National Cancer Institute

Surveillance Research Program Bulletin

Web sites: *http://surveillance.cancer.gov;*
http://seer.cancer.gov

The Surveillance Research Program (SRP) directs the collection and analysis of data to answer key questions about cancer incidence, morbidity, mortality, and cancer-related health status in diverse regions and populations in the United States.

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Spring 2010

Highlights

SRP Reorganizes Into Four New Branches

SRP's reorganization into four new branches was approved in March 2010. The cumulative effects of senior staff retirements and transfers to careers outside SRP, coupled with a recent flurry of new hires, stimulated a carefully planned assessment of SRP's structure to engage experienced senior staff in scientific administrative leadership and to focus on future recruitment. In addition to the Office of the Associate Director, which remains mostly intact, the new structure has four highly collaborative and integrated branches: Statistical Methodology and Applications Branch (Eric J. [Rocky] Feuer, Ph.D., Chief), Surveillance Systems Branch (David Stinchcomb, M.A., M.S., Chief), Data Analysis and Interpretation Branch (Kathleen Cronin, Ph.D., Acting Chief), and Data Modeling Branch (Angela Mariotto, Ph.D., Acting Chief).

Join in the *Cancer.gov* Evolution

In an effort to improve its ability to reach diverse audiences with the latest, evidence-based cancer information, NCI recently announced an "evolution" of its flagship resource, *Cancer.gov*. Rather than a one-time redesign, the evolutionary process will implement changes and enhancements in phases. This effort provides an unprecedented opportunity to involve numerous stakeholders: advocates, NCI-designated Cancer Centers, NCI-supported programs, extramural researchers, health care professionals, the public, and others.

NCI welcomed ideas on improving and enhancing *Cancer.gov* through an online forum that was open until March 31, 2010, and allowed individuals and organizations to submit suggestions and vote and comment on those of others. After March 31, a new section on *Cancer.gov* was created to provide updates on the site's evolution.

SRP Releases New Version of Hematopoietic Database and Manual

Version 1.5 of the Hematopoietic Database and the *2010 Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* are available now on the SEER Web site (*http://seer.cancer.gov*). Designed for the data collector and those who qualitatively review hematopoietic and lymphoid neoplasms, the database and manual include rules for reportability, primary site coding, and histology coding, as well as basic disease information on progression and treatment. The tool is used throughout North America and was created by a working group composed of cancer registrars, specialty physicians, and representatives from several organizations. To download the new versions or view a complete list of included corrections, visit *http://seer.cancer.gov/tools/heme/index.html*.

Training and Meeting Opportunities

NCRA 36th Annual Educational Conference

The National Cancer Registrars Association (NCRA) will hold its 36th Annual Educational Conference from April 21–23, 2010, at the Palm Springs Convention Center in Palm Springs, CA. It will be preceded by preconference workshops on April 19–20. This year's conference agenda includes large-group presentations, breakout sessions, intensive training workshops, and exhibitions. Registration fees vary from $225 to $695, depending on member status, date of registration, and days attended. For additional information and to register, visit *http://www.ncra-usa.org*.

NAACCR 2010 Annual Conference

The North American Association of Central Cancer Registries (NAACCR) will hold its 2010 Annual Conference from June 19–26, 2010, in Québec City, Canada. This year's conference, titled "Renewed Collaboration: A Modern Paradigm for Cancer Surveillance," will address the role, opportunities, and challenges of collaboration and how it can improve relationships, lead to joint projects, and foster learning. Full conference registration fees range from $475 to $650, depending on member status and date of registration. For additional information and to register, visit *http://www.naaccr.org/annualconference*.

APHA Annual Meeting and Exposition

The American Public Health Association (APHA) will hold its 138th Annual Meeting and Exposition from November 6–10, 2010, in Denver, CO. This year's theme will be "Social Justice: Public Health Imperative." For additional information, visit *http://www.apha.org/meetings*.

Principles of Oncology Training Program

A. Fritz and Associates will hold a concentrated 5-day training program in cancer registry operations and procedures entitled, "Principles of Oncology for Cancer Registry Professionals." The program will emphasize accurate data collection methods and will include extensive, site-specific, hands-on case coding, abstracting, and staging sessions using practice cases. The course is endorsed by the NCRA and NAACCR and recommended by NCI's Surveillance, Epidemiology, and End Results (SEER) Program. It will be held November 8–12, 2010, in Reno, NV. The registration fee is $995, and all workshop materials will be provided. For additional course information, prerequisites, and registration materials, visit *http://www.afritz.org/pocr.htm*.

CTR Exam Preparation Workshop

A. Fritz and Associates will hold a concentrated 3-day review of areas that may be tested on the Certified Tumor Registrar (CTR) exam. The program will include classroom presentations and discussion, opportunities to ask questions, case exercises, and a practice examination with immediate feedback. It will be held August 12–14, 2010, in Reno, NV. The registration fee is $375. For additional course information and to register, visit *http://www.afritz.org/CTRws.htm*.

SRP News

New Hires

Hyunsoon Cho, Ph.D., joined SRP in February 2010 as a Mathematical Statistician in the Data Modeling Branch. Dr. Cho received her Ph.D. in biostatistics in 2009 from the University of North Carolina at Chapel Hill (UNC), after completing her dissertation on Bayesian influence diagnostic methods for parametric regression models. Her research areas included Bayesian modeling and diagnostic methods, categorical data analysis, survival analysis, and clinical trials. While pursuing her doctorate, she worked at the UNC Biometric Consulting Laboratory, where she conducted multidisciplinary collaborations. At SRP, Dr. Cho will work on improving the CANSURV software and on developing and applying statistical models such as Joinpoint and cure rate models for cancer data. Outside of the office, she enjoys traveling and taking care of her newborn son, Daniel.

Hyunsoon Cho

Nadia Howlader, M.S., returned to SRP in February 2010 as a Mathematical Statistician in the Data Analysis and Interpretation Branch, after a 1-year stint at the Georgetown University Medical Center. Ms. Howlader received her B.S. in mathematics and statistics from the University of Winnipeg and her M.S. in biostatistics from the University of Washington. Her previous experience includes 1 year working on an HIV clinical trial in Kenya, and 4 years at the Fred Hutchinson Cancer Research Center, after which she initially joined SRP. At SRP, Ms. Howlader will work on a multiple imputation project for missing data, the *Cancer Statistics Review*, and a study of hormone replacement therapy use by various racial/ethnic groups. Outside of the office, she enjoys watching movies, taking walks, reading, and traveling.

Nadia Howlader

Shunpu Zhang, Ph.D., joined SRP in February 2010 as a Mathematical Statistician in the Statistical Methodology and Applications Branch. Dr. Zhang received his Ph.D. in statistics from the University of Alberta. Since 1997, he has been an assistant and associate professor of statistics at the University of Alaska-Fairbanks and an associate professor and full professor of statistics at the University of Nebraska-Lincoln. His research interests included general statistical methodology, bioinformatics, and statistical methods related to influenza virus genotyping. At SRP, Dr. Zhang will provide expertise in bioinformatics and statistical issues in the analysis of microarrays, especially issues relating to the SEER Residual Tissue Repository. He also will work with other SRP statisticians to develop statistical research opportunities in genetic epidemiology and methods for the analysis and presentation of national cancer statistics. Outside of the office, Dr. Zhang enjoys fishing, traveling, and spending time with his 7-year-old son.

Shunpu Zhang

Other SRP Staff News

Kristine Crane Transitions to New Position with OCE

On February 26, Health Communications Fellow **Kristine Crane, M.A.,** transitioned to a new position with the Office of Public Information and Resource Management (OPIRM) in NCI's Office of Communications and Education (OCE). While at SRP, Ms. Crane wrote and edited for SRP publications, fact sheets, and other projects. Her new role will involve writing for the *NCI Cancer Bulletin* and video production and editing for its Web publication. "I came [to SRP] to learn about the telescopic view of cancer, and I got that," said

Kristine Crane

Ms. Crane. "The most interesting (if sobering) statistic that I came across was that the number of years lost to breast cancer, presuming an average lifespan of 80 for women in the United States, is 774,000. I appreciate having access to all kinds of information like that, and knowing the dedicated souls behind it."

SRP Public Health Service Members Participate in Haiti Relief Efforts

In response to the January 12 earthquake in Haiti, U.S. Public Health Service (PHS) Commissioned Corps officers **Captain Sean Altekruse** and **Lieutenant Commander Antoinette Percy-Laurry** were deployed to participate in relief activities. From January 26 to February 12, Capt. Altekruse served with the Incident Response Command Team at the U.S. Embassy in Port-au-Prince, where he wrote mission updates and managed the accountability of PHS personnel in the theatre of operations. He also helped deliver supplies to field hospitals, warehouses, and mortuaries, and briefly boarded the hospital ship USNS Comfort in support of PHS efforts to discharge patients to Haitian hospitals.

From February 25 to March 10, LCDR Percy-Laurry served at the U.S. Department of Health and Human Services (HHS) Emergency Management Group (EMG) planning section and reported to the Secretary's Operations Center (SOC) at HHS headquarters in Washington, DC. The EMG controls all incident-related activities, and

Capt. Sean Altekruse (second from left) and PHS colleagues aboard the USNS Comfort

the SOC is the focal point for collection and distribution of public health and medical information on behalf of the U.S. Government. LCDR Percy-Laurry managed the accountability of HHS personnel involved in the Haiti mission, updated the Incident Coordination Plan daily, and reviewed documents relating to patient movement and return from the United States to Haiti.

Angela Mariotto Hosts SRP Holiday Party

On January 6, **Angela Mariotto** hosted a Potluck Holiday Celebration at her home in Bethesda. SRP staff gathered at her home that afternoon to toast the New Year with food and games.

Li Zhu (l.) and Lynn Ries (r.) chat at the holiday celebration

SEER Registry Staff Profile

Kevin C. Ward, Ph.D., PI, Metropolitan Atlanta and Rural Georgia Registry

Kevin C. Ward

Kevin C. Ward, M.P.H., Ph.D., C.T.R., is the Principal Investigator (PI) at the Metropolitan Atlanta and Rural Georgia Registry, and Director of the Georgia Center for Cancer Statistics (GCCS). He also is a Research Assistant Professor in the Department of Epidemiology at the Emory University Rollins School of Public Health (RSPH) and the Director of a new Data Management and Outcomes Research Core serving population science researchers at Emory's Winship Cancer Institute.

Dr. Ward began his career in engineering, receiving a B.I.E. in 1993 from the Georgia Institute of Technology. He went on to study Epidemiology at RSPH, where he received an M.P.H. in 1998 and a Ph.D. in 2008. In 1997, he joined GCCS, becoming its Deputy Director in 2002 and Director in 2009. Dr. Ward currently receives research funding from a variety of institutions, including NCI, the Centers for Disease Control and Prevention, the Association of Schools of Public Health, and the Georgia Department of Human Resources. Additionally, he belongs to several professional associations and committees and chairs NAACCR's Data Evaluation and Certification Committee.

Dr. Ward currently focuses on three major areas. The first is training, which includes a three-course series for cancer registrars on the principles and practices of cancer registration, surveillance, and control, and how these data can be used. He also serves on the steering committee of the Middle Eastern Cancer Consortium and conducts training throughout the Middle East to help develop cancer registries and enhance the use of data for research purposes.

Secondly, Dr. Ward is involved in an organizational initiative to expand GCCS' research capacity. This initiative includes outreach to researchers throughout the state, expansion of electronic pathology reporting in Georgia, enhancement of the registry's capacity for rapid case ascertainment, and development of a Data Management and Outcomes Research Core at Emory's Winship Cancer Institute, which recently was designated as an NCI Cancer Center.

Finally, Dr. Ward's research aims to explore ways to augment registry data with information from other sources. "The goal is to set up a long-term, sustainable data set that supplements cancer registry data with a whole host of administrative claims data," he explained. These sources of administrative data include Medicare, Medicaid, State Health Benefits, private insurers, and hospital discharge records. The first year of this project involves evaluating the feasibility of each of these linkages. In the second year, the augmented data will be used to evaluate the National Comprehensive Cancer Network's Clinical Practice Guidelines in Oncology.

Dr. Ward enjoys the variety that his position offers. "What excites me about public health is tying health sciences to statistics. That's really what drew me to epidemiology," he said. He also enjoys improving registry operations and efficiency, citing the similar challenges faced by registries and businesses.

When asked about the future of the field, he said, "I'd like to see us grow our capacity to leverage technology for the automatic capture of data. We won't be able to keep up with the demands of data collection if we don't." He believes that the current electronic pathology system is a good example of this, and that the future will see the application of new technologies for data capture from other sources of information, such as electronic medical records. "But in the meantime," he added, "we can leverage existing sources of information, such as claims data."

Selected Recent Publications

Hao Y, Landrine H, Jemal A, et al. Race, neighborhood characteristics, and disparities in chemotherapy for colorectal cancer. J Epidemiol Community Health. 2009 Dec 3. [Epub ahead of print]

Goodman M, Liu L, Ward K, et al. Invasion characteristics of oral tongue cancer: frequency of reporting and effect on survival in a population-based study. Cancer. 2009 Sep 1;115(17):4010-20.

Lund MJ, Eliason MT, Haight AE, et al. Racial/ethnic diversity in children's oncology clinical trials: ten years later. Cancer. 2009;115(16):3808-16.

SEER Registry Staff News

NCCC Changes Name to Cancer Prevention Institute of California

In February 2010, the Northern California Cancer Center (NCCC) changed its name to the Cancer Prevention Institute of California (CPIC). According to **Sally L. Glaser, Ph.D.,** Chief Executive Officer of CPIC and Director of the Northern California SEER Program, "the new name captures our focus on preventing cancer and reducing its burden where it cannot yet be prevented. It also reflects the growing presence of our work throughout California." CPIC's organizational structure, mission, and functions will remain the same. For more information, visit the Institute's new Web site at *http://www.cpic.org*.

Seattle Kicks Off Registry Implementation of CSv2

The start of 2010 marked the start of the nationwide implementation of Collaborative Staging Version 2 (CSv2), an expansion of the data collected by the SEER registries. The Cancer Surveillance System (CSS) of the Fred Hutchinson Cancer Research Center in Seattle, WA, was the first SEER registry to implement this change, which took place on February 16, 2010. CSS combined the change with a switch in its database management systems to SEER*DMS and in its abstracting tool to SEER*Abs. Registry staff prepared for the transition by working with a beta version of SEER*DMS for several months to become familiar with its content and structure. As part of the implementation, cases diagnosed between 2004 and 2009 were converted from CSv1 to CSv2, and CSS

is facing the challenge of consolidating abstracts coded according to CSv1 guidelines from hospital registries with the converted data in the database. CSS will share its experience with the CSv2 Mapping Team as the team develops further implementation guidelines for the registry community. Despite these challenges, registry personnel consider the change a valuable one. "These new data items are relevant for people doing research because of their important clinical implications," said CSS Registry Manager **Mary Potts, C.T.R.** "But," she added, "to continue to expand the dataset to meet the growing demand for information, we need to actively explore methods of electronic data capture to reduce the data collection burden for hospital and central registry staff."

SEER Releases New CSR Data

The *SEER Cancer Statistics Review, 1975-2007* (*CSR*), published by SRP, was released on April 15, 2010. The report is available at *http://seer.cancer.gov/csr/1975_2007/index.html*. Materials posted include:

• *SEER CSR, 1975-2007*
• SEER Data, 1973-2007
• Updated Stat Fact Sheets and Fast Stats
• Delay-Adjusted Incidence Rates for SEER 9 and SEER 13

The updated *Cancer Statistics Review* presents the most recent cancer incidence, survival, prevalence, and lifetime risk statistics. National cancer mortality statistics will be added to the report as soon as they are made available. All material in the *SEER CSR* report is in the public domain and may be reproduced or copied without permission. Citation of this source, however, is appreciated.

The latest SEER data also were released through SEER*Stat.

CISNET Staff Profile
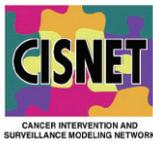
David T. Levy, Ph.D., Pacific Institute for Research and Evaluation

David T. Levy, Ph.D., is a Senior Research Scientist and Program Manager at the Pacific Institute for Research and Evaluation (PIRE) in Calverton, MD. He has conducted public health and health economics research at PIRE since 1995. Dr. Levy also teaches economics at the University of Baltimore's School of Business, as a tenured Associate Professor from 1989–1994 and as a full Professor since 1994. He has received a number of awards for his research, including the University of Baltimore Research Award, which he received four times, and the University of Maryland Board of Regents Research Award, which he received in 2005.

Dr. Levy's research includes the CISNET study, "A Simulation of Tobacco Policy, Smoking, and Lung Cancer," for which he has served as Principal Investigator since 2002. This study has four main goals: (1) to extend the

David T. Levy

previously developed SimSmoke model to estimate and predict smoking-attributable deaths, (2) to determine the impact of tobacco control interventions on smoking rates and mortality, (3) to examine the effect of new tobacco products and non-tobacco products on smoking rates and mortality, and (4) to examine the methods used to project lung cancer deaths and the sensitivity of these estimates. "These goals are very closely related; they all revolve around the development of the model as a guide to public policy," he said.

Dr. Levy began working on the SimSmoke model in the late 1990s, under a contract from the Substance Abuse and Mental Health Services Administration (SAMHSA). The model originally took into account three types of tobacco policies—cigarette taxes, smokefree laws, and youth access laws—and considered them comprehensively in a United States context. Through additional funding from the World Health Organization, the Bloomberg Foundation, and many other sources, SimSmoke was

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expanded to consider particular states such as Kentucky, and additional policies such as cessation treatment.

"[The CISNET grant] has allowed us to further develop and refine the model so that it can be applied to different states and countries," Dr. Levy said. "It also has allowed us to focus on lung cancer, and through that receive feedback from other CISNET modelers."

Seeking and incorporating the ideas of others is nothing new for Dr. Levy. As an economist, he has experience modeling social systems, which he draws on in this research. "But from the beginning," he said, "we have always used expert panels with epidemiologists, psychologists, sociologists, biostatisticians, and other disciplines, because this is such a multidisciplinary model. Through CISNET, I've been fortunate enough to work with experts in modeling complex phenomena."

And, that work has been successful. "The model seems to work well for many different countries and states. It's also helped people to understand the interrelationships between the variables," said Dr. Levy. However, SimSmoke must be adapted for each country, depending on its existing legislation and population characteristics. "For example, clean indoor air laws are likely to have less effect in agricultural countries because people are more likely to work outdoors," explained Dr. Levy. So far, he has adapted and applied the model to about 30 different countries.

Current and future efforts include working with non-profit organizations to make SimSmoke available to all states and training researchers in other countries to use it. Dr. Levy also has begun working on obesity policy. "Obesity is a more complicated issue," he noted, "but the understanding of how policies work is very similar."

Selected Recent Publications

Levy DT, Cho S, Kim Y-M, et al. An evaluation of the impact of tobacco control policies in Korea using the SimSmoke Model: the unknown success story. Am J Public Health (in press).

Levy DT, Mabry PL, Graham AL, et al. Reaching Healthy People 2010 by 2013: a SimSmoke simulation. Am J Prev Med. 2010 Mar;38(3 Suppl):S373-81.

Levy DT, Graham AL, Mabry PL, et al. Modeling the impact of smoking-cessation treatment policies on quit rates. Am J Prev Med. 2010 Mar;38(3 Suppl):S364-72.

Levy DT, Hyland A, Higbee C, et al. The role of public policies in reducing smoking prevalence in California: results from the California tobacco policy simulation model. Health Policy. 2007 Jul;82(2):167-85.

Levy DT, Bauer JE, Lee HR. Simulation modeling and tobacco control: creating more robust public health policies. Am J Public Health. 2006 Mar;96(3):494-8. Epub 2006 Jan 31.

CISNET News

CISNET Prostate Collaborative Team Proposes Research To Reconcile Recent Findings on PSA Screening

In March 2009, the *New England Journal of Medicine* published early results of two large randomized trials on the efficacy of PSA screening. One—the European Randomized Study of Screening for Prostate Cancer (ERSPC)—indicated a benefit of screening, while the other—the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial—showed no benefit. The differences in research design and implementation between the studies makes it difficult to compare their results directly, explained **Angela Mariotto, Ph.D.,** but modeling can be used to reconcile these findings.

To this end, the CISNET Prostate Collaborative Team recently proposed using its prostate cancer models to clarify the message on PSA screening efficacy. The team hopes to obtain more detailed data from the trials to use in this study and to feed these data into three models developed independently by the Fred Hutchinson Cancer Research Center, Erasmus MC, and the University of Michigan. Using three different models will enhance the reliability of results and provide a sensitivity analysis on model structures and their underlying assumptions.

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