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 2009

Highlights

NCI Board of Scientific Advisors Reviews SEER and CISNET Progress Reports: Concepts for Renewal Gain Executive Committee Approval

Progress reviews for the Surveillance, Epidemiology, and End Results (SEER) Program and Cancer Intervention and Surveillance Modeling Network (CISNET) were presented to the National Cancer Institute's (NCI) Board of Scientific Advisors (BSA) on November 7, 2008. The BSA provides scientific guidance on issues concerning NCI program policy, current advancements, and the direction of NCI's extramural research programs, in addition to examining current extramural initiatives. The November BSA review of SEER was in preparation for developing a proposal for another 7 years of funding. The SEER presentation included a brief general update by Brenda Edwards, Ph.D., who was joined by SEER Principal Investigators (PIs) Sally Glaser, Ph.D., of the Northern California Cancer Center and Dennis Deapen, Dr.P.H., of the University of Southern California, who provided specific information on the contributions of the SEER Program to progress against cancer.



A CISNET progress report also was presented at the November BSA meeting by Rocky Feuer, Ph.D., and several CISNET PIs: Jeanne Mandelblatt, M.D., M.P.H., of Georgetown University, Anne Zauber, Ph.D., of Memorial Sloan-Kettering Cancer Center, and Ruth Etzioni, Ph.D., of the Fred Hutchinson Cancer Research Center. Two rounds of CISNET grants have been funded since 2000; this renewal will initiate a

third round, pending BSA approval.





The Board members were very interested in the progress reports, and their comments and suggestions helped to strengthen both the SEER and CISNET concepts before being submitted to the NCI Executive Committee. The Executive Committee consists of the NCI Director and NCI Center, Division, and Administrative Directors, who provide scientific and financial management for the Institute and review all proposals for development or continuation of major scientific programs. At its January 13, 2009, meeting, the Executive Committee approved both the renewal concept for CISNET and the recompetition concept for SEER.

GIS and Health Information

During the meeting of the Centers for Disease Control and Prevention's National Environmental Public Health Tracking Conference in Washington, DC, on February 25, 2009, Denise Riedel Lewis, Ph.D., gave a talk titled "GIS and Health Information: Improving Cancer Surveillance and Control." The talk was designed to provide an update on a Geographic Information Systems (GIS) workshop that SRP sponsored with the National Library of Medicine in 2005, "The Crossroads of GIS and Health Information: Moving Ahead To Improve Cancer Control." This update for a targeted audience of public health professionals tasked with health outcome tracking and visualizations was a chance to showcase some of the work SRP has achieved in the years since the 2005 workshop and assist others with finding tools and resources to meet their needs.

SRP Fellows Attend 2008 APHA Meeting

Former Cancer Research Training Award

(CRTA) Fellow Leyda Su Ham, D.O., M.P.H., M.B.A., and current CRTA fellows Katrina Mackrain, M.P.H.,



and Lawrence Hwang, M.P.H., attended the 136th annual American Public Health Association (APHA) Meeting and Exposition in San Diego, CA, October 25–29, 2008. The APHA annual meeting is the oldest and largest global gathering of public health professionals, attracting close to 13,000 national and international physicians, administrators, nurses, educators, researchers, epidemiologists, and related health specialists each year. The conference addressed current health science, policy, and practice issues with leading experts, researchers, and practitioners presenting at nearly 1,000 sessions on issues such as health reform and reproductive rights. Themed "Public Health Without Borders," the meeting examined transnational public health through discussions about refugee health, water and land rights, and pollution management across borders. The conference included opening remarks by Sir Michael Marmot, M.B.B.S., M.P.H., Ph.D., F.R.C.P., F.F.P.H.M., F.Med.Sci., director of the International Institute for Society and Health, and closed with a panel of former surgeons general Richard H. Carmona, M.D., M.P.H., F.A.C.S., David Satcher, M.D., Ph.D., and M. Joycelyn Elders, M.D. The next APHA meeting will be held in Philadelphia and will address current water issues, with the theme "Water and Public Health: The 21st Century Challenge."

CRTA Alum Presents at APHA

On October 26, 2008, Dr. Leyda Su Ham, a CRTA fellow at SRP during 2007–2008, presented at the APHA 136th Annual Meeting and Exposition. Utilizing data on 151,284 colorectal cancer (CRC) cases diagnosed in 1992–2002 from the 13 NCI SEER registries, Dr. Su Ham studied differences in stage-specific survival rates for CRC among Asian subgroups by census tract and education. Regarding the project, Dr. Su Ham stated, "I appreciate the support and mentorship I received at SRP, which contributed to an amazing and unforgettable learning experience."

SEER Managers and PI Meetings

The 2008 SEER Program Managers and Principal Investigators (PI) Meetings were held November 12–14, 2008, at the Neuroscience Building located at 6001 Executive Boulevard, Rockville, MD. Individuals from NCI's Division of Cancer Control and Population Sciences (DCCPS) and SEER's 18 cancer registries discussed issues in cancer surveillance. SEER leadership organized four visioning groups to address challenges in pivotal areas, including registry operation, core data, informatics, and data use.

The SEER Core Data Visioning Group, led by Dr. Dennis Deapen, provided recommendations for SEER registries to fulfill their mission of producing high-quality populationbased incidence and overall survival/mortality data in addition to providing data for epidemiological research. One major challenge facing SEER registries is the numerous variables available and the decision process in eliminating excessive variables. Another concern among SEER constituents is the length of time from data collection to release of incidence rates, mortality rates, survival rates, and case records for research, although SEER is the timeliest of the national systems. Currently, incidence and mortality data are released 28 months after the calendar year of collection. Cost/benefit considerations encourage the release of data a year earlier than is scheduled currently.

The SEER Data Use Visioning Group discussed increasing SEER visibility through marketing, collaborative research, and strategic partnerships, and by creating new domains for using SEER resources. This goal could be achieved by recruiting professional communications consultants to disseminate information on SEER's value to the community and ensuring the circulation of SEER data, statistics, and research findings to all relevant stakeholders.

Cancer information submitted to the Utah Cancer Registry was evaluated for completeness and timeliness by the SEER Informatics Visioning Group. The completeness analysis included the examination of 40 fields within 203,325 records for data collected from 1973–2008. The fields were from four major areas, including demographics, tumor, treatment, and followup. The percentages of valid, invalid, and unknown data were measured. It was reported that the majority of cancer data available contained less than 1 percent of unknown information. In addition, the primary site and SEER Summary Stage percent unknown remained consistent regardless of the reporting source.

Timeliness of the coding of core Utah Department of Health variables was measured in increments of less than 1 month, 1–4 months, 4–6 months, 6–12 months, 1–2 years, 3–5 years, and more than 5 years. It was reported that, for timeliness, the majority of fields' scores were consistently higher than 95 percent for all points in time. Recommendations made by the SEER Informatics Visioning Group included the submission of data to health departments 5 months prior to the current protocol and an earlier evaluation of diagnosis data.

For the first time in the 30+ years of the SEER Program, total program costs were tracked in a continuous and systematic fashion. The SEER Cost Tracking System Visioning Group determined the total cost of operating SEER's Central Cancer Registries. Information derived from this evaluation will facilitate more informed planning and budgetary decisions, in addition to identifying operating deficiencies and other areas needing improvement.

Funding Opportunities

Program Announcement: Decision Making in Cancer

The Program Announcement (PA) Decision Making in Cancer: Single-Event Decisions (R01, R21) invites applications for research projects that will enhance understanding of human decisionmaking processes so that individuals can make more informed and satisfying choices regarding their health.

Further details can be found at: PA-08-063 (R01): http://grants.nih.gov/grants/guide/ pa-files/PA-08-063.html PA-08-064 (R21): http://grants.nih.gov/grants/guide/ pa-files/PA-08-064.html

Employment Opportunities

Mathematical Statisticians

SRP has several openings for Mathematical Statisticians. Statisticians within SRP work with population-based data on cancer incidence, mortality, survival, and prevalence and study the data's relationship to geography, risk factors, screening, treatment, and socioeconomic factors. Examples include: (1) using state-of-the-art methods to ensure that cancer data are accurate and timely and to detect outliers and understand their source (using methods such as spatial-temporal scan statistics and data-mining techniques), (2) developing and evaluating new cancer and cancer-related progress measures and methods for the analysis and presentation of national cancer statistics (e.g., survival cure models, change-point models, back-calculation methods, small area estimation), (3) analysis and simulation modeling to better understand and project trends in cancer data, and (4) identifying and developing funding opportunities for the outside research community to advance methodology in population-based cancer research and managing the resulting grants and contracts. The existing program is expanding its scope, and exciting opportunities are available that integrate diverse areas such as spatial statistics/GIS, population genetics, survival modeling, demography, survey methods, mixed models, simulation modeling, data mining, program evaluation, and outcomes research. Applicants with masters or doctoral degrees in statistics, biostatistics, or a related area with strong academic backgrounds, training, and experience are being sought.

Contact: Eric J. (Rocky) Feuer, Ph.D., Chief, Statistical Research and Applications Branch, *rf41u@nih.gov*

Quantitative Demographer

NCI, located within the National Institutes of Health (NIH), Department of Health and Human Services (DHHS), is inviting applications for a position within SRP. The position includes responsibility for scientific program management of extramural grants and contracts. In addition, the position encompasses several areas of responsibility that entail use of analytic skill: (1) developing new approaches and statistical tools (e.g., custom life tables by race, socioeconomic status, or geographic region) for the presentation and estimation of statistics that contribute to the understanding and interpretation of cancer data; (2) organizing and managing collaborative analyses of SEER data and the rich data sets resulting from database linkages such as SEER and geocoded socioeconomic and other demographic information (e.g., the National Longitudinal Mortality Study); and (3) coordinating a research grant program to answer key questions about demographic patterns in cancer rates, risk factors (including genetic), outcomes, and cancer-related health status in diverse populations of the United States.

There are openings at several levels. Excellent communication and interpersonal skills are essential. Salary will be commensurate with experience. U.S. citizenship is required for federal positions.

Contact: Dave Stinchcomb, Chief, Cancer Statistics Branch, *stinchcd@mail.nih.gov*

Postdoctoral and Sabbatical Positions

SRP invites applications from qualified candidates in the area of cancer surveillance research. The positions range from summer-only to 1-year appointments. Successful candidates will come into contact with scientists and public health professionals representing a variety of research disciplines. Mechanisms include the Cancer Research Training Award (CRTA) and the Intergovernmental Personnel Act (IPA) sabbatical position.

Contact: Eric J. (Rocky) Feuer, Ph.D., Chief, Statistical Research and Applications Branch, *rf41u@nih.gov*

Training and Meeting Opportunities

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 include extensive, site-specific, hands-on case coding, abstracting, and staging sessions using practice cases that are representative of the many situations registrars may face. The course is endorsed by the National Cancer Registrars Association (NCRA) and North American Association of Central Cancer Registries (NAACCR) and recommended by NCI's SEER Program. It will be held November 16–20, 2009, in Reno, NV. The registration fee is \$949, 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 preparation workshop for the Certified Tumor Registrar (CTR) Examination entitled, "CTR Exam Preparation Workshop." The workshop is designed to cover the revised 2009 content of the examination, with an emphasis on areas that are not usually covered in state meetings or other short CTR examination preparation workshops. The course will be held August 13–15, 2009, in Reno, NV. The registration fee is \$375, and participants are required to bring their own reference materials to the workshop. For additional course information, prerequisites, and registration materials, visit *http://www.afritz.org/CTRws.htm*.

SRP Staff News

SRAB New Hires



Michelle Dunn

Michelle Dunn, Ph.D., joined SRP in February 2009 as a Mathematical Statistician in the Statistical Research Applications Branch (SRAB). In exchange for a full scholarship to Harvard University, where she obtained an A.B. in Applied Mathematics, Dr. Dunn made a 4-year post-

graduation commitment to the U.S. Department of Defense (DoD), where she worked as a civilian statistician. While at DoD, she conducted data analysis and developed algorithms and software. At her request, Dr. Dunn was granted a 1-year sabbatical from DoD to pursue a master's degree in Statistics at Carnegie Mellon University (CMU), which she obtained in 1995. Her graduate experience was so positive that, following her commitment to DoD, Dr. Dunn returned to CMU, where she completed a Ph.D. in Statistics with an emphasis in Bayesian methods. After completing her Ph.D., she contracted with the medical devices group at the U.S. Food and Drug Administration, where she worked on Bayesian analysis of bi-arm studies, in which the differences of two variables are examined when information is known on each variable prior to the analysis. At SRAB, Dr. Dunn will be responsible for scientific aspects of grants, including responding to information requests and reviewing progress reports and summary statements. She also will be the liaison for prospective grantees, and will assist in the application process and in recruiting top researchers to the field of cancer study. Outside of the office, Dr. Dunn enjoys traveling, cooking, raising her twin daughters, and remodeling her home.

Minjung Lee, Ph.D., joined SRP in September 2008 in a postdoctoral position in SRAB. Dr. Lee obtained her Ph.D. in Statistics from the University of Wisconsin-Madison in August 2008. She also holds a B.S. in Statistics from Pusan National University and a master's degree



University and a master's degree Minjung Lee in Statistics from Seoul National University. Her

research interest lies in competing risk analysis and survival analysis. At SRAB, she continues to develop competing risk models for colorectal cancer data that will be included in the colorectal cancer survival system. Dr. Lee also will be involved in investigating survival models for the Medicare Health Outcomes Survey (MHOS) project. Dr. Lee enjoys watching movies, listening to music, and reading fiction.

Huann-Sheng Chen, Ph.D.,

joined SRAB as a Mathematical

Statistician. Dr. Chen earned his master's and doctoral degrees in

Statistics from the University of Illinois at Urbana-Champaign and his

bachelor's degree in Mathematics

University. In 1998, he joined

from the National Taiwan



Huann-Sheng Chen

the Department of Mathematical Sciences at Michigan Technological University in Houghton, MI, as an Assistant Professor before becoming an Associate Professor. Dr. Chen's research interests include statistical genetics, survival analysis, biostatistics, and spatial statistics. He has three young children and, in his spare time, enjoys cross-country skiing, jogging, and other outdoor activities.

OAD New Hires



Vero Addi Vero Addi to working with SRP, Ms. Addi worked for the National Museum of the American Indian as a Cultural Arts Participant Coordinator. At SRP, she is working to transition paper media to electronic media and providing administrative support for the division. Outside of the office, Ms. Addi dances and competes in Indian powwows and designs and beads her own regalia. She has three sons.



Diane Barrett joined SRP in January 2009 as an Extramural Support Assistant in the OAD. She came to SRP through DEAS after an 18-year career with Washington Adventist Hospital, where she provided administrative support to the Coordinator of the Medical Surgery Unit. At SRP, her responsibilities include making travel

Diane Barrett

arrangements, processing purchase requests, maintaining the filing system, and scheduling conferences. Outside of work, Ms. Barrett enjoys reading, traveling, bowling, and dancing.

Marsha Reichman Moves to DCCPS OD



Marsha Reichman, Ph.D., started the new year with a move to the DCCPS OD, where she is now on detail as Senior Advisor on Biospecimens and Bioinformatics.

Marsha Reichman

Dr. Reichman joined DCCPS as a Surveillance Research Coordinator in SRP in 2003. Since that time, she

played a leading role in designing and developing SEER*DMS, a data management system for SEER registries, now deployed in eight registries. She also coordinated the SEER Residual Tissue Repository and was Project Officer for a series of contracts examining novel measurements of health disparities. In addition to health disparities, Dr. Reichman was involved in analyses related to data linkage. From July 2006 to December 2007, she served as Acting Branch Chief of the Cancer Statistics Branch, which houses the SEER Program. She directed planning for the "SEER Visioning the Future" meeting in 2008 and was co-chair of the Informatics/Automation working group that was initiated at the meeting. Dr. Reichman also was a member of the Trans-NCI Informatics Summit II and serves on other national committees related to cancer surveillance. Before returning to NCI, Dr. Reichman was Director of Epidemiology and Survey Research at Northrop Grumman Information Technology Health Solutions and Services (formerly ROW Sciences, Inc.). She also was a Senior Staff Fellow in NCI's Division of Cancer Prevention and Control, where she was the PI on an interagency controlled diet study that examined effects of alcohol consumption on estrogen metabolism in premenopausal women.

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Vera Addi joined SRP in September 2008 as an Extramural Support Assistant in the Office of the Associate Director (OAD). Ms. Addi is contracted through the Master Key Contractor System, which provides personnel support for the Division of Extramural

Dr. Reichman holds a Ph.D. in Cell and Molecular Biology from Massachusetts Institute of Technology, an M.A. in Mathematical Statistics from the University of Maryland, and a bachelor's degree in Biology and Mathematics from Barnard College.

SEER Registry News



NAACCR Webinar: Measuring and Minimizing the Disclosure Risk of a Cancer Data Public Use File

The purpose of this NAACCR Webinar was to provide a general description of confidentiality and privacy issues

with respect to the use and disclosure of cancer registry data for research purposes on both the aggregate and individual levels. Topics covered included confidentiality principles and responsibilities applicable to data stewardship, guidelines constructed for the protection of the data, and evaluation methods to determine risk of disclosure. The January 2009 Webinar concluded with a discussion and demonstration of the role of the Record Uniqueness Program in protecting against disclosure.

Recent SEER Publications

- Harper S, Lynch J, Meersman SC, Breen N, Davis WW, Reichman ME. An overview of methods for monitoring social disparities in cancer with an example using trends in lung cancer incidence by area-socioeconomic position and race-ethnicity, 1992-2004. Am J Epidemiol 2008 Apr 15;167(8):889-99. Epub 2008 Mar 15.
- Rollison DE, Howlader N, Smith MT, Strom SS, Merritt WD, Ries LA, Edwards BK, List F. Epidemiology of myelodysplastic syndromes and chronic myeloproliferative disorders in the United States, 2001-2004, using data from the NAACCR and SEER programs. Blood 2008 Jul 1;112(1):45-52. Epub 2008 Apr 28.

CISNET News



New CISNET Brochure Covers History and Progress

The CISNET: Modeling to Guide Public Health Research and Priorities brochure includes a comprehensive

history of CISNET's program, funding, goals, and accomplishments since its implementation in 2000, along with CISNET's current research agenda. In describing CISNET's achievements, the publication provides assurance to CISNET stakeholders that the program continues not only to fulfill its mission successfully but that it



has repeatedly exceeded initial expectations. The publication characterizes future investigative potential for the research community, collaborators, and colleagues that would maintain the consortium of NCI-sponsored investigators who have efficaciously used modeling to improve understanding of the impact of cancer control interventions on population trends in incidence and mortality for breast, colorectal, lung, and prostate cancer.

State-Based Evidence of Breast Cancer Prevalence

Research conducted by Angela Mariotto, Ph.D., of SRAB, in collaboration with Istituto Superiore de Sanita, Italy, will aid state authorities in making more informed decisions regarding public health programming and the allocation of health resources using breast cancer prevalence estimates among women. The increasing

prevalence of breast cancer survivors is the product of advances in breast cancer research, particularly more effective breast cancer screening techniques, reduced toxic effects of treatment, and decreased cancer recurrence. The investigators used the Mortality-Incidence Analysis Model (MIAMOD) to derive incidence and complete

Jeanne Mandelblatt, M.D., M.P.H.,

is the Associate Director of Pop-

ulation Sciences at the Lombardi

Comprehensive Cancer Center and a

Georgetown University Medical

Center. She also is a CISNET PI in

breast cancer. Dr. Mandelblatt was the

member of the Cancer Control Program at the Cancer Center, an affiliate of prevalence estimates and projections. Estimates were validated through comparison with incidence data reported for 39 states and the District of Columbia as provided by cancer registration programs. These estimates are available through the State Cancer Profiles Web site (*http://statecancerprofiles.cancer.gov*). This type of modeling also is being applied to all cancer sites combined.

CISNET Staff Profile



Jeanne Mandelblatt

lead coordinator of the work group that recently completed an analysis for the U.S. Preventive Services Task Force (USPSTF).

Dr. Mandelblatt initially was trained in family medicine and spent a decade working as a provider in the Harlem and East Harlem communities. She holds a Master of Public Health degree in addition to doctoral level training in Cancer Epidemiology and Geriatrics. Dr. Mandelblatt's research is focused primarily on Gero-oncology and Health Services. She initiated research into the cost-effectiveness of interventions based on her clinical work in Harlem, which resulted in several simulation models and policy evaluations of interventions for minority and mature minority women with breast and cervical cancer. Her primary research focus is to evaluate breast cancer incidence and mortality differences among races and the correlation with race-specific trends in obesity.

Several other working groups were examining similar questions, and Dr. Mandelblatt decided to organize a collaborative project with five other CISNET modeling groups. The USPSTF worked with the task force and NCI to summarize the data across all six models. Having six models enhances the strength of the data results and creates plausible simulation models for a large population with lifespan followup. Despite differences in the modeling structures for each group, all gave the same qualitative ranking to the 20 screening strategies that were evaluated. The findings were presented to the USPSTF and used to develop optimal screening guidelines.

Selected CISNET Publications

- Bradley CJ, Yabroff KR, Dahman B, Feuer EJ, Mariotto A, Brown ML. Productivity costs of cancer mortality in the United States: 2000-2020. J Natl Cancer Inst 2008 Dec 17; 100(24):1763-70. Epub 2008 Dec 9.
- Huang L, Pickle LW, Das B. Evaluating spatial methods for investigating global clustering and cluster detection of cancer cases. Stat Med 2008 Nov 10;27(25):5111-42.
- Kim H-J, Yu B, Feuer EJ. Inference in segmented line regression: a simulation study. J Stat Comput Simul 2008;78(11):1087-1103.
- Miglioretti DL, Rutter CM, Bradford SC, Zauber AG, Kessler LG, Feuer EJ, Grossman DC. Improvement in the diagnostic evaluation of a positive fecal occult blood test in an integrated health care organization. Med Care 2008 Sep;46(9 Suppl 1):S91-6.
- Yabroff KR, Mariotto AB, Feuer E, Brown ML. Projections of the costs associated with colorectal cancer care in the United States, 2000-2020. Health Econ 2008 Aug 17(8):947-59.

Network Meeting Recap

A Network for Cancer Control Research Among American Indian and Alaska Native (AI/AN) Populations ("the Network") meeting was held March 25–27, 2009, in Rockville, MD. Attendees were from the fields of medicine, public health, and nursing. This group of Native and non-Native researchers and educators assembles biannually to exchange information on cancer control research and to improve community links to NCI's researchers.

Led by the Mayo Clinic, the AI/AN Leadership Initiative *Cancer Spirit of Eagles* considers the cancer-related health needs of Native American populations across the North

American Continent, AI/AN populations have very high incidence rates for specific cancers and poor survival rates

for most cancers. Through partnerships between tribes, multiple cancer centers, Cancer Information Services, and the American Cancer Society, AI/AN communities will receive assistance to increase community awareness and understanding of cancer, and AI/AN researchers will receive training in cancer control research techniques. In addition, community channels to NCI will continue to be improved.



2009 NAACCR General Election Results



The North American Association of Central Cancer Registries (NAACCR) held its 2009 election in April to select a treasurer and three representatives-atlarge. Seventy-five of the 85 votingeligible NAACCR members voted, an impressive 88 percent response rate. Elected were: Treasurer Karen Knight, M.S. Representative-at-Large Glenn Copeland, M.B.A. Mary Jane King, M.P.H., C.T.R. Gary Levin, B.A., C.T.R. Nan Stroup, Ph.D. (to fill Karen Knight's position for the remainder of her second year)

Section 508 Compliance Tips

Section 508 of the Rehabilitation Act has received considerable attention because of the mandate that federal agencies provide disabled employees and members of the public access to information that is comparable to the access available to nondisabled individuals. Section 508 addresses accessibility for people with visual, motor, and hearing disabilities.

Consider the following suggestions to create Section 508-compliant Word documents:

Structure: Create a clear reading order with a logical hierarchy.

Styles: Use headings for structure and create custom styles to maintain consistency.

Tables: Use tables for data, not layout; tables can be problematic for users of assistive technology if not constructed properly; keep tables simple—no merged cells or multiple header levels. Images: Provide text alternatives for images that convey meaning (e.g., flowcharts or graphs). Use the layout setting "in line with text."

Grouping Images: Group illustrations created from several smaller images. Provide text alternatives for single, grouped objects.

Complex Images (charts, diagrams): Provide a text description of the image in the body of the text or in an appendix. Charts inserted with the "Insert Chart" mechanism do not require alternative text; the data are present.

Thanks to Ginger Carter of IMS, Inc., for this very useful information.

Surveillance Research Program Staff

• Office of the Associate Director (OAD) Telephone: 301-496-8506 Fax: 301-480-4077

Brenda K. Edwards, Ph.D., Associate Director Betsy Flagg, Program Analyst Amy Garson, Program Analyst Terri Harshman, Program Analyst Stephen Meersman, Ph.D., Health Scientist Administrator Lawrence Hwang, M.P.H., CRTA Fellow Katrina Mackrain, M.P.H., CRTA Fellow Judith Swan, M.H.S., Public Health Advisor

• Cancer Statistics Branch (CSB) Telephone: 301-496-8510 Fax: 301-496-9949

David Stinchcomb, M.A.-Geo/M.S.C.S., Chief Peggy Adamo, R.H.I.T., C.T.R., Public Health Analyst Sean Altekruse, D.V.M., M.P.H., Ph.D., Epidemiologist Lois Dickie, C.T.R., Public Health Analyst Milton Eisner, Ph.D., Public Health Statistician Marie-Josephe Horner, M.S.P.H., Epidemiologist Nadia Howlader, M.S., Biostatistician Carol Johnson, C.T.R., Public Health Analyst Carol Kosary, M.A., Mathematical Statistician Denise R. Lewis, Ph.D., M.P.H., Epidemiologist Barry Miller, Dr.P.H., Epidemiologist Antoinette Percy-Laurry, M.S.P.H., Public Health Analyst Lynn Ries, M.S., Health Statistician Jennifer Ruhl, R.H.I.T., C.T.R., Public Health Analyst Zaria Tatalovich, Ph.D., Health Statistician

• Statistical Research and Applications Branch (SRAB) Telephone: 301-435-7739 Fax: 301-480-2046

Eric J. (Rocky) Feuer, Ph.D., Chief Huann-Sheng Chen, Ph.D., Mathematical Statistician Kathy Cronin, Ph.D., Mathematical Statistician Michelle Dunn, Ph.D., Mathematical Statistician Rose Fredua, Program Analyst Lan Huang, Ph.D., Mathematical Statistician Minjung Lee, Ph.D., Mathematical Statistician Angela Mariotto, Ph.D., Mathematical Statistician • Division of Extramural Activities Support (DEAS) Telephone: 301-496-8506 Fax: 301-480-2046

Oluyemisi Akinneye, B.S., DEAS Task Leader

Vera Addi, Extramural Support Assistant Diane Barrett, Extramural Support Assistant Anastasia Nosiri, Extramural Support Assistant Miquel Sample-Jubilee, Extramural Support Assistant

• Administrative Resource Center (ARC) Telephone: 301-451-9470 Fax: 301-435-5071

Mary Kashanchi, Deputy ARC Manager Steve Brown, Purchasing Agent Rhonda Turner, Administrative Technician Donna Wade, Administrative Officer