The 2002-2006 Strategic Plan: Goals and Action

Demographic and Behavioral Sciences Branch, NICHD

October, 2005

This document is a summary of progress made to date on the DBSB's 2001 strategic plan. The document reproduces the strategic goals adopted by the Branch and provides information about activities that have addressed these goals. Information about the plan and its development is available at http://www.nichd.nih.gov/publications/pubs/dbsb_plan.htm

Cross-cutting Themes

Cross-cutting Theme: Theory and Methods
Continue to emphasize the development and cross-fertilization of theoretical and methodological approaches that contribute to population research.

Advancing the development of theories and methods that contribute to population research is a fundamental goal of the DBSB. As population scientists seek to answer increasingly complex questions, the theories that guide research must keep pace, whether through the development of new paradigms or the extension, elaboration, and integration of existing ones. Similarly, increasingly complex questions require a broader and more sophisticated toolkit of research methods. The Branch will continue to encourage diversity and innovation its theoretical and methodological approaches to population research, as well as in the cross-fertilization of different approaches.

In recent years, advances in theory and methods have expanded the understanding of questions such as the effects of context, the role of social interaction in demographic change, and intergenerational processes. The Branch will continue to support developments in these areas. Other important challenges for theory development include:

- Strengthening theories that contribute to migration research by drawing from the human ecology tradition, developing macro-level theories, and considering migration in relation to the life course
- Improving theories related to the spatial distribution of populations, considering the relevance and dimensions of space in demographic research, and integrating space and time in causal frameworks
- Expanding work that integrates theories of gender in population research, focusing on gender as a structural aspect of social organization, as well as gendered meanings and norms
- Enriching population research with theories of culture that view cultures as dynamic, historically variable, and non-homogeneous, studying the local meanings people give to demographic behaviors and relevant explanatory variables, and recognizing the interrelationships between local meanings and social structure

- Developing improved specifications of the biological mechanisms involved in demographic phenomena through interdisciplinary collaborations

A particular focus for methodological studies is measurement issues, including: the comparability of measures in the numerators and denominators of demographic rates; the changing meaning of demographic constructs and its implications for measurement; and the measurement of subjective phenomena and sensitive behaviors. Other methodological challenges include:

- Improved methodologies for causal modeling
- Further development of statistical methods for application to demographic studies, including statistical modeling of dependent data, and methods of modeling heterogeneity
- Research on simulation approaches, the integration of formal and statistical demography, and the dynamic modeling of population phenomena
- Research on methods of network analysis, including missing data problems and temporal aspects
- Improved application of spatial data and methods to demographic research
- Improved designs and methods for studies that collect biomarkers to understand the roles of biological processes in demographic phenomena
- Improved methodologies for facilitating the dissemination and linkage of demographic datasets, while protecting the confidentiality of study participants
- Development of methods to improve inclusion of language minorities (non-English speakers) in demographic studies

Actions Taken

In 2003, the Branch issued a Request for Proposal (RFP), *Designing New Models for Explaining Family Change and Variation*, requesting proposals for a multi-year planning effort to develop research and data-collection strategies for studying the causes of family and fertility change and variation. The contract was awarded to a consortium led by Duke University (Philip Morgan, Principle Investigator [PI]) and also involving University of California Los Angeles, University of Maryland, and Northwestern University. The project also is known as "Explaining Family Change." Theory development is an explicit part of this project, and investigators are examining contributions to theories of family change made by anthropology, economics, sociology, evolutionary biology, and psychology. The project also explores the potential of innovative methodological approaches for research in this area. Information about the project is available at http://www.soc.duke.edu/~efc/.

A contract to the National Research Council supported a 2002 workshop on *the Biodemography of Fertility and Family Behaviors* and resulted in publication of the volume, *Offspring: Human Fertility Behavior in Biodemographic Perspective.*

Where appropriate, the Branch has explicitly encouraged applications that will advance theoretical and methodological approaches in Program Announcements (Pas) and Request for Applications (RFAs) issued by the Branch. For example:

> RFA HD02-030, *Intergenerational Family Resource Allocation*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-02-030.html, encouraged theory development.
> RFA HD01-002, *The Influence of Gender on HIV Risk*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-01-002.html, encouraged the development of theory related to gender and its application to HIV risk.
>
> A recent PA, PA-05-033 *Men's Heterosexual Behavior and HIV Infection*, http://grants2.nih.gov/grants/guide/pa-files/PA-05-033.html, encourages similar research with an emphasis on men.
>
> PA 03-057, *Social and Demographic Studies of Race and Ethnicity in the United States*, http://grants2.nih.gov/grants/guide/pa-files/PA-03-057.html, encouraged research on the conceptualization, measurement, and modeling of race and ethnicity
>
> RFA HD02-008, *Development of Community Child Health Research*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-02-008.html, encouraged the integration of biomedical and social science approaches to understanding health disparities in pregnancy outcomes and child health.

The DBSB has encouraged cross-training in the population sciences and other relevant fields through its Mentored Research Scientist Development Award (K01), http://www.nichd.nih.gov/cpr/dbs/k01.htm since 2001, Land has awarded twelve grants.

The DBSB organized a session on causal inference at the Population Association of America meeting, resulting in a series of articles in *Population and Development Review,* "Causal Analysis in the Population Sciences: A Symposium."

The Branch issued PAR 02-099, *Educational Programs for Data, Methods, and Interdisciplinary Approaches to Population Research*, http://grants.nih.gov/grants/guide/pa-files/PAR-02-099.html. Under this announcement, the DBSB has funded seminars on methodological topics, including Global Information System (GIS) and formal demography.

Branch staff led a NIH Roadmap activity that provided supplemental funds to grants in support of methodological innovation; it also participated in the NIH Roadmap initiative on interdisciplinary workshops and networks, and on other Roadmap activities promoting methodological innovation and interdisciplinary research in the behavioral and social sciences.

DBSB cooperated with other NIH Institutes and Offices to re-issue an NIH-wide PA encouraging methodological research in the behavioral and social sciences, available at http://grants2.nih.gov/grants/guide/pa-files/PA-05-090.html. The DBSB also contributed to a trans-NIH PA on *Innovations in Biomedical and Computational Science and Technology* (http://grants2.nih.gov/grants/guide/pa-files/PAR-03-106.html).

In addition, Branch staff encouraged cross-fertilization of ideas between demographers and ecologists through symposia and presentations at the Ecological Society of America and the Population Association of America.

The DBSB initiated a cooperative agreement to facilitate data sharing, *Data Sharing for Demographic Research*, a collaborative effort between Michigan, the Inter-university Consortium for Political and Social Research (ICPSR), the Carolina Population Center, and the Minnesota Population Center. This project includes methodological research related to data sharing; see http://www.icpsr.umich.edu/DSDR/ for more information. The Branch has also funded a program project at the University of Michigan, which also conducts methodological research on confidentiality and data sharing. A final project in this area is a National Academies of Sciences (NAS) workshop, *Confidentiality Issues Arising from the Integration of Remotely Sensed Data with Social Science Survey and Other Self-Identifying Data*. The DBSB also participates in a trans-NIH data-sharing working group to facilitate and stay current with NIH developments in data-sharing methods and approaches.

The Branch also funded numerous Small Business Innovation Research (SBIR) Grants on the development of methodologies for sampling, survey research, estimation and projection, measurement of segregation, spatial methods, and other topics.

The Branch held or supported numerous workshops addressing theory and methods:

Workshop on the Influence of Gender on HIV Risk
March 14, 2003
This grantee workshop focused on how norms and institutions related to gender affect HIV risk and prevention in various cultural contexts. Examples of relevant features of gender included differential access to resources, power differentials and dynamics, and cultural scripts for male and female behaviors in sexual and romantic relationships.

New Directions in Young Children's Socio-Emotional Measures
November 13, 2002
This workshop was the third in a series of three workshops that examined measures of child development and family processes available for use in large-scale surveys. This workshop focused on measures of socio-emotional development.

- **Selecting Cognitive Measures for Children in Large-Scale Surveys**
  May 1, 2002
  This workshop was the second in a series of three workshops that examined measures of child development and family processes available for use in large-scale surveys. This workshop focused on measures of cognitive development. The workshop was held under the auspices of the Science and Ecology of Early Development (SEED) program.

Counting Couples II: Measurement Issues in Family Demography
November 13-14, 2003
The purpose of this conference was to describe why and how the measurement of family-related demographic phenomena matters and to discuss and recommend how best to improve current data-collection practices to more accurately depict family change and behavior. This conference was a follow-up to the workshop *Counting Couples: Improving*

Marriage, Divorce, Remarriage, and Cohabitation Data in the Federal Statistical System
December 13 and 14, 2001, Bethesda, Maryland.

Workshop on the Measurement of Media Content Across Different Types of Media, December 11-14, 2003**.**

Respondent Retention in Longitudinal Surveys (collaborator)
2004, Washington DC

Workshop on Interdisciplinary Perspectives on Culture
June 13-14, 2005, This conference addressed concepts from psychology, anthropology, evolutionary biology, sociology, and economics as they relate to theories of culture and cultural change.

The Moving Americans Conference: Interdisciplinary Conversations on Internal Migration
May 4-6, 2006
This conference brings together leading social scientists and historians to explore the relationship between immigration and internal migration; migration and racial diversity and opportunity; health and migration; movement inside urban areas; institutional factors in migration; economic and amenity migration, and the effects of Hurricane Katrina on migration.

Cross-cutting Theme: Translation of Research

Promote the translation of research findings to make them accessible and useful to diverse audiences and to better integrate the insights from basic research into programs and practice.

The vast majority of research supported by the DBSB has focused on basic science, with academic scholars the primary audience for the results. Yet, many of the findings generated in these projects could be useful to public policy makers and the general public if the results could be made more accessible. In addition, basic research findings may contribute to the development of more effective intervention programs, prevention strategies, or provider practices. Investments in outreach efforts and applied research are needed to improve the accessibility and utility of the research supported by the Branch and to maximize its value to society.

Journalists remain key gatekeepers for the dissemination of demographic research. To work effectively with journalists, researchers must provide them with accessible resources, including research summaries, statistics, access to materials via the Web, and personal interviews to support their stories. These same resources are used increasingly by policy makers and the public to inform decisions. But, researchers generally communicate technical findings to research-sophisticated audiences and frequently do not possess the skills needed to communicate effectively with journalists and other non-technical audiences. There is a need for researcher education to improve the communication, and therefore accessibility, of research findings.

Population researchers must also develop common criteria for determining which research findings are appropriate for dissemination, and appropriate means of communicating different types of findings. All too often, non-scientific audiences can be misled when descriptive or correlational findings are confused with causal effects. In part, improved communication tools and skills can help to minimize confusion. In addition, improved integration of policy analysis into demographic training may strengthen researchers' own understanding of how and when research can inform policy.

Basic science can also be used as a basis for program development. The DBSB has supported the translation of basic research into HIV prevention programs for many years. This research has demonstrated the effectiveness of new strategies for behavioral change and has also added to basic scientific knowledge through the use of randomized designs to test theory-driven hypotheses about behavior change. The Branch recently expanded its portfolio of intervention research to include studies for improving contraceptive use and could further develop research in the area of family interventions and health.

Actions Taken

A Population Research Infrastructure Program (PRIP) grant to the Population Reference Bureau is supporting a program of information dissemination to news media and policy makers about developments in demographic research. See http://www.prb.org/cpipr/ for more information. Other grantees under PRIP also have strong programs of research dissemination.

Dissemination efforts by the Fragile Families Study have informed policy makers about marriage, parenting, child well-being, and the effects of welfare reform; see

http://crcw.princeton.edu/fragilefamilies/briefs.asp for a series of research briefs. The Three Cities Study and the Los Angeles Family and Neighborhood Study have also participated in subjective efforts.

The Branch undertook a synthesis of research published and forthcoming from the first two waves of the National Longitudinal Study of Adolescent Health (Add Health); this is nearing completion.

In a grant funded under PAR 02-099, Educational Programs for Data, Methods, and *Interdisciplinary Approaches to Population Research*, Dr. Nancy Krieger is training public health officials and researchers in concepts, methods, and approaches to geocoding public health data, generating census-derived area-based socioeconomic measures, and using these data to investigate and monitor social disparities in health.

The Branch initiated a multi-stage program of research intended to build the scientific knowledge necessary to evaluate which workplace policies and practices related to work-family conflict are the most beneficial for the health and well-being of workers, their families and children, and workplaces. Three workshops provided the foundation for this initiative:

> *Work, Family, Health, and Well-Being*, September 23, 2002
> *Workplace Strategies and Interventions for Improving Health and Well-Being*, April 13-15, 2004
> *Health Outcomes and Study Designs for Evaluating the Impacts of Work-Family Policies and Practices on Health and Well-Being*, July 22-23, 2004

Six cooperative agreements were awarded in response to an RFA and (HD04-017, *Developing Study Designs to Evaluate the Health Benefits of Workplace Policies, and Practices*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-04-017.html). Grantees form a network that will develop plans for research strategies. The network is collaboratively funded by The National Institute on Aging (NIA), Office of Behavioral and Social Science Research (OBSSR), and National Institute of Occupational Safety and Health (NIOSH) as well as NICHD. Numerous other Institutes, Federal Agencies, and Foundations also contributed to development of the initiative.

The Branch has funded several research grants that evaluate experimental interventions in the area of welfare reform and maternal and child health. Examples include research on the *Moving to Opportunity Study and the Progresa Project in Mexico*.

DBSB joined in a trans-NIH PA, PAR-05-026, *Community Participation in Research*, http://grants.nih.gov/grants/guide/pa-files/PAR-05-026.html, that encourages research that involves local communities in guiding the scientific research agenda and the design of studies.

The Branch has also funded numerous grants that applying basic research findings to the development and testing of behavioral interventions, primarily in the HIV/STD prevention area. It also participated in a trans-NIH announcement, RFA 02-007, *HIV/STD Prevention Programs for Adolescents.*

DBSB convened a January 2002 workshop of grantees who were replicating "proven" HIV-prevention interventions in new settings or populations. Participants discussed the challenges of transferring programs to new settings and strategies for balancing fidelity to the original program model with the flexibility needed to adapt programs to new populations. DBSB staff is developing a paper based on these studies.

The Branch funded several grants based on an RFA, *Improving Contraceptive Practice and Delivery*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-01-015.html, that encouraged research to inform strategies: to support effective contraceptive use; identify and evaluate innovations in clinical practice; and address the influence of policy and the structure and financing of reproductive health services on effective contraceptive use, and the cost-effectiveness of alternative approaches to structuring and financing contraceptive services.

The Branch initiated a PA, *Research on HIV/STD Prevention Messages*, http://grants2.nih.gov/grants/guide/pa-files/PA-01-139.html, to encourage the translation of social science research into effective prevention messages and to increase understanding of factors reducing the effectiveness of prevention messages.

Branch staff are collaborating with the Center for Disease Control and Prevention (CDC) and the National Campaign to Prevent Teen Pregnancy to develop a 2006 research conference: *What's it Going to Take? A Teen Pregnancy Prevention Research Agenda for the Next Decade.*

SBIR grants are addressing: the development, implementation, and evaluation of teen pregnancy prevention and teen STD/HIV/AIDS prevention programs; provision of psychosocial information and support to couples seeking infertility consultation and treatment; tools for the evaluation of HIV/AIDS prevention programs; development of self-efficacy in young adult males in preventing pregnancy with their female partners; development of a prevention program for sexual assault; and prevention of STDs.

The DBSB also joined a trans-NIH RFA, *Strengthening Behavioral and Social Science in Medical Schools*. The first awards under this initiative were made in September 2005.

New Areas of Emphasis

New Area of Emphasis: Diversity and Opportunity in American Society
Support demographic, behavioral, and social science research on race and ethnicity, social and economic inequalities, and their intersections with immigration and other demographic phenomena.

In the past 30 years, the United States has become increasingly more diverse. The share of U.S. residents who are non-Hispanic whites has declined, as the share of these who are members of racial and ethnic minority groups, particularly Hispanics has increased. The dominant factor driving this change has not been differences in natural increase (births and deaths) across racial/ethnic subgroups; rather, it has been increases in immigration from non-European countries following liberalization of U.S. immigration laws starting in the late 1960s. In relation to opportunity and achievement, there are some indications that differences within racial/ethnic groups are as important as differences across groups. Furthermore, indices of income inequality in the United States have been rising in recent decades, reflecting not only immigration, but also other rapid social changes in the family and in gender roles, economic restructuring, and technological change. It is important to understand how each of these factors affects rising inequalities, and how changes in inequality affect demographic trends.

The DBSB seeks to extend and expand demographic, behavioral, and social science research on diversity and opportunity in the United States. Of particular interest is how population diversity influences opportunity, particularly socioeconomic opportunities, of U.S. residents. Since 1995, the Branch has supported a vigorous research portfolio on issues related to immigration and immigrants and plans to continue this research emphasis. The Branch plans to renew and expand its support of research on race and ethnicity and research related to social and economic inequality and stratification in the United States. Some of the issues to be addressed include the following:

- Research on how race, ethnicity, immigrant status, gender, and class intersect to affect socioeconomic outcomes
- Research examining the demographic processes including migration, residential segregation and integration, education, and fertility and family formation that affect and are affected by inequality
- Research that examines the processes and events in the lives of children that affect their socioeconomic outcomes as adults, especially those factors that explain racial, ethnic, and immigrant status differences
- Research that develops innovative models that capture, for the diverse populations within the United States, the processes affecting opportunity
- Research that looks at how the increasing diversity of U.S. society changes the opportunities available for the demographic subgroups within the United States

Actions Taken

The Branch issued an announcement for research on the demography of race and ethnicity in the United States, PA-03-057; *Social and Demographic Studies of Race and Ethnicity in the United States*, http://grants2.nih.gov/grants/guide/pa-files/PA-03-057.html. The Branch award four grants and a fifth is pending. This announcement will be re-issued in the coming year.

The NICHD provided partial funding for an NAS panel on the Hispanic population of the United States.

The Branch has expanded its program in immigration research. Although it has not yet re-issued earlier PAs in this area, the PA noted above on race and ethnicity included a call for research on how immigration is changing the racial and ethnic character of the country's population.

The Branch has supported the New Immigrant Survey, a large-scale longitudinal follow-up of a probability sample of legal entrants to the United States.

The Branch participated in a conference was held September 25, 2002; on the *Effects of Immigrant Legalization Programs on the United States: Scientific Evidence on Immigrant Adaptation and Impacts on U.S. Economy and Society*. A report from the conference is forthcoming.

Another workshop, *One in Five: Addressing Health, Educational, and Socioeconomic Disparities of Children in Immigrant Families* –encouraged interdisciplinary research on children in immigrant families. The workshop was held May 25 and 26, 2005. A workshop summary will be published in the coming year.

Numerous projects funded by DBSB address the impact of poverty, race, and ethnicity on children and families. These include grants funded under the SEED initiative, the three major "welfare" studies (Fragile Families, Three Cities, and Los Angeles Family and Neighborhood Study [LAFANS]), and numerous other grants using existing data bases and smaller scale data collection strategies. No studies have examined the effects of "inequality" per se.

Numerous funding initiatives have addressed racial, ethnic, and socioeconomic disparities in health. These are co-sponsored with other NIH entities and include:

> RFA OD03-001, *Pathways Linking Education to Health*,
> http://grants2.nih.gov/grants/guide/rfa-files/RFA-OB-03-001.html
> The OBSSR-sponsored "*Mind-Body" Initiative*, under which DBSB is funding research on health disparities at the University of Michigan (George Kaplan, PI).
> PA-04-153, *Health Disparities Among Minority and Underserved Women*,
> http://grants1.nih.gov/grants/guide/pa-files/PA-04-153.html
> PA-03-170 *Health Promotion Among Racial and Ethnic Minority Males*,
> http://grants1.nih.gov/grants/guide/pa-files/PA-03-170.html
> PA-05-029, *Social and Cultural Dimensions of Health*,
> http://grants2.nih.gov/grants/guide/pa-files/PA-05-029.html

A recent conference, *Health Disparities in Infertility*, held March 10-11, 2005, examined the prevalence of infertility and receipt of infertility services in minority and low-income populations. The conference involved demographers, sociologists, economists, epidemiologists, and biomedical scientists and clinicians.

Branch staff have also contributed to planning an NIH-wide conference on the contributions of behavioral and social sciences to understanding and addressing health disparities.

New Area of Emphasis: Intergenerational Research

Support research on resource flows across generations and age groups, the mechanisms through which assets, values, and behaviors are transmitted across generations, and the impact of intergenerational flows on children, families, and society.

Intergenerational research includes studies of how families transmit characteristics, attitudes, behavior, knowledge, and resources across generations and the implications of these transmissions for the health, well-being, and life course of the individuals involved. It also includes the effect of public policy and intervention programs on intergenerational behavior. Intergenerational transfers may be private, as in the case of parents' assumption of child-rearing costs or children's support for elderly parents, or public, as in examples of public education, Social Security, Medicare, Medicaid, and other programs with an age component. Public transfers may be imposed directly by the public sector or indirectly, as when the public sector incurs debt that must be repaid or serviced by future generations.

Intergenerational transfers matter for several reasons. The investments parents plan to make in their children affect their fertility decisions, and the investments they actually make are an important determinant of the human capital of the next generation. Patterns of intergenerational transfers are a major determinant of the financial consequences of changing age distributions, and specifically of population aging. Transfers have a major influence on social and economic inequalities. Further, private transfers can be substituted for, or crowded out by, public transfers. These processes of substitution and crowding out can have significant effects on the impact of age-based or need-based public policies.

The DBSB Program on Intergenerational Research will support research on how private behaviors and public policy affect the allocation of family and other resources across the generations. It will examine how private family resource allocation decisions result in improvements in health, wealth accumulation (including human capital), and well-being for children, active adults, and the elderly. The Program will examine the implications of these transfers for individuals, families, and society, and how public policy interacts with family processes to alter these results. It will also examine how family behavior transmits health, behavior, and attitudes to children, and the long-term implications of these transmissions.

Actions Taken

DBSB issued an RFA (RFA HD02-030, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-02-030.html) for research on intergenerational transfers. The RFA encouraged studies that examine the manner in which private family resource allocation decisions result in improvements in health, wealth accumulation (including human capital), and well-being for children, active adults and the elderly, and how public policy interacts with family processes to alter these results. A workshop for grantees under the *Intergenerational Family Resource Allocation RFA* was held March 10-11, 2005. A report from the workshop is available from DBSB.

One of the working groups established under the Explaining Family Change Project will consider new directions in research on intergenerational family relations. This group is collaborating in

planning a 2006 conference in the Penn State Family Issues Symposia Series on intergenerational relationships.

Research and initiatives under *the Children and Child Health* goal (See next section) address issues relating to the transmission of values, resources, and characteristics to children, and the influence of biology, family behavior, communities and social policy on these processes.

New Area of Emphasis: Children and Child Health A Population Perspective

Develop a comprehensive, population-based perspective on children and child health by building a research program on the status, well-being, and health of children in diverse populations, and on the influence of families, communities, and policies on child health and well-being.

Children are a critical element of population age structure, a major dependency group, and the major source of human capital for future populations. As such, it is necessary to understand the status, trends, determinants, and consequences of the health and well-being of children in the population. Attention to children has always been implicit in the DBSB Program, especially in reference to family and household dynamics. Supported research has examined the implications of changing family structures for child development and well-being, child support, child care, infant mortality, and child health, and the health of immigrant children. The DBSB has also supported the development of indicators of child health and well-being and engaged in a national effort to institutionalize the annual production of these indicators by the federal government.

Building on this foundation, the DBSB seeks to broaden its program of research on children from social, economic, and demographic perspectives. Areas of emphasis include studies of the macro circumstances of children, studies of the influence of family and community on child health and well-being, and studies of multi-level influences on child behavior, health, and development. There is an opportunity to blend social and behavioral sciences in exploring the behavioral and biological consequences of growing up in diverse environments-poor or rich, diverse or racially segregated, unsafe or protected.

Topics that have traditionally been part of the DBSB Program offer many new and continuing opportunities for research on children, for example:

- Studies of the impact of the major increase in children born into or living in families with cohabiting parents and other "new" family structures
- Studies of the processes that link family structure and child outcomes
- Research on family investments and resource allocations that affect children
- Research on parental employment and its effect on parenting and child outcomes
- Research on the impact of public policies on children's health and well-being

New directions for research will help to fill out a comprehensive, population-based perspective on children. One example is research on children's experiences with institutions outside the family (e.g., faith-based organizations, schools, recreational leagues), peer groups, the effects of such experiences on health and development, and the factors that influence whether and how children experience these institutions. Another is expanded research on the efficacy of policy and program interventions designed to improve the health and well-being of children, and the factors that enhance or diminish program or policy effects.

There are also important ways in which the well-being of children intersects with other important demographic topics. Most notable are the questions of health disparities in children, the well-being of immigrant children, the well-being and life course of disabled children, and the effects of high-risk behavior of children and adolescents on their health, well-being, and their life chances.

Actions Taken

The NICHD has continued to support the development and dissemination of *America's Children: Key National Indicators of Well-Being*, issued annually by the Interagency Forum on Child and Family Statistics.

DBSB re-issued PA-04-113, *The Science and Ecology of Early Development (SEED),* http://grants2.nih.gov/grants/guide/pa-files/PA-04-113.html. This initiative encourages interdisciplinary research among sociologists, demographers, psychologists, and economists on the effects of context and public policy on the development of children in low-income and poor families. A grantee workshop was held September 13-14, 2004.

A workshop on *School Readiness* was held February 25-26, 2003. The workshop examined research on how school environments influence children's development of school readiness and facilitate children's transition to school.

The Branch issued an RFA (HD04-017, *Developing Study Designs to Evaluate the Health Benefits of Workplace Policies and Practices*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-04-017.html). This initiative is designed to address child and family health through employer practices and policies that reduce work-family conflict (see entry under Translation of Research).

The DBSB is co-leading a cooperative agreement is to develop a multi-site, multi-level study that examines how community, family, and individual influences interact with biological influences and result in health disparities in infant and early childhood mortality and morbidity.

Branch staff co-led the Social Environment Working Group of the National Children's Study, developing guidance for this large longitudinal birth cohort study on the integration into the study of information on public policy, community and family characteristics, parenting, media exposure, and other social and economic factors.

The Branch has funded numerous studies that provide information on children's health and development in the context of their demographic, social, economic, and policy environments. These include the Child Supplement to the Panel Study of Income Dynamics, the Child and Adolescent components of the NLSY, 79 cohort, the National Survey of Families and Households, the New Immigrant Survey, the Add Health Study, the Early Childhood Longitudinal Study – Birth Cohort, the Fragile Families Study, the Three Cities Study, and the Los Angeles Family and Neighborhood Study. These studies make their data available for secondary analysis.

Numerous other grants funded by the Branch use secondary data and qualitative methods to study the effects of family and social context (including cohabitation, family instability, public health, child support, and workplace policies) on children's health and development.

DBSB also funded an extension of the Add Health Study to obtain information on high school transcripts, thus providing additional information on school experience for research on adolescence using this dataset.

A workshop, *Addressing Health, Educational, and Socioeconomic Disparities of Children in Immigrant Families*, encouraged interdisciplinary research on children in immigrant families. The workshop was held May 25 and 26, 2005, and brought together NICHD grantees from the social sciences, developmental sciences, and medicine.

The Branch's African Partnerships Initiative addresses issues of orphan well-being, child feeding, and child health in Sub-Saharan Africa along other social and behavioral topics related to the HIV epidemic.

Branch staff are working with others in the Institute to explore the potential for social science contributions to research on childhood obesity.

A workshop-in-planning will address the effects of media on children's health and development.

The DBSB co-funded the *American Time – Use Survey Early Results* conference, to be held in December 2005. This conference will feature work relevant to parental investments of time in parenting and other family responsibilities.

Much of the work funded under the goal on *Intergenerational Research* (See pg. 12) also relates to this goal.

New Area of Emphasis: Sexuality, Development, and Health

Encourage basic research on sexuality and sexual behavior in relation to healthy development, the stability of family relationships, fertility, and the transmission of disease.

For many years, research on sexual behavior has been an essential component of the Branch's research program on fertility, unintended pregnancy, and HIV/AIDS. Research on these topics, however, has been handicapped by the absence of a well-developed scientific body of knowledge that addresses basic issues in human sexuality and sexual behavior. Basic research on the development, expression, and consequences of sexuality, broadly defined, is essential to both strengthening research in now-funded areas and to extending research to other important outcomes. Theoretical approaches to understanding sexuality and its consequences should move beyond "medicalized" paradigms to recognize the developmental, social, cultural, economic, as well as psychological dimensions of these complex traits and behaviors. For example, sexuality and the management of sexual behavior are central to positive family functioning and marital stability, and to healthy development in adolescence and adulthood. There is a need for more theory, data, scholarship, and ultimately, more understanding of these connections. Particular attention should be paid to the role of gender in influencing sexuality and sexual behavior. Important but underdeveloped areas of research include:

- Normative development of sexual identity and behavior over the life course
- Meanings of sexual behavior to individuals and groups (e.g., as a marker of adulthood, an expression of intimacy, an expression of physiological need, and/or a means of creating life)
- Developmental, social structural, and cultural processes that shape norms, values, and "scripts" concerning sexuality and its expression
- Roles of sexuality and sexual behavior in partnerships of various types (e.g., casual partnerships, committed relationships, cohabitation, marriage), with attention to partnership stability, overall relationship quality, and the interrelationships between sexual and nonsexual domains
- Dynamics of sexual partnerships, including issues related to: coerced or forced sex; emotional, social, and other factors relating to partnership choice and behavior in partnerships; bargaining and accommodation within partnerships; and the influence of gender on these processes
- Influence of families, social networks, and sexual marketplaces on sexual development and behavior
- Impact of laws and regulations relating to sexual behaviors

Actions Taken

Branch staff organized a trans-NICHD working group to discuss the Institute's mission in research on sexuality, and to explore responsible approaches to advancing research on this sensitive topic. These efforts helped to prepare the Institute staff for questions from congress and other organizations regarding NICHD funding of this area of research. The Institute continues to fund research in this area.

The Branch successfully integrated sexuality research into the NICHD Strategic Plan, *Reproductive Health for the 21st Century*.

The DBSB continues to encourage a broad approach to research on sexual behavior in its funding talks for researchers, program announcements and RFAs. Special attention is given to the importance of social, cultural, and economic factors and the importance of considering the couple context of sexual behaviors. Relevant workshops and initiatives include:

Workshop on Dual Protection, January 9-10, 2003
Participants considered the prevalence of dual protection, (that is, the use of methods to protect against both pregnancy and STIs); determinants at the levels of the individual, couple, and broader contexts; and intervention programs to promote dual protection.
Workshop on the Influence of Gender on HIV Risk, March 14, 2003
This grantee workshop focused on how norms and institutions related to gender affect HIV risk and prevention in various cultural contexts. Examples of relevant features of gender included differential access to resources, power differentials and dynamics, and cultural scripts for male and female behaviors in sexual and romantic relationships.
RFA HD02-010, *Sexual Relationships, Sexual Concurrence, and HIV*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-02-010.html; this RFA encouraged research on behavioral dynamics involved in partner choice; partnership formation, stability, and exclusivity; and the monitoring and managing of HIV risk within partnerships.
RFA 02-020, *Social and Behavioral Research on New Biomedical Methods for HIV/STD Prevention*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-HD-02-020.html, this RFA encouraged research on social and behavioral issues pivotal to the development, evaluation, and eventual widespread use of new methods, especially topical microbicides, for HIV/STD protection for both men and women.
PA-04-115 *Religious Organizations and HIV*, http://grants1.nih.gov/grants/guide/pa-files/PA-04-115.html, this PA called for studies to examine the extent and nature of religious organizations' involvement in HIV-related activities, the factors that influence such involvement, and its effectiveness.
PA-05-033, *Men's Heterosexual Behavior and HIV Infection*, http://grants2.nih.gov/grants/guide/pa-files/PA-05-033.html, this PA encourages basic social and behavioral science studies on the determinants of the sexual behavior of adult heterosexual men.
The DBSB funded studies of male sexual function during the adult years, the effect of emotion and arousal on sexual risk-taking, and a conference on methodological issues in sexuality research.
The Branch has funded a variety of qualitative research projects that examine cultural processes associated with sexual behaviors, in the United States and overseas.
The Branch co-sponsored a PA, *Behavioral, Social, Mental Health, and Substance Abuse Research with Diverse Populations*, http://grants2.nih.gov/grants/guide/pa-files/PA-01-096.html.
Data from The Add Health Study have been used on a widespread basis to examine romantic relationships, sexual behaviors, and sexual risk-taking in adolescence. Other large-scale studies supported by the Branch, including the NLSY-97, the National Survey

of Family Growth (NSFG), and the National Survey of Adolescent Males, have also been used for studies of sexual behavior.

The DBSB is encouraging the submission of applications on marital and romantic relationships previously funded through the National Institute of Mental Health (NIMH); for more information see http://www.nichd.nih.gov/cpr/dbs/research.htm.

Two conferences-in-planning will address relevant research. One will focus on early prevention of adolescent sex. The second, described earlier, is a collaborative effort with the National Campaign to Prevent Teen Pregnancy and the CDC.

A new PA, *Research on pathways linking environments, behaviors and HIV/AIDS,* invites research on the social environmental influences that affect sexual behaviors, among other topics.

New Area of Emphasis: Macro-level Population Research

Support population research at the aggregate level and develop theories and methods that unify macro- and micro-level processes in population research.

For more than a century, population researchers have usefully applied a variety of powerful tools and theories to describe and analyze the processes that give populations their shape and drive population change. Such macro-level population research is integral to the DBSB mission of supporting research that provides an overall perspective on population characteristics, trends, and processes. For example, an aggregate perspective provides essential information on the implications of immigration for the growth and composition of the U.S. population, the meaning of the decline in non-marital fertility among teenagers, and trends in health disparities and the well-being of children and families in an age of welfare reform. Without a balanced portfolio of research that contains both micro- and macro-level research, the DBSB cannot offer a meaningful and coherent answer to questions such as these in the domains of interest to the program. Aggregate level research is also essential to inform and motivate research. Substantial and sophisticated analyses of population characteristics and trends help to focus research and program intervention on real problems and illuminate the factors that contribute to them.

Despite the importance of aggregate-level population research, the DBSB portfolio has become heavily dominated by research focused on understanding individual-level processes and behaviors. It is time to rectify this imbalance by encouraging and supporting more aggregate-level research. Accomplishing this goal will require attention to data needs and to the accessibility of data on population characteristics and change. It will also involve encouragement of new developments in formal demography, such as stochastic forecasting, two-sex models, and research on the consequences, interpretation, and forecasting of changing demographic rates. The field will benefit from innovative approaches to dynamic modeling and the integration of mathematical, simulation, and statistical approaches to studying population phenomena.

Unifying knowledge about population processes at the macro- and micro-levels is an emerging scientific frontier that needs new theory and methodology to fulfill its promise. Knowledge of individual-level behavior has grown much more quickly than the understanding of how to aggregate such knowledge in population-level analyses. The mechanisms that link individual-level processes and aggregate-level processes are still poorly understood, but clearly involve feedback mechanisms, "tipping points," and structural dependencies that complicate the direct translation from micro to macro and vice versa. Development of dynamic models that link the "behaviors" of individuals and aggregates is a major challenge for social scientists and an important step in improving our understanding of demographic processes. Theoretical developments linking economic growth models to household decision-making and using social networks as a way of conceptualizing social processes are promising theoretical platforms upon which to build.

Actions Taken

The Branch is planning to hold a workshop on macro-micro linkages in population research in 2006.

The Branch issued PAR 02-099, *Educational Programs for Data, Methods, and Interdisciplinary Approaches to Population Research*, http://grants.nih.gov/grants/guide/pa-files/PAR-02-099.html. Under this announcement, it has funded a grant to develop a training program in formal demography to supplement that offered in standard demographic training.

The Explaining Family Change project is exploring mechanisms that link micro-level behaviors with macro-level change. Several grant-supported projects also address these issues; e.g.; the Los Angeles Family and Neighborhood Study.

Issues related to macro-micro linkages were included in the RFA HD02-030, which solicited research on intergenerational transfers. Several grantees are addressing these issues.

The Branch issued an announcement, PA03-027, *Social and Structural Impact of HIV/AIDS*, http://grants2.nih.gov/grants/guide/pa-files/PA-03-027.html. This announcement called for research examining the social, demographic, economic, and other structural impacts of HIV in populations around the globe.

The DBSB's portfolio in population and environment addresses macro-micro linkages by relating individual- and household-level behaviors to population change and environmental impacts. The Branch has funded an NAS workshop on population, land use, and the environment, which produced a volume:, *Population, Land Use; and Environment: Research Directions*.

The DBSB co-sponsored RFA TW 03-005, *Health, Environment, and Economic Development*, http://grants2.nih.gov/grants/guide/rfa-files/RFA-TW-03-005.html; which encouraged developmental and exploratory research and research capacity-building in developing countries on topics that combine the issues of health, environment, and economic development to improve scientific understanding of the relationships among those factors, and suggest guidance for policy.

A new announcement, *Research on Pathways Linking Environments, Behaviors, and HIV/AIDS,* will invites research on the impact of environmental factors on HIV-related behaviors, the impact of behavioral patterns in a population on the nature and course of the HIV epidemic, and the impact of the epidemic on the social, economic, institutional, and cultural environment.