long-term studies for developmental science, and their contribution to understanding intergenerational processes
- Enriching data sets through interdisciplinary collaboration; expanding data sets with biomarkers, spatial data, rich information about context, embedded ethnographies, and studies of non-Western cultures
- Providing greater and more vigorous support for archiving and data access, including the data-sharing initiative, which is essential for addressing confidentiality issues in shared data

and ensuring that data can be permanently archived; supporting archiving and data sharing in all related fields, but especially in developmental psychology

- Promoting the development of technologies for remote access to confidential data, involving PRIP where appropriate

Pursue effective translation of research through interventions and dissemination

The expert panel discussed the importance of many aspects of research translation, including:

- Addressing persistent questions relating to interventions, including those relating to reaching the target population, retaining people in programs, and identifying mechanisms through which programs work; paying special attention to topics such as frequency of intervention, dose, programs among early adolescents, parental involvement, and contextual factors that may affect whether programs are successful
- Expanding intervention research to engage practitioners to ensure that interventions are effectively integrated into practice settings, cost-effective, culturally appropriate, and successful in involving hard-to-engage populations; taking advantage of cost-effective opportunities for research connected with existing interventions (e.g., iron supplementation programs)
- Laying the foundation for multilevel intervention strategies by supporting studies that address family, neighborhood, and community processes; identifying the connections among complex environmental influences on health outcomes, using simulation studies as a tool
- Proactively disseminating research findings; anticipating the need for effective materials and support networks, identifying appropriate audiences, and developing effective and useful messages; training researchers in dissemination (perhaps through the R25 mechanism) and stressing the value of dissemination to grantees and reviewers
- Targeting the medical community as an audience for dissemination of research on population diversity and context, information that could help to inform interventions and the dissemination of health information

Maintain core training programs and innovate to reach undergraduates and to retain researchers in the field

The expert panel discussed the importance of many aspects of research training, including:

- Recruiting underrepresented and nontraditional groups into the field and pursuing ways to assure that international students can participate in training programs
- Developing creative programs to expose undergraduates to population studies, such as undergraduate internships, lower-division undergraduate courses, and leadership classes for high school students that expose them to participatory research, activism, and the utility of demographic and health data; developing materials and syllabi for multimedia, intensive, dynamic courses and sharing them across institutions
- Retaining population research as the core focus of training programs supported by the Branch, while strongly encouraging the involvement of other disciplines; encouraging training as a means to interdisciplinary research projects
- Encouraging the use of mechanisms such as the R25 program for centralized training in those areas where centralization may be cost-effective (e.g., advanced methods, ethics)

- Focusing attention on the retention of trained demographers as active contributors to the field; considering ways to create networks made up of postdoctoral fellows and K01 holders across the various programs

Other key points of the discussion

The expert panel also touched on the following topics:

- Focusing on processes that go beyond the individual—places, distribution in space, social context, exclusion, and disadvantage—and collecting appropriate data to measure and study them
- Developing new theories and measurements of contexts, especially addressing the movement of people across contexts
- Developing new statistical tools to study the reciprocal nature of the processes studied
- Emphasizing the need to understand disparities across all dimensions relevant—family, context, and others
- Continuing research on population and the environment, focusing on interdisciplinary work that models population change as endogenous, and integrating spatial statistics and micro-simulations
- Continuing to support research on infertility and the Branch’s extensive portfolio in AIDS research

Summary

In this meeting, the expert panel provided a rich and varied array of ideas for advancing the directions, quality, and impact of population research supported by the NICHD. Members did not recommend de-emphasizing any of the research areas currently supported by the Branch, although one panelist suggested that research on immigration and inequality had been effectively launched and would not require broad new initiatives. As noted above, some areas that were not the central focus of discussions, including population and environment and AIDS, family planning, infertility, and other aspects of reproductive health, were nevertheless seen as critically important to the Branch’s mission. These areas were seen as ongoing priorities that should continue to receive attention and support.

Appendix Members of the Expert Panel

Andrew J. Cherlin, Ph.D.
Professor, Department of Sociology
Johns Hopkins University

Jacquelynne S. Eccles, Ph.D.
Professor, Gender and Achievement Research Program
Institute for Research on Women and Gender
University of Michigan

Mark Ellis, Ph.D.
Professor, Department of Geography and Center for Studies in Demography and Ecology
University of Washington

Barbara Entwisle, Ph.D.
Director, Carolina Population Center and Professor of Sociology
University of North Carolina

Jennifer Johnson-Hanks, Ph.D.
Assistant Professor, Department of Demography
University of California, Berkeley

Kristin Moore, Ph.D.
Senior Scholar, Child Trends
Washington, DC

Teresa Seeman, Ph.D.
Professor of Medicine & Epidemiology
Division of Geriatrics
Geffen School of Medicine at University of California, Los Angeles

Barbara W. Sugland, M.P.H., Sc.D.
Executive Director, Center for Applied Research and Technical Assistance
Baltimore, Maryland

Duncan Thomas, Ph.D.
Professor, Department of Economics
University of California, Los Angeles