

# SURVEY RESEARCH

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NEWSLETTER FROM THE SURVEY RESEARCH LABORATORY

## Challenges to Collecting Survey-Based Biomarker and Genetic Data

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### INTRODUCTION

It is becoming increasingly apparent that a fuller understanding of health and health outcomes will require the simultaneous collection and analysis of genes, the environment, and behaviors. The household survey appears to be an ideal medium for the collection (or linking) of these various types of information. While the household survey has long been used to collect vast amounts of data related to demographic, social, psychological, and behavioral influences on health and health outcomes, the collection of biological measures ushers in a host of new benefits. As Weinstein and Willis (2000) indicate, the benefits of linking biological measures with survey data include (1) obtaining population-representative data from nonclinical samples, (2) calibrating self-reports with other measures of health and disease, (3) explicating pathways and elaborating causal linkages between social environment and health, and (4) linking genetic markers with survey materials. The coupling of survey and biomeasure data can enhance our understanding of the determinants of and treatments for a range of diseases, including various cancers, cardiovascular disease, gastrointestinal disease, arthritis, and substance abuse disorders.

There is evidence that surveys are increasingly including biomarker and genetic data (hereafter referred to as "biomeasures"). Using the key words "(survey OR questionnaire) AND (biospecimen OR biomarker OR gene OR genotype)," we conducted a PubMed search for articles that indicate the use of both biomeasure and survey data and present the results in Exhibit 1 on the following page. It is apparent from this figure that the publications with survey-

based biomeasure data has increased in the past 20 years, both in terms of raw numbers of publications and percentage of total publications. For example, within just the last decade, a threefold increase in the number of publications with a reference to survey-based biomeasure collection was observed, with approximately 1,000 publications of this nature in 1996 and over 3,000 in 2006, or about 13% of the total number of publications for that year. Clearly, the collection or linking of biomeasures and survey data is on the rise. However, the extent to which the increasing collection of survey and biomeasure data has been informed by the survey methodological literature is unclear, as the methods deployed in the collection of biomeasures in surveys vary widely. It is in this context that a session was organized and undertaken at the Ninth Conference on Health Survey Research Methods held in 2007 at Peachtree City, Georgia.

The overarching goal of the session was to advance our understanding of "best practices" in this specific application of survey methods. A number of common challenges emerged from the papers presented at the conference, including the selection of the data collection platform, selection of the biomeasures and equipment, obtaining consent, and quality control. Each of these is discussed in depth in the proceedings document that came out of that meeting (Beebe, in press) and briefly summarized below.

### COMMON CHALLENGES

#### Selection of the Data Collection Platform

For purposes of this section, the term "data collection platform" includes method of data collection

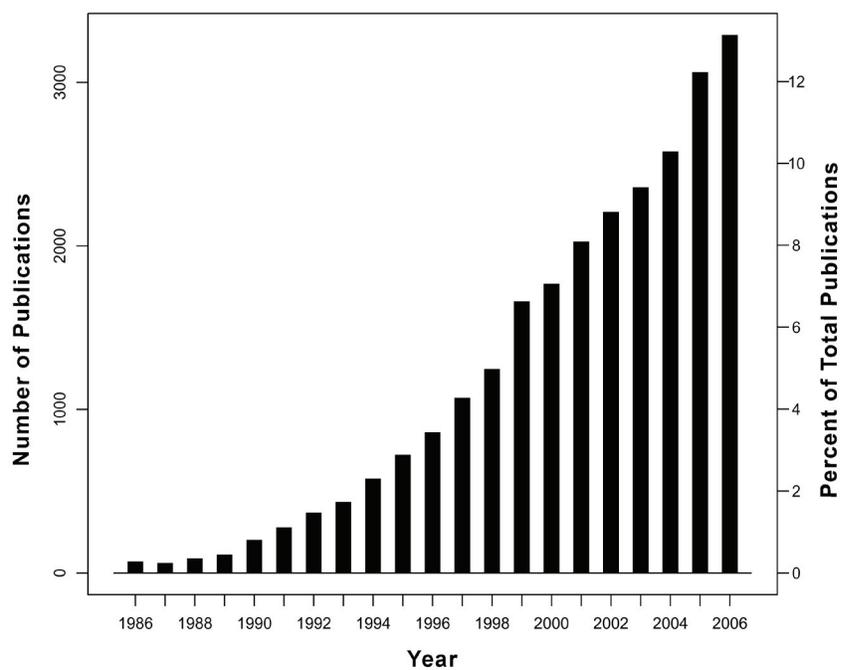
(e.g., mail, telephone, in-person) and location (e.g., household- vs. clinic-based). Decisions surrounding the former often center on the trade-offs of cost versus quality. A mailed survey may be the most inexpensive method of collection, but one is limited in the range and complexity of biometrics that can be collected. The in-person interview allows for the widest range of biometric collection but is also the most expensive. In addition, there appears to be a lack of consensus on what type of interviewer is best suited to undertake both the survey and biometric collection. Some have trained health care workers to conduct the interviews, while others have found it easier to train interviewers to collect the biospecimens. Further, medical malpractice insurance may be necessary for interviewers who are not medically trained. Interviewers also need to have buy-in and be willing to work with the specimens—such as keeping saliva vials in their freezers. An in-person interview conducted in the clinic setting may offer an even better range of biometric collection due to the availability of relevant biospecimen collection equipment, but some respondents may be disinclined to come into the clinic or be otherwise hampered in their ability to do so due to lack of insurance and/or transportation.

Respondent capacity and motivation also have some bearing on what data collection platform is used. As mentioned above, some respondents may be disinclined to come into a clinical setting for the interview and/or biometric collection. Similarly, respondents may be unwilling or unable to follow the necessary instructions for the collection of the relevant biometric collection, even if it is something as relatively simple as a buccal swab. Again, there are trade-offs in the selection of method that center around cost, quality, respondent capacity, and motivation.

### Selection of Biometrics and Equipment

When doing household biometric collection, all materials must be lightweight, easy to carry, and possible for the lay interviewers to collect. As is the case with the selection of the data collection platform, decision-making in this realm is guided by trade-offs between cost and data quality. Historically,

**Exhibit 1. Publications with Survey-Based Biometric and/or Genetic Data, by Year (1986-2006)**



blood draws have been the gold standard since they are seen as providing the greatest yield of whatever biological information is sought (e.g., DNA). However, the collection of blood is often the most expensive, requiring in-person interviews for the most part and the potential use of health care workers, such as phlebotomists. But even within the realm of saliva collection, there is variability in cost and quality. Satia-Abouta and colleagues (2002) found that buccal swabs and mouthwash offer DNA samples of comparable quality but that swabs are about half the price per sample of mouthwash rinses (\$8.50 vs. \$18.00, respectively) and that respondents found the swab instructions easier to follow. A common approach in genetic epidemiology is to ask for blood first and collect saliva if blood collection is refused (Lum & Marchand, 1998). Finally, packaging and shipment of specimens is very important, as well as costly. Different specimens need to be shipped in different ways, and a system should be in place to track shipments, and follow-up on delinquent shipments should be built into the design.

### Obtaining Consent

The issue of obtaining consent in the context of biometric collection is quite large and likely warrants a session of its own at some future conference. Many of the social and ethical issues of incorporating biometrics into survey studies are covered in *Cells and Surveys, Should Biological Measures Be*

*Included in Social Science Research?* (National Research Council, 2000), if one is interested in learning more. The main issue here is that most respondents are unfamiliar with the coupling of questionnaires and biomeasure collection. As such, what we know about consent in the classical survey data collection context may not be transferable to the realm of biomeasure collection. Due to the lack of regulation, how the collection is described to participants is not consistent. It can be described as DNA or genetic material, but also as a mouthwash sample, buccal cell sample, or saliva sample. How the biomeasure collection is described may, in turn, affect respondents' cooperation. It is not clear whether IRBs will allow for less than full disclosure of all aspects of the biomeasure collection in this process, however. Another major issue is how and when to report the results of the biospecimen testing to respondents (e.g., genetic profile). One of the major questions in this area is the obligation of the survey researcher collecting biospecimens versus the clinician charged with doing the same.

### Quality Control

The addition of biomeasure collection increases the potential for error. In addition to the usual sources of survey error, there is error associated with the collection and shipment of biological specimens and laboratory error. Errors in collection and shipment can come from incorrect recording of data by the interviewer or incorrect collection of the sam-

ple by the respondent. Certain specimens have temperature constraints (e.g., must be frozen, cannot get too warm), and incorrect storage may destroy specimens. Exhibit 2 offers a sampling of the different sources of error that are introduced with the addition of biomeasures to the survey data collection. The increase in error sources necessitates—and underscores the importance of—incorporating strict quality control mechanisms into the survey investigations as the need for quality control increases with the number of biomeasures collected.

### CONCLUSION

As suggested by the trajectory of publications presented earlier in Exhibit 1, the issue of biomeasure collection in surveys is not going to go away any time soon. However, more work needs to be done before we can get to “best practices” in this area. It is only through the types of experimentation that brought the survey research field to this point that we can accrue the necessary understanding of the virtues and pitfalls of various approaches to biomeasure collection in surveys. It is also likely that the whole endeavor would benefit from cross-disciplinary training between biomedical and social scientists so that the former can learn more about survey methods and the latter can learn more about genetics and the like. With this increased understanding, science can fulfill the heretofore unrealized potential of all that the combination of survey-based biomeasure collection offers.

**Exhibit 2. Error Sources in the Collection of Survey-Based Biomeasure Data**

Error Source	Examples
Survey respondent	Failure/Inability to attend study site
	Failure to follow directions (e.g., fasting)
	Concerns about dispositions of specimens
Failure of the collection apparatus	Equipment failure or damage in transportation
	Loss of electrical power
	Technician absence
Errors in specimen collection	Failure to follow specific protocols
	Mislabeling of containers
	Breakage, loss, or mishandling of specimens
Mishandling in specimen transportation	Failure to get specimen to lab in timely manner
	Loss or breakage of containers
	Microbial contamination or failure to store at the correct temperature
Long-term specimen storage	Loss, breakage, or contamination of specimens
	Inadequate labeling/transcription
Laboratory determinations	Lack of appropriate procedures
	Inadequate quality control

Source: Wallace (2000).

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## CURRENT RESEARCH

*Further information on the studies described in this section should be obtained from the organizations conducting the studies at the addresses given at the beginning of each organization's listing. Neither Survey Research nor the Survey Research Laboratory can provide this information. Study summaries are accepted by Survey Research with the understanding that additional information can be released to others.*

## CALIFORNIA

### Survey Research Center (SRC)

#### University of California at Berkeley

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**Golden Bear Omnibus (GBO) Survey.** The 2007 GBO provided a common vehicle to survey an RDD sample of California adults about public policy and public health issues. Subject areas included national health insurance, workers' compensation, new challenges of race in

California, willingness to participate in research involving childhood leukemia, privacy rights, presidential approval, and family medical leave. Interviews were conducted in English and Spanish with 1,186 respondents. *Project Director:* Madonna Camel, *Contact Person:* Robert Lee.

**Water Evaluation Study.** SRC conducted a public health study designed to investigate possible health risks encountered by swimmers at two southern California beaches. Subjects were recruited in person from recreational swimming areas and interviewed about their swimming habits. Telephone interviews were conducted two weeks after recruitment and addressed incidents of gastrointestinal and respiratory illness, as well as eye, ear, and skin infections. Follow-up interviews were conducted with 4,772 of the 5,778 recruited subjects. *Principal Investigator:* Jack Colford (Univ. of California at Berkeley), *Project Director:* Susan Burns, *Contact Person:* Robert Lee.

**Epidemiology of Functional Health in Elderly Hispanics Tracking Project.** SRC attempted to locate and conduct health-related interviews with a panel of subjects and/or their children or grandchildren in order to assess the viability of locating these participants for a future research project. Data are being used to refine tracing efforts that will be used in the investigator's NIH proposal to conduct follow-up research on the cohort and their adult children and grandchildren. SRC successfully located and conducted brief telephone interviews with 423 subjects. *Principal Investigator:* Mary Haan (Univ. of Michigan), *Project Director:* Madonna Camel, *Contact Person:* Robert Lee.

**Epidemiology of Functional Status in Elderly Hispanics and Their Children.** SRC was asked to attempt to locate and conduct brief diabetes-related interviews with the adult children of a panel of elderly Hispanics for ongoing research investigating the risk factors that may lead to cognitive impairment in later life for Hispanics. SRC successfully located and conducted brief CATI interviews with 508 subjects. *Principal Investigator:* Mary Haan (Univ. of Michigan), *Project Director:* Madonna Camel, *Contact Person:* Robert Lee.

## ILLINOIS

### Survey Research Laboratory

#### University of Illinois at Chicago

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**Patient Safety Information Systems.** Conducted on behalf of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), this study sought to assess the current status of patient safety reporting pro-

grams in U.S. hospitals and determine the advantages and disadvantages of specific information technology applications in adverse event reporting and prevention. In Phase 1 of the study, SRL mailed questionnaires addressing hospitals' occurrence event reporting procedures to 2,050 hospitals in fall 2005. Completed questionnaires were received from 1,374 hospitals. For Phase 2, JCAHO selected 489 Phase 1 respondents, each of which were mailed a questionnaire asking about staff training and opinions about occurrence report data and systems in early 2006. JCAHO then selected 20 hospitals from the 269 Phase 2 respondents to participate in Phase 3, which occurred in 2007. The questionnaire for the final phase asked risk managers for feedback about the quarterly reports received from JCAHO over the last year, and 17 completed questionnaires were returned. *Principal Investigator:* Chandrika Divi (JCAHO).

**Helping Young Smokers Quit (HYSQ): Phase III.** The project was part of Phase III of the HYSQ initiative funded by the Robert Wood Johnson Foundation, NCI, and CDC. SRL also conducted Phase I data collection, during which snowball sampling methods were used to identify youth tobacco cessation programs in the U.S. Phase III had two goals: (1) to recontact and interview programs screened as eligible during Phase I and (2) to conduct snowball sampling to locate new programs operating in the same counties as the Phase I programs. Main data collection began on January 9, 2007, and ended on May 28, 2007. Of the 756 Phase I programs, interviews were conducted with 327 (121 of which had been discontinued), and 48 programs identified through snowball sampling were interviewed. *Principal Investigator:* Susan Curry (Univ. of Illinois at Chicago).

**Academic Professional (AP) Employment Policies and Practices.** SRL conducted this Web survey of APs employed at the Univ. of Illinois at Urbana-Champaign (UIUC) in October 2007. The study purpose was to assess APs' opinions of various aspects of their positions, including promotional pathways, position title and compensation, work hours, career assistance, performance evaluations, and satisfaction with various facilities and services offered at UIUC. Over 4,000 APs received the invitation to participate, and 1,815 ultimately did so. *Project Coordinator:* Sowmya Anand.

## MASSACHUSETTS

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**MassHealth Tobacco Cessation Benefit Pilot Program Evaluation.** This statewide dual-mode (mail

followed by phone), dual-language (English and Spanish) survey of Medicaid members ( $n \approx 6,500$ ) is sponsored by the Univ. of Massachusetts Medical School, Commonwealth Medicine, Office of Clinical Affairs. The goals are to evaluate member awareness of the benefit and the effectiveness of the pilot program in assisting MassHealth members to quit smoking. The survey will be fielded during the spring of 2008. *Study Director:* Patricia Gallagher, *Assistant Study Directors:* Kirk Larsen and Deanne Dworski-Riggs.

## MICHIGAN

**Office for Survey Research (OSR)  
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**Michigan Cancer Behavioral Risk Factor Survey (MCBRFS).** Beginning in 2001, the MCBRFS focuses on the screening practices, cancer knowledge, and risk behaviors associated with breast, cervical, prostate, and colorectal cancers. Given the disproportionate rates of early diagnosis and mortality among minority groups, the sample methodology includes an oversampling of African Americans, Native Americans, Hispanics/Latinos, and Arab Americans. To increase participation in the study of those with potential language barriers to health access, the interviews are completed in Spanish and Arabic, as well as English. Over 12,000 interviews have been completed so far; an additional 4,350 will be gathered starting early 2008. Data have been used to track trends and to guide health policy and programs. *Project Manager:* Debra Rusz.

**Prostate Cancer Outcomes and Satisfaction with Treatment Quality Assessment (PROST-QA).** Currently in its fifth year, this NCI-funded phone survey of prostate cancer patients and their spouses or partners evaluates the effects of therapy choices on patient health-related quality of life and patient and spouse satisfaction with care. The research team includes faculty collaborators from M.D. Anderson, UCLA, Washington Univ., the Cleveland Clinic, Beth-Israel Deaconess Medical Center-Harvard Univ., and the Univ. of Michigan. The project has recruited more than 1,200 patients and 600 spouses or partners who have completed a baseline interview prior to treatment. They then are interviewed 2-months, 6-months, 12-months, 24-months, 36-months, and 48-months post-treatment. In 2006, an additional award to Wayne State Univ. researchers allowed the project to expand the spouse assessment interview, and a 2007 award will allow expansion of the patient interview. *Project Manager:* Jill Hardy.

## NORTH CAROLINA

### Social and Statistical Sciences

#### RTI International

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Research Triangle Park, NC 27709-2194  
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rak@rti.org; www.rti.org

**High School Longitudinal Study (HSLs:09).** RTI is conducting the HSLs:09 for NCES. It seeks to understand students' choice, access, and persistence in the science, technology, engineering, and mathematics curriculum. RTI will survey a nationally representative sample of high school students, their parents, teachers, and school administrators. At 9<sup>th</sup> and 11<sup>th</sup> grade, computerized adaptive assessments will be administered in science and math, and the cohort will be followed into early adulthood. *Project Director:* Dan Pratt.

**Baccalaureate and Beyond Longitudinal Study (B&B).** RTI will conduct a multimode follow-up interview with students who earned bachelor's degrees during the 2007–08 school year. Funded by NCES, B&B will interview about 25,000 new graduates, focusing on issues related to employment, graduate education, family formation, income and finances, and personal and professional goals. A separate interview section for new teachers will cover teacher preparation and first jobs. *Project Director:* Jennifer Sharp Wine.

**Development of a Computer Network for Data Collection via the Internet from a Nationally Representative Sample of American Households.** Sponsored by Stanford Univ. through an NSF grant, this study will build a nationally representative Web panel of respondents from households using in-person field recruiting. Panel members will be provided with Internet equipment. Study goals include testing the effectiveness of Internet survey methods and expanding understanding of public opinion. *Project Director:* Joe Eyeran.

**Improving Informed Consent for Biorepositories.** RTI will evaluate a template designed to obtain informed consent for participation in a biorepository. The template will serve as a model form adaptable to a wide variety of biorepository studies. RTI will conduct cognitive interviews to assess comprehension of the consent template, reactions to the idea of the biorepository, and general perceptions of medical research. The project is funded by the Duke Inst. for Genome Sciences and Policy. *Project Director:* Elizabeth Dean.

**U.S. Military Health.** Funded by the U.S. Dept. of Veterans Affairs and led by the Univ. of Texas Southwest Medical Center, the study will identify the prevalence and correlates of Gulf War Syndrome. RTI will collect approximately 9,700 phone interviews from randomly selected military personnel who were eligible for deployment during the 1990–91 Persian Gulf War. Data collection also

includes a subsample of blood specimen collection and clinical exam. *Project Director:* Kathleen Considine.

**National Hospital Discharge Survey (NHDS).** RTI will assist NCHS to develop and field the recently redesigned NHDS. In the development phase, RTI will build an electronic data collection tool for use by abstractors, create survey materials and protocols, and conduct a 40-hospital pretest. In the implementation phase, RTI will recruit a new nationally representative panel of over 200 hospitals and perform 2 annual cycles of data collection. *Project Director:* Victoria Albright.

**National Implementation of Home Health CAHPS Survey (HHCAHPS).** The purpose of this project is to help the Centers for Medicare and Medicaid Services plan, coordinate, and develop a strategy for the national implementation of the HHCAHPS by multiple survey vendors. RTI will train and provide technical assistance and oversight to survey vendors and conduct a mode experiment, perform statistical analysis for patient mix adjustment, and convene a technical expert panel. *Project Director:* Judith Lynch.

**Protected Repository for the Defense of Infrastructure Against Cyber Threats (PREDICT).** PREDICT is a repository for data sets contributed and hosted by non-government entities for use by cyber security researchers to test technologies that support effective threat assessment and increase cyber security capabilities. RTI is providing the overall management and coordination for PREDICT, facilitating data flow between PREDICT participants, providing Web-based repository access, and developing protocols to protect the confidentiality and integrity of the data and ensure its proper usage. *Project Director:* Charlotte Scheper.

**2004/09 Beginning Postsecondary Students (BPS) Longitudinal Study.** RTI will conduct a second follow-up interview with students who started their postsecondary education for the first time during the 2003–04 school year. Funded by the National Center for Education Statistics, BPS will interview about 19,000 postsecondary students, focusing on issues related to continued enrollment, degree attainment, transition to employment, income and finances, family formation, and personal and professional goals. *Project Director:* Jennifer Sharp Wine.

## PENNSYLVANIA

### Institute for Survey Research (ISR) Temple University

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**Year Up Program Evaluation.** Funded by the McConnell-Clark Foundation, this is an evaluation of the employment and training program outcomes for young

people in four large northeast cities. The random assignment study runs from fall 2007 to spring 2010. Follow-up CATI interviews will occur at 12 and 24 months after program intake. ISR will track and maintain contact with approximately 200 participants and wait-list controls over the course of the study. *Principal Investigator*: Anne Roder (Economic Mobility Corporation), *Study Director*: Eric Foster.

**Pennsylvania Commission on Crime and Delinquency Literature Review, Evaluability Assessment Services, and Training.** This project uses a flexible approach designed to respond to the dynamic context of ongoing program and organizational change as needed. *Principal Investigator*: Heather Hammer.

## SOUTH CAROLINA

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**South Carolina Emergency Preparedness Survey.** In this CATI survey conducted July–September 2007, more than 1,000 randomly-selected South Carolina adults were asked questions on issues related to preparedness for an emergency situation or disaster in the state. The state's Homeland Security Office and State Law Enforcement Division will use the information to evaluate current levels of citizen preparedness and to design ways in which such preparedness can be improved. *Project Director*: Robert Oldendick.

**Medicaid Survey.** More than 1,200 South Carolina Medicaid recipients and parents and guardians of Medicaid recipients participated in a CATI survey August–October 2007 to evaluate their Medicaid health plan. The survey was conducted for the Univ. of South Carolina's Inst. for Families and Society in conjunction with the SC Dept. of Health and Human Services, which will use the data to help future Medicaid recipients choose the health plan best for them. *Project Director*: Robert Oldendick.

## TEXAS

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**Hillcrest Poll 2007.** On behalf of Hillcrest Baptist Medical Center, CCRD conducted over 1,000 CATI interviews with McLennan County residents about a variety of health care-related issues.

**Title IX Survey.** A Web survey of over 500 undergraduates measured the estimated levels of athletic experience, ability, and inclination among Baylor students. The results were submitted to demonstrate compliance with Title IX of the Education Amendments of 1972 to the Civil Rights Act of 1964.

**Extraco Bank Web Site.** Eight focus groups were conducted to gather opinions and attitudes concerning Web site convenience and presentation. Groups were inclusive of a variety of audiences.

**Baylor Law School Focus Groups.** CCRD conducted 5 focus groups presenting selected practice cases to be tried by Baylor Law School students. Filmed focus groups featured a new vote concerning their respective cases every 15 minutes to determine what dialogue was instrumental in altering the participants' votes. A mock jury for these cases was selected from focus group participants for mock trial conducted by the Law School. *Principal Investigator*: Robyn Driskell, *Project Coordinator*: Debbie Marable.

## VIRGINIA

**Center for Survey Research (CSR)  
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**Voting in Long-Term Care Facilities.** With funding from the Alzheimer's and Related Diseases Research Award Fund, CSR conducted phone interviews with staff involved in voting procedures in 202 Virginia nursing homes and assisted-living facilities. The project sought to understand the steps taken by long-term care facilities to make it possible for residents to register and vote. *Principal Investigators*: Paul Freeman (Dept. of Politics, Univ. of Virginia), Richard Bonnie (School of Law, Univ. of Virginia), and Thomas Guterbock (CSR); *Coordinator*: Robin Bebel.

**Human Resources (HR) Restructuring Survey.** Versions of a survey done for the Univ. of Virginia and Virginia Tech were administered by mail and Web to all salaried staff, staff supervisors, and faculty who supervise staff. The survey was an opportunity for employees to evaluate University HR policies and procedures. Data were presented in a full report and at town meetings in conjunction with University administrators. *Project Director*: Thomas Guterbock, *Project Coordinator*: Deborah Rexrode.

**Customs-Trade Partnership Against Terrorism (CTPAT) Border Security Survey.** Sponsored by U.S. Customs Border and Protection (CBP), Dept. of Homeland Security, the survey was designed so that CBP could identify the costs and return on investment as-

sociated with a company's participation in the C-TPAT. This national Web survey had 1,756 participating firms. *Senior Research Director:* David Hartman, *Project Coordinator:* Linda Tournade.

**Access to Medical Care Survey.** Telephone and face-to-face interviews were conducted with residents of the Williamsburg, VA, area, with special attention to medically underserved areas. Questions addressed access to medical care. The study was sponsored by the College of William and Mary with grant support from the Williamsburg Community Health Foundation. *Project Director:* Thomas Guterbock, *Project Coordinator:* Deborah Rexrode.

## CANADA

### Institute for Social Research (ISR)

#### York University

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**2007 Ontario Election Study.** Over the course of the fall 2007 election campaign in Ontario, ISR conducted approximately 1,350 CATI interviews with adults in randomly selected Ontario households. The study will help researchers understand why Ontarians elect the people and parties they do, and how important such issues as funding for education and health care are to people across the province. The rolling cross-section sampling strategy of interviewing about 45 people per day will shed light on how public opinion changes over the course of the campaign. The study also looks at issues relating to elections, as there is a referendum on Mixed Member Proportional Representation in this election. *Project Director:* David Northrup.

#### Universal Influenza Immunization Project (UIIP).

Since there is no survey in Canada that regularly gathers health data on children under age 12, the UIIP was undertaken to estimate the proportion of Ontario children up to age 11 who had a flu shot in the most recent flu season, estimate how many of these were at risk (under 24 months and with a chronic health condition, like asthma), and see if school-based flu shot programs increase the inoculation rate of children. From the spring through fall of 2007, ISR conducted CATI interviews in about 4,000 households in which children live, including 200 households with an at-risk child. The information gathered will be used to improve the Ontario flu inoculation program and decrease the number of people who suffer from the flu each year. Funding was provided by the Canadian Institutes of Health Research. *Principal Investigator:* Doug Manuel (Institute for Clinical Evaluative Sciences [ICES], Sunnybrook Health Sciences Centre), *Co-investigators:* Jeff Kwong (ICES), Kathy Moran (Rapid Risk Factor Surveillance System Steering Committee, Durham Health Unit), and David Northrup (ISR).

**Women's Political Participation.** The primary purpose of this national study is to examine how feminist beliefs and religious values shape the political attitudes and behavior of women. While women's political behavior has come to mirror that of men in many domains, some gender gaps continue to exist and are being explored in this research. Over the summer and fall of 2007, ISR conducted approximately 1,200 interviews with randomly selected adult Canadian women in all provinces except Quebec. Funding was provided by the Social Sciences and Humanities Research Council of Canada. *Principal Investigator:* Brenda O'Neill (Univ. of Calgary), *Co-investigators:* Elisabeth Gidengil (McGill Univ.) and Lisa Young (Univ. of New Brunswick), *Project Director:* David Northrup.

## GERMANY

### ZUMA—Center for Survey Research and Methodology

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#### ESS and CESSDA in the ESFRI Roadmap: Recommendations for European Research Infrastructures.

The European Social Survey (ESS) and the Council of European Social Science Data Archives (CESSDA) are 2 of 35 European infrastructures recommended by the European Strategy Forum on Research Infrastructures (ESFRI) to be financially supported in the long term of 10 to 20 years. The ESS focuses on the development of a comparative and cumulative research process in Europe to outstrip the research based on single-nation data. CESSDA will address the fragmentation of the scientific information space and language, cultural, economic, legal, and institutional barriers to provide and facilitate access of researchers to high quality data.



## PERSONNEL NOTES

*Survey Research reports on the new appointments and promotions of professional staff at academic and not-for-profit survey research organizations, as well as those of the for-profit organizations that are patrons of the newsletter.*

The Center for Survey Research at the Univ. of Virginia is very pleased to welcome **Jim Ellis** into the position of Director of Research. In addition, CSR promoted graduate assistant **Kien Trung Le** to full-time research analyst.

The Office for Survey Research at Michigan State Univ.'s Inst. for Public Policy and Social Research is pleased to announce that **Charles Ballard** has been named the new

Director of the State of the State Survey. **Linda Stork** has accepted the position of Operations Manager and will oversee the phone interviewing facility.

At RTI, the Survey Research Division has been joined by Senior Survey Director **Sara Zuckerbraun**; Research Engineers **David Foster** and **Marc Garcia**; Research Psychologist **Leyla Stambaugh**; Survey Specialists **David Bergeron**, **Heather Best**, **Grant Bettinger**, **Nicole Buchholz**, **Angela DeCuzzi**, **Katy Etzel**, **Tiffany Fambro**, **Elizabeth Gichumbi**, **Sarah Kalsbeek**, **Jeff Lyons**, **Bushra Mahmood**, **Wayne Nelson**, **Dawn Ohse**, **Shelly Parsons**, and **Corrine Telfer-James**; Survey Directors **Toby Moore**, **Karen Buerkle**, and **Tiffany King**; Research Epidemiologist **Sharon Campolucci**; Survey Methodologists **Sarah Cook**, **Patty LeBaron**, and **Andy Peytchev**; and Administrative Assistant **Gloria Shores**. RTI's Research Computing Division welcomes Director of Bioinformatics **Carol Hamilton**; IT QA Specialist **Craig Hollingsworth**; Research Programmers/Analysts **Mia Chiflikyan**, **Sujatha Lakshmikanthan**, **Brandon Peele**, **Nathan Sikes**, and **Jorgen Waldermo**; Technical Support Specialists **Jon Morris** and **Dwight Perry**; Project Administration Specialists **Amanda Flynn** and **Destiney Nettles**; and Senior Administrative Assistant **Melinda Thomas**, as well as Public Health Analyst **Alison Banger** in RTI's Atlanta office. In the Education Studies Division, new appointments include ASP.NET programmer **Kevin Murphy**; Research Education Analysts **Jean Ahn**, **Lisa Caves**, **Elizabeth Glennie**, **Carolyn Ransford**, and **Natasha Janson**; Research Education Scientists **Karen Charles** and **Jane Griffin**; and Research Survey Specialists **Jonathan Paslov** and **Nicole Tate**. Also joining the Education Studies Division are Project Administration Specialist **Pamela Mullins** and Administrative Assistant **Laurie Byers**.



## JOB OPPORTUNITIES

*This section contains listings of employment opportunities in survey research organizations. Listings can be sent to the editors at the address in the newsletter or e-mailed to [survey@srl.uic.edu](mailto:survey@srl.uic.edu). Survey Research does not charge a fee for these postings.*

NORC, a national organization offering innovative solutions in research and technology affiliated with the Univ. of Chicago, is looking for **statisticians**, **survey methodologists**, **survey specialists**, **statistical programmers**, **data managers**, **project directors**, and **social scientists** with advanced training or experience in survey research or survey operations. New staff will be based in our Chicago or Washington, DC, offices. To find out more, please visit [www.norc.org/careers](http://www.norc.org/careers). NORC is an affirmative action, equal opportunity employer that values and actively seeks diversity in the workforce.

The Survey Research Center at the Univ. of Michigan will seek candidates for **survey specialist** and **survey director** positions. Staff members serving in these positions are primarily responsible for management of data collection projects, which includes working with research investigators and other clients to define project and sample design, coordinating all aspects of preproduction and production within Survey Research Operations (SRO), providing regular progress and cost reports, and documenting all procedures. You can watch for postings at the Univ. of Michigan jobs Web site [www.umjobs.org/](http://www.umjobs.org/). To find postings specific to SRC, click on key word search and type in "Survey Research Center." The Univ. of Michigan is an equal opportunity/affirmative action employer.

**Senior Research Fellow** at the Center for Survey Research (CSR), Univ. of Massachusetts Boston. CSR is a full-service, academic survey research organization in its 32<sup>nd</sup> year of operation. We currently have an opening for a social science Ph.D. to join our group of 8 senior staff members and work as a collaborative, interdisciplinary team member. Special consideration will be given to those applicants with particular interest in methodological aspects of survey research (e.g. sampling, question design and evaluation, Web-based surveys, computer-assisted data collection), and/or new analytic techniques (e.g. multilevel statistical analysis, analysis of longitudinal data, nonresponse bias). Applicant must have demonstrated analytic skills and an ability to develop funding for her/his own research interests. Considerable experience with large-scale probability sample survey projects is essential. Competitive calendar-year salary commensurate with experience. Equal Opportunity/Affirmative Action Employer. Application review is ongoing until the position is filled. Send vita to Director, Center for Survey Research, Univ. of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125.



## ANNOUNCEMENT

### GESIS ANNOUNCES NEW JOURNAL

In July 2007, the first issue of the new journal for empirical social research *Methoden, Daten, Analysen (Methods, Data, Analyses)* was published. The focus of the journal is survey research methods, and it contains articles concerning collection, processing, documentation, and analysis of survey data. It follows the two German Social Science Infrastruktur Services (GESIS) publications *ZA-Information* and *ZUMA-News*, which have been discontinued.

The following is a list of publications related to survey research. They are not available from Survey Research nor the Survey Research Laboratory.

- Bautista, R., Callegaro, M., Vera, J. A., & Abundis, F. (2007). Studying nonresponse in Mexican exit polls. *International Journal of Public Opinion Research*, 19, 492–503.
- Belli, R. F., Smith, L. M., Andreski, P. M., & Agrawal, S. (2007). Methodological comparisons between CATI event history calendar and standardized questionnaire instruments. *Public Opinion Quarterly*, 71, 603–22.
- Blumberg, S. J., & Luke, J. V. (2007). Coverage bias in traditional telephone surveys of low-income and young adults. *Public Opinion Quarterly*, 71, 734–49.
- Brick, J., Edwards, W., & Lee, S. (2007). Sampling telephone numbers and adults, interview length, and weighting in The California Health Interview Survey Cell Phone Pilot Study. *Public Opinion Quarterly*, 71, 793–813.
- Brick, J., & Tucker, C. (2007). Mitofsky-Waksberg: Learning from the past. *Public Opinion Quarterly*, 71, 703–16.
- Byrne, C. M., Harrison, J. D., Young, J. M., Selby, W., & Solomon, M. J. (2007). Including the questionnaire with an invitation letter did not improve a telephone survey's response rate. *Journal of Clinical Epidemiology*, 61, 1312–14.
- Casterline, J. B., & El-Zeini, L. O. (2007). The estimation of unwanted fertility. *Demography*, 44, 729–45.
- Clapp, J. D., Holmes, M. R., Reed, M. B., Shillington, A. M., Freisthler, B., & Lange, J. E. (2007). Measuring college students' alcohol consumption in natural drinking environments. *Evaluation Review*, 31, 469–89.
- Dean, E., Caspar, R., McAvinchey, G., Reed, L., & Quiroz, R. (2007). Developing a low-cost technique for parallel cross-cultural instrument development: The Question Appraisal System (QAS-04). *International Journal of Social Research Methodology*, 10, 227–41.
- Ehlen, J., & Ehlen, P. (2007). Cellular-only substitution in the United States as lifestyle adoption: Implications for telephone survey coverage. *Public Opinion Quarterly*, 71, 717–33.
- Farris, C., & Holtzworth-Munroe, A. (2007). Representative sampling of maritally violent and nonviolent couples. *Journal of Interpersonal Violence*, 22, 1613–22.
- Fiore, A., Baxter, L. C., Bell, B. P., Hershov, R., Passaro, D., Twiddy, S., et al. (2007). Hepatitis A 2004 vaccination in children: Methods and findings of a survey in two states. *American Journal of Preventive Medicine*, 33, 346–52.
- Fullerton, A. S., Dixon, J., & Borch, C. (2007). Bringing registration into models of vote overreporting. *Public Opinion Quarterly*, 71, 649–60.
- Göb, R., McCollin, C., & Ramalhoto, M. F. (2007). Ordinal methodology in the analysis of Likert scales. *Quality & Quantity*, 41, 601–26.
- Harrington, T., & Newman, E. (2007). The psychometric utility of two self-report measures of PTSD among women substance users. *Addictive Behaviors*, 32, 2788–98.
- Hayashi, T. (2007). The possibility of mixed-mode surveys in sociological studies. *International Journal of Japanese Sociology*, 16, 51–63.
- Inaba, A. (2007). Problems relating to declining response rates to social survey research in Japan: Trends after 2000. *International Journal of Japanese Sociology*, 16, 10–22.
- Kampen, J. K. (2007). The impact of survey methodology and context on central tendency, nonresponse, and associations of subjective indicators of government performance. *Quality & Quantity*, 41, 793–813.
- Keeter, S., Kennedy, C., Clark, A., Tompson, T., & Mokrzycki, M. (2007). What's missing from the national landline RDD surveys?: The impact of the growing cell-only population. *Public Opinion Quarterly*, 71, 772–92.
- Kelley-Baker, T., Voas, R. B., Johnson, M. B., Debra, C., Furr-Holden, M., & Compton, C. (2007). Multimethod measurement of high-risk drinking locations. *Evaluation Review*, 31, 490–507.
- Kennedy, C. (2007). Evaluating the effects of screening for telephone service in dual frame RDD surveys. *Public Opinion Quarterly*, 71, 750–71.
- Lavrakas, P., Shuttles, C., Steeh, C., & Fienberg, H. (2007). The state of surveying cell phone numbers in the United States: 2007 and beyond. *Public Opinion Quarterly*, 71, 840–54.
- Link, M. W., Battaglia, M. P., Frankel, M. R., Osborn, L., & Mokdad, A. H. (2007). Reaching the U.S. cell phone generation: Comparison of cell phone survey results with an ongoing landline telephone survey. *Public Opinion Quarterly*, 71, 814–39.
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- Lorant, V., Demarest, S., Miermans, P.-J., & van Oyen, H. (2007). Survey error in measuring socioeconomic risk factors of health status: A comparison of a survey and a census. *International Journal of Epidemiology*, 36, 1292–99.
- Maarten, J. L. F. C., van den Hout, A., van der Heijden, P. G. M., & Böckenholt, U. (2007). Log-linear randomized-re-

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- Westat

- sponse models taking self-protective response behavior into account. *Sociological Methods & Research*, 36, 266–82.
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- Messeri, P. A., Allen, J. A., Mowery, P. D., Healton, C. G., Haviland, M. L., Gable, J. M., et al. (2007). Do tobacco countermarketing campaigns increase adolescent underreporting of smoking? *Addictive Behaviors*, 32, 1532–36.
- Mitchell, K., Wellings, K., Elam, G., Erens, B., Fenton, K., & Johnson, A. (2007). How can we facilitate reliable reporting in surveys of sexual behaviour? Evidence from qualitative research. *Culture, Health & Sexuality*, 9, 519–31.
- Olsen, J. A., Bloch, D. A., & Bloch, G. J. (2007). Controlling for occasion-specific effects when assessing the test-retest reliability of self-report health questionnaires. *Quality of Life Research*, 16, 1399–1405.
- Porter, S. R., & Whitcomb, M. E. (2007). Mixed-mode contacts in Web surveys. *Public Opinion Quarterly*, 71, 635–48.
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- Reimer, M., & Matthes, B. (2007). Collecting event histories with TrueTales: Techniques to improve autobiographical recall problems in standardized interviews. *Quality & Quantity*, 41, 711–35.
- Reinhard, M. J., Hinkin, C. H., Barclay, T. R., Levine, A. J., Marion, S., Castellon, S. A., et al. (2007). Discrepancies between self-report and objective measures for stimulant drug use in HIV: Cognitive, medication adherence, and psychological correlates. *Addictive Behaviors*, 32, 2727–36.
- Rosenberg, H., & Mazzola, J. (2007). Relationships among self-report assessments of craving in binge-drinking university students. *Addictive Behaviors*, 32, 2811–18.
- Rueda, M., Martínez-Puertas, S., Martínez-Puertas, H., & Arcos, A. (2007). Calibration methods for estimating quantiles. *Metrika*, 66, 355–71.
- Soloff, C., Sanson, A., Wake, M., & Harrison, L. (2007). Enhancing longitudinal studies by linkage to national databases: Growing up in Australia, the longitudinal study of Australian children. *International Journal of Social Research Methodology*, 10, 349–63.
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- Talen, E., & Shah, S. (2007). Neighborhood evaluation using GIS: An exploratory study. *Environment & Behavior*, 39, 583–615.
- VanGeest, J. B., Johnson, T. P., & Welch, V. L. (2007). Methodologies for improving response rates in surveys of physicians. *Evaluation & the Health Professions*, 30, 303–21.

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Waters, E., Davis, E., & Mehmet-Radji, O. (2007). Population surveys of children's health and wellbeing: Parental views on data collection content and methods. *International Journal of Social Research Methodology*, 10, 167-80.

Webster, J. M., Staton-Tindall, M., Duvall, J. L., Garrity, T. F., & Leukefeld, C. G. (2007). Measuring employment among substance-using offenders. *Substance Use & Misuse*, 42, 1187-1207.

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