EGRP Bulletin

Epidemiology and Genetics Research Program

Web Site: http://epi.grants.cancer.gov

The Epidemiology and Genetics Research Program (EGRP), in the National Cancer Institute's (NCI) Division of Cancer Control and Population Sciences (DCCPS), provides research opportunities to increase understanding of cancer etiology and prevention in human populations. EGRP supports epidemiologic research in four areas:

Modifiable Risk Factors—focusing on factors that may be modified to reduce cancer risk, such as diet and nutrition; alcohol; physical activity and energy balance; tobacco; infectious diseases; physical and chemical agents; and medical exposures, including medications and treatments;

Host Susceptibility Factors—focusing on factors that influence personal susceptibility to cancer, such as genetic, epigenetic, immunological, hormonal, and biological pathways; and social, cultural, and racial/ethnic factors;

Methods and Technologies—focusing on methods for epidemiologic data collection, study design and analysis, and development and adaptation of laboratory and technical approaches for large epidemiologic studies; and

Clinical and Translational Epidemiology—focusing on etiologic and genomic factors that influence cancer progression, recurrence, new primary cancers, survival, and other treatment outcomes, and factors associated with cancer development among individuals with underlying diseases and conditions.

Contents

NATIONAL CANCER INSTITUTE

Spring 2009

EGRP Funding Opportunities of Interest

Program Announcements Reissued for Studies of Energy Balance and Cancer

The National Cancer Institute's (NCI) Epidemiology and Genetics Research Program (EGRP) is cosponsoring two reissued Program Announcements (PAs) for Studies of Energy Balance and Cancer. These funding opportunities use the Research Project (R01) and Exploratory/Developmental (R21) grant mechanisms.

The PAs invite grant applications for studies that focus on research to define factors affecting energy balance and to define mechanisms influencing cancer risk, prognosis, and quality of life. Studies may range from new analyses of existing datasets to additional collection of data and biological specimens in ongoing investigations. The knowledge gained is anticipated to provide additional information to better understand the relationships among energy balance, cancer risk, and prognosis.

Examples of the types of research topics and approaches that would be appropriate for these PAs include, but are not limited to:

- Hypothesis-based analyses of stored biological samples (e.g., blood, urine, fat aspirates, or exfoliated cells) from participants in existing studies for assessment of biologic markers that may be related to energy balance measures and cancer risk and prognosis, such as sex-hormone-binding globulin (SHBG), insulin-like growth factors (IGF), lipids, and cytokines linked with repeated measures of diet, physical activity, cardiorespiratory fitness, and anthropometrics;
- Analyses of fat aspirates from participants enrolled in studies to evaluate the environmental and genetic determinants of cancer that may be etiologically associated with body fat distribution patterns and diet and physical activity measures;
- Collection and analyses of biological samples from cancer survivors for linkage with questionnaire data to test hypotheses related to energy balance;
- Collection and hypothesis-based analyses of additional information related to energy balance, such as diet, cardiorespiratory fitness, sedentary behavior, and physical activity, in ongoing cancer therapy trials of adults, children, and/or adolescents to determine if there is a relationship between obesity and long-term survival, or between obesity and quality of life; and
- Collection and hypothesis-based analyses of biological specimens from participants in epidemiologic studies for linkage with questionnaire data on medication use, especially those known to be associated with weight gain, that could be related to energy balance and cancer risk and prognosis.

Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award also will vary. Although the financial plans of the NIH Institutes and Centers provide support for this program, awards pursuant to these PAs are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.

These PAs are cosponsored with the Office of Cancer Survivorship (OCS), which also is in the Division of Cancer Control and Population Sciences (DCCPS), and NCI's Division of Cancer Prevention (DCP).

Scientific inquiries related to EGRP may be directed to Somdat Mahabir, Ph.D., M.P.H., Program Director, Modifiable Risk Factors Branch; e-mail: *mahabir@mail.nih.gov*. Please refer to the PAs for the other scientific contacts.

Access the *NIH Guide for Grants and Contracts:*
PA-09-148 (R01): *http://grants.nih.gov/grants/guide/pa-files/PA-09-148.html*
PA-09-149 (R21): *http://grants.nih.gov/grants/guide/pa-files/PA-09-149.html*

Other Funding Opportunities of Interest

Funding Opportunities Available Through the American Recovery and Reinvestment Act (ARRA) of 2009

The American Recovery and Reinvestment Act of 2009 (ARRA or "Recovery Act") legislation provides an unprecedented level of funding ($8.2 billion in extramural funding) to NIH to help stimulate the United States economy through the support and advancement of scientific research. The ARRA is intended to stimulate the economy, create or retain jobs, and have the potential for making scientific progress in 2 years. NIH expects to:

- Select recently peer reviewed, highly meritorious research grant applications (R01s and others) that can be accomplished in 2 years or less,
- Fund new research applications,
- Accelerate the tempo of ongoing science through targeted supplements to current grants,
- Support new types of activities, such as the NIH Challenge Grant program, that meet the goals of the ARRA, and
- Use other funding mechanisms as appropriate.

Other Funding Opportunities *(continued)*

NIH's Recovery Act implementation plans are evolving rapidly, and more areas and topics may be added. Investigators should be aware that the total number of grants may be significantly higher because individual Institutes and Centers also can fund grants through their own Recovery Act allocations.

Because the application process and requirements may vary for NIH's Recovery Act funding opportunities, please communicate with your assigned NCI Program Director to obtain updated information.

As other opportunities become available, information will be shared via EGRP's listserv (see page 16 to subscribe); however, it also is very important for investigators to regularly check the following NIH and NCI Web pages for new ARRA information.

NIH Web pages

- NIH ARRA Home page: *http://grants.nih.gov/recovery*
- Listing of Web sites for supplements and revisions to active NIH grants: *http://grants.nih.gov/recovery/ic_supp.html*
- Listing of Web sites for Research and Infrastructure "Grand Opportunities" (GO grants): *http://grants.nih.gov/recovery/ic_go.html*

NCI Web pages

- NCI ARRA Home Page: *http://www.cancer.gov/recovery*
- NCI ARRA funding information: *http://www.cancer.gov/researchandfunding/announcements/recoveryact*

NIH Guide for Grants and Contracts Notices

- NOT-OD-09-054, NIH Review Criteria, Scoring System, and Suspension of Appeals: *http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-054.html*

Innovative Molecular Analysis Technologies Program Funding Opportunity Announcements Reissued

NCI's Innovative Molecular Analysis Technologies (IMAT) Program has reissued its Funding Opportunity Announcements (FOAs) for 2009. The IMAT Program (*http://imat.cancer.gov*) is aimed at stimulating and accelerating the development, integration, maturation, and dissemination of the most novel and highly innovative technologies in support of cancer research, detection, and diagnosis. Since 1998, the IMAT Program has accelerated the development of various tools, platforms, and associated methods that have direct relevance to cancer research and, ultimately, to clinical oncological practice.

The IMAT Program consists of the following three related themes:

1. **Innovative Technology Development for Cancer Research**, which emphasizes research projects that are centered on the inception and preliminary development of very early stage, highly innovative but also high-impact technologies for cancer research;
2. **Application and Use of Transformative Emerging Technologies in Cancer Research**, which is designed to support research projects that are centered on emerging, highly transformative technologies ready for initial application or use in a clinical or laboratory setting or in a relevant field of cancer research; and
3. **Innovative and Applied Emerging Technologies in Biospecimen Science,** which is centered on the development and application of novel and potentially transformative technologies to assess, evaluate, and interrogate biospecimens or analytes thereof to maximize their quality and utility in cancer research, with minimal or no detrimental effects on patient or donor health.

Technologies of particular interest that are applicable to basic research in the fields of cancer etiology and epidemiology, including the study and reduction of cancer-related disparities, and that facilitate movement of discoveries made in basic sciences to human populations or clinical and public health settings include:

- Identification and validation of functional or ancestral biomarkers for differential risk susceptibility in large or multiple populations. Preferred attributes include: high degree of specificity, sensitivity, reproducibility, predictability, and cost-efficiency;
- Improved technologies for glycomics, proteomics, epigenetics, haplotyping and genotyping (both nuclear and mitochondrial), pharmacogenomics, and toxicogenomics;
- Improved technologies for high-throughput screening (HTS), noninvasive analysis, or advanced biosensors that can be used in risk assessment in populations;
- Single cell technologies for HTS in selective at-risk cell(s) in exfoliated cells/biopsy samples for epidemiology; and
- Improved technologies for disseminating information—such as risk, practices in clinic, cancer-related health outcomes, and public health settings—to different population groups.

Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award also will vary. Although NCI's financial plans provide support for the IMAT Program, awards pursuant to these FOAs are contingent on the availability of funds. NCI will use the NIH Exploratory/Developmental Phase II Research Grant (R33) award mechanism for RFA-CA-09-007, Application and Use of Transformative

Emerging Technologies in Cancer Research, which runs in parallel with an FOA of identical scientific scope, RFA-CA-09-006, which solicits applications under the NIH Exploratory/Developmental (R21) grant mechanism. RFA-CA-09-008, Innovative Technology Development for Cancer Research, also uses the R21 mechanism.

- **Letters of intent are due** August 30, 2009;
- **Applications are due** September 30, 2009; and
- The **FOAs expire** on October 1, 2009.

For general questions about IMAT, contact EGRP's Mukesh Verma, Ph.D., Chief, Methods and Technologies Branch, e-mail: *vermam@mail.nih.gov*.

Access the *NIH Guide for Grants and Contracts* for details:
RFA-CA-09-007 (R33): *http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-09-007.html*;
RFA-CA-09-006 (R21): *http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-09-006.html*; and
RFA-CA-09-008 (R21): *http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-09-008.html*.

Grantsmanship

NIH Implements Early Stage Investigator Policy

On September 26, 2008, NIH announced a change in its New Investigator policies designed to encourage early transition to independence. New investigators within 10 years of completing their terminal research degree or within 10 years of completing their medical residency will be designated as Early Stage Investigators (ESIs). Traditional NIH Research Project Grant (R01) applications for ESIs will be identified, and the career stage of the applicant will be considered at the time of review and award. As in the past, an application with more than one Principal Investigator (PI) will be identified for consideration by reviewers if all of the listed PIs qualify as ESIs or New Investigators.

To implement this modified policy, all New Investigators must update their eRA Commons profiles to ensure that they are given appropriate consideration for R01 applications for due dates beyond February 2009. New Investigators who do not yet have an eRA Commons account should work through the sponsored research office or its equivalent at their institution to establish an eRA Commons account. Investigators who already have an account should update degree information at *https://commons.era.nih.gov/commons*.

More information on this policy is available on the New and Early Stage Investigator Web site:
http://grants.nih.gov/grants/new_investigators/index.htm.

Answers to Frequently Asked Questions are available at *http://grants.nih.gov/grants/new_investigators/faq.htm*.

Direct inquiries regarding ESI policies to *esinih@od.nih.gov*.

2009 NIH Regional Seminars on Program Funding and Grants Administration

NIH offers two regional seminars each year that focus on topics related to NIH extramural program funding and grants administration. Optional NIH Electronic Research Administration (eRA) computer workshops for Principal Investigators and administrators are offered in conjunction with the 2-day seminar and provide attendees with hands-on experience in using the eRA Commons.

The first 2009 seminar was held April 16–17, 2009, in Atlanta, GA. The second seminar will be held June 25–26, 2009, in Las Vegas, NV. Details on the Regional Seminar in Las Vegas are available at *http://grants.nih.gov/grants/seminar_20090625.htm*.

Access Notice NOT-OD-09-046 in the *NIH Guide for Grants and Contracts* at *http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-046.html*.

DCCPS Requires 8 Weeks' Advance Notice for Submission of Large-Budget Epidemiology Grant Applications

EGRP reminds current and prospective grantees that NCI and NIH require grant applications with requested budgets of $500,000 or more in direct costs in any one year to contact the appropriate program staff member and receive approval before submitting the proposals to NIH's Center for Scientific Review (CSR). *NIH Guide for Grants and Contracts* Notices NOT-CA-02-029 and NOT-OD-02-004 state that approval must be sought 6 weeks prior to submitting such applications. **However, approval for applications assigned to DCCPS, of which EGRP is a part, must be sought at least 8 weeks prior to submission to CSR in order to complete the necessary internal processing.**

Investigators must follow this policy, speak to the appropriate Program Director, and respond to requests for information. If advance notice of the proposed research and budget is not received and approval given by DCCPS, CSR will not accept the application, which will result in a delay in consideration until the next submission deadline. **This policy applies to new, competing continuation, competing supplement, and amended/resubmitted applications.** However, it does not apply to applications submitted in response to Requests for Applications (RFAs) or other funding opportunities with specified budget limits. Investigators also should be aware that an approval given to submit a large-budget application is limited to the cycle for which the proposal is being submitted.

Access the *NIH Guide for Grants and Contracts* for details:

- NOT-CA-02-029 *(http://grants.nih.gov/grants/guide/notice-files/NOT-CA-02-029.html)*; and
- NOT-OD-02-004 *(http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-004.html)*.

NIH Data-Sharing Policy In Effect for Genome-Wide Association Studies

The NIH policy that went into effect in January 2008 for the sharing of data obtained through genome-wide association studies (GWAS) supported or conducted by NIH applies to competing grant applications, proposals for contracts, and NIH intramural research projects that include GWAS.

Refer to the NIH GWAS Web site at *http://grants.nih.gov/grants/gwas* for guidance on implementing the policy, including developing data-sharing plans for applications and proposals. that include GWAS, peer review of GWAS grant applications, submitting data to the NIH GWAS data repository, requesting access to data in the NIH GWAS data repository, oversight of the NIH GWAS initiative, protections for research participants, points to consider for Institutional Review Boards and institutions in their review of data submission plans and institutional certifications, and frequently asked questions and answers.

NIH Revised Policy Issued on Enhancing Public Access to Archived Publications

The NIH Public Access Policy requires that all final peer-reviewed manuscripts resulting from NIH funds be submitted to PubMed Central (PMC, *http://pubmedcentral.nih.gov*) on acceptance for publication. As of May 25, 2008, all NIH applications, proposals, and progress reports must include the PMC reference number or NIH Manuscript Submission reference number when citing a paper that falls under the policy and is authored or co-authored by the investigator, or arose from the investigator's NIH award.

To ensure compliance with the Public Access Policy, NIH Program Officials will check applications, proposals, or progress reports to see if citations of papers that appear to fall under this policy include a PubMed Central Identifier or appropriate alternative. NIH staff will inform Principal Investigators (PIs) via an e-mail if citations appear to be out of compliance and will copy the Institutional Business Official on the e-mail.

PIs will be asked to respond via e-mail to both the Program Official and the Institutional Business Official with confirmation of compliance or an appropriate explanation. Confirmation would be the citation for the paper plus the appropriate identifier as described in *NIH Guide* Notice NOT-OD-08-119. This *NIH Guide* Notice also contains a summary of application instructions pertaining to citations, and details on demonstrating compliance through eRA Commons using the Electronic Streamlined Noncompeting Award Process (eSNAP).

Access the *NIH Guide for Grants and Contracts* Notice NOT-OD-08-119 at *http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-119.html.*

Key Public Access Policy Web pages:

- Home page: *http://publicaccess.nih.gov/index.htm*
- Frequently Asked Questions: *http://publicaccess.nih.gov/FAQ.htm#content*
- Communications and Training: *http://publicaccess.nih.gov/communications.htm*
- *NIH Guide* Notice, NOT-OD-08-033: *http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html*
- *NIH Guide* Notice, NOT-OD-08-119: *http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-119.html*

Visiting Scholars Seminar Series

The EGRP Visiting Scholars Seminar Series brings outstanding scientists in the extramural population sciences community to NCI to share their latest research and facilitates an exchange of ideas on ways to continue moving the science forward. If you are visiting NCI on the day of a seminar, you are welcome to join us.

To obtain a visitor's pass prior to the seminar, contact Leah Sansbury, Ph.D., M.S.P.H., Visiting Scholars Seminar Series Coordinator, and Program Director, Clinical and Translational Epidemiology Branch, tel.: 301-496-9600, e-mail: *sansburl@ mail.nih.gov.*

Refer to the following URL for more information about the series: *http://epi.grants.cancer.gov/visiting/index.html.*

Remaining 2008–2009 Seminar		
Date and Time	**Location**	**Speaker**
June 29, 2009 Noon–1:00 p.m.	Executive Plaza North 6130 Executive Blvd. Conference Room H	**Anna R. Giuliano, Ph.D.** *Chair, Department of Cancer Epidemiology and Genetics* *Program Leader, Risk Assessment, Detection, and Intervention Program, H. Lee Moffitt Cancer Center and Research Institute*

Earlier Presentations

Summaries of the September and October 2008 seminars by Marianne Berwick, Ph.D., M.P.H., and Christine Ambrosone, Ph.D., are available in the Winter 2008/2009 *EGRP Bulletin*, which can be viewed online at *http://epi.grants.cancer.gov/Bulletins/Winter08/visiting.html*.

November 2008

Immaculata DeVivo, Ph.D., M.P.H.

Immaculata DeVivo, Ph.D., M.P.H., Associate Professor in the Department of Medicine at the Harvard Medical School and of Epidemiology at Harvard University's School of Public Health, delivered the third Visiting Scholars Seminar Series presentation on November 3, 2008, titled "Genetic and Environmental Risk Factors for Endometrial Cancer." Endometrial cancer, the fourth most common cancer in women, is a disease in which the roles of both environmental and genetic factors can be studied, especially in relation to excessive exposure to unopposed estrogens. The highest rates of endometrial cancer are seen in North America, and although the disease is more common in Caucasians, African Americans are twice as likely to die from this disease. Dr. DeVivo's overall research goal is to better understand disease risk, mechanisms, and the role of genetic variation on disease risk.

Dr. DeVivo reviewed known risk factors for endometrial cancer, all of which relate to estrogens: age at menarche and menopause, exposure to endogenous and exogenous estrogen, and obesity. She also discussed genetic findings from a nested endometrial cancer case-control study derived from a subcohort of the Nurses' Health Study I. As most of the hereditary components of endometrial cancers likely are the result of low-penetrant susceptibility genes, Dr. DeVivo and colleagues have used a candidate gene approach to study polymorphisms such as the progesterone receptor gene (PR +331), which appears to influence endometrial cancer risk.

Dr. DeVivo collaborates with other investigators in the NCI-sponsored Epidemiology of Endometrial Cancer Consortium (E2C2), which has been pooling covariate and genetic data to evaluate polymorphisms of interest with greater power and proposes to conduct a genome-wide association study of endometrial cancer. Investigators interested in learning more about E2C2 should contact Leah Sansbury, Ph.D., M.S.P.H., at *sansburl@mail.nih.gov*.

December 2008

John Boice, Jr., Sc.D.

John Boice, Jr., Sc.D., Professor in the School of Medicine at Vanderbilt University and Scientific Director at the International Epidemiology Institute (IEI), delivered the fourth Visiting Scholars Seminar Series presentation on December 8, 2008, titled "Genetic Consequences of Cancer Treatments: An International Study of the Children of Cancer Survivors."

Dr. Boice's presentation focused on his research into the risks associated with parental exposure to radiation and genetic susceptibility to cancer. The Genetic Consequences of Cancer

Treatment (GCCT) Study is a large-scale retrospective cohort study that began in 2005 to quantify the extent to which curative cancer treatments, such as radiation and chemotherapy, in cancer survivors up to the age of 35 contribute to adverse reproductive outcomes such as birth defects, stillbirths, and neonatal deaths. In addition, the GCCT is investigating the risk of childhood cancer among the offspring of the participants. Nearly 25,000 children born to 15,000 cancer survivors in Denmark and Finland are being evaluated, including by the analysis of bloods drawn from trio families (survivor, spouse, and children). Comparisons are being made with nearly 100,000 children born to 45,000 siblings of cancer survivors.

Although the GCCT will continue through 2010, Dr. Boice and colleagues already have made several important observations. For instance, as the radiation dose to the uterus increases, children are more likely to be born early and of low birthweight. A similar dose-response relationship was seen with uterine exposure to radiation, resulting in an increase in stillbirths and neonatal deaths; spontaneous abortions also increased following high-dose pelvic irradiation among female cancer survivors. Studies have been conducted in Denmark and are ongoing in Finland as part of the GCCT to determine whether there are associations between radiation treatment in parents and malformations and single gene disorders among children of cancer survivors. To date, 678 birth defects among the children of cancer survivors and 2,282 birth defects among the siblings' children have been identified; possible associations are being explored and quantified by amount of radiation and chemotherapy administered. Other preliminary studies in the GCCT include research on DNA repair gene polymorphisms, cancer susceptibility as indicated by the G2 radiation sensitivity assay, genomic instability, and inherited mutations in minisatellite DNA and mitochondrial DNA. Future plans include possibly extending the work on cellular radiosensitivity and DNA polymorphic variation with quantitative assays for telomeric length and expression of cancer-relevant genes, i.e., cell cycle regulators, checkpoint genes, DNA-damage response genes, genes involved in reactive oxygen stress response, apoptosis, and inflammation; analyses of chromosome aberrations following *in utero* exposure to radiation or chemotherapy; transgenerational effects when both parents have cancer; and heritability of susceptibility and therapy effects among cancer survivors who are twins.

Dr. Boice and colleagues at Vanderbilt and the IEI are collaborating with other investigators at the University of Texas M.D. Anderson Cancer Center, the Danish Cancer Society, the Finnish Cancer Registry, Westlakes Research Institute, the University of Central Lancashire, and the University of Oklahoma. The group has a close working relationship with the Childhood Cancer Survivor Study. To learn more about the GCCT Study, visit *http://www.gcct.org*.

January 2009

Johanna Lampe, Ph.D., R.D.

Johanna W. Lampe, Ph.D., R.D., Full Member and Associate Division Director, Cancer Prevention Program, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, delivered the fifth Visiting Scholars Seminar Series presentation on January 12, 2009. Dr. Lampe's seminar, titled "Modulation of Breast Cancer Risk: Impact of Human Genotype and Gut Bacterial Phenotype," focused on the modifying effects of genetics and diet on cancer biomarkers and susceptibility.

Dr. Lampe's laboratory is studying the metabolism of isoflavones from soy, including how gut bacteria influence the metabolism of isoflavones. Isoflavones are polyphenolic compounds that are of interest due to their structural and functional similarities to estrogen, a hormone that often has been associated with breast cancer. The soy isoflavone daidzein is metabolized by intestinal bacteria to O-desmethylangolensin (ODMA) in approximately 80 percent of the U.S. population and then to equol by about 30 percent of the population. Equol, but not ODMA, has estrogenic activity. Interestingly, about 50 percent of the Japanese population can produce equol. It has been suggested that this difference may be due in part to early life exposure to soy; however, it does not appear as though there is any one specific environmental or genetic determinant as to whether a person will be an "equol producer." It still is unclear whether the ability to produce equol results in any health-related effects, although Dr. Lampe described an ongoing case-control study in Shanghai, China, a highly relevant study population due to frequent soy consumption. She and her colleagues are evaluating the association between plasma equol concentration and the risk of breast cancer, fibrocystic breast conditions (FBC), and proliferative and nonproliferative FBC in these women.

Dr. Lampe also described a cross-sectional study of premenopausal women she and her colleagues are using to examine relationships between functional polymorphisms in the UDP-glucuronosyltransferases (UGTs) and sulfotransferases (SULTs) and several endpoints, including breast density, bone density, and steroid hormone profile. The UGT and SULT enzymes are highly polymorphic, and polymorphisms altering enzyme function can affect clearance of endogenous and exogenous estrogens. Thus, these polymorphisms might impact the steady-state levels of these hormones, but larger studies are needed to determine more conclusively whether UGT and SULT polymorphisms impact hormone metabolism in premenopausal women.

February 2009


Christopher Amos, Ph.D.

The University of Texas M.D. Anderson Cancer Center's **Christopher I. Amos, Ph.D.,** Professor and Deputy Chair, *ad interim*, Department of Epidemiology, delivered the sixth Visiting Scholars Seminar Series presentation on February 9, 2009. Dr. Amos's presentation, "Epidemiology in Changing Times: Unraveling the Gordian Knot of Lung Cancer Predisposition," reviewed a variety of genetic approaches used to better understand factors influencing the risk of lung cancer.

The Genetic Epidemiology of Lung Cancer Consortium (GELCC) identified the first genetic locus for lung cancer in 2000. Since 2000, family-based studies have identified high-risk alleles, such as p53 mutations, 6q, and RGS17, for familial lung cancer through linkage analyses. Large, population-based genome-wide association (GWA) scans have been conducted in recent years to identify low-risk alleles. Although smoking clearly is the leading risk factor for lung cancer, three independent GWA studies were published in April 2008 simultaneously suggesting that two SNPs on chromosome 15q25, rs8034191 and rs1051730, have a significant association with lung cancer risk. Dr. Amos and his colleagues also will complete a genome-wide smoking and genetic interaction analysis to identify genes not identified in their initial analysis. Additionally, because linkage disequilibrium is very different between Caucasians and individuals of African descent, Dr. Amos and colleagues plan to collaborate with other sites to characterize risks in African Americans.

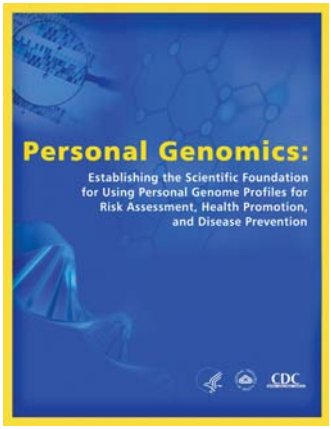
Collaborations between epidemiologists and basic scientists will be needed to identify the causal variants that confer increased risk for lung cancer. More research also is needed to develop methods to provide and deliver information to individuals about risks, especially low-level risks.

Summaries of the remaining 2008–2009 EGRP Visiting Scholars Seminar Series will appear in the next *EGRP Bulletin*.

Abstracts and publications for EGRP-funded research are available at *http://cancercontrol.cancer.gov/grants/query.asp?program=EGRP*.

Meetings of Interest

Workshop Addresses Research Basis To Support Emergence of Personal Genomics



Representatives from academia, industries involved in personal genome profiles, and advocacy groups participated in a 2-day workshop this past December to address how the integration of genomics into personalized health care can follow an evidence-based process. Consumers now can obtain personal genome profiles on their own, yet the research basis for using them in risk assessment, health promotion, and disease prevention is not well developed.

The workshop, **"Personal Genomics: Establishing the Scientific Foundation for Using Personal Genome Profiles for Risk Assessment, Health Promotion, and Disease Prevention,"** was sponsored by NCI's Division of Cancer Control and Population Sciences (DCCPS); National Human Genome Research Institute (NHGRI); National Heart, Lung and Blood Institute (NHLBI); NIH's Office of Behavioral and Social Sciences Research (OBSSR); and the Centers for Disease Control and Prevention (CDC). The meeting was held December 17–18, 2008, in Bethesda, MD, and was organized by Muin Khoury, M.D., Ph.D., of CDC and on detail to DCCPS as a senior consultant on Public Health Genomics, and Sheri Schully, Ph.D., of EGRP.

Participants reviewed and discussed the scientific basis for the use of genome profiles in risk assessment and disease prevention, identified gaps in knowledge, and explored how these gaps can be filled through multidisciplinary research. The presentations offered both consumer and provider perspectives and reviewed the scientific information needed to evaluate and interpret the results of genomic profiles and their value in health promotion and disease prevention. An underlying theme of the workshop discussions centered on the degree to which the use of genomic profiles may improve disease prevention and/or control efforts, especially when compared to existing approaches that do not use genetic risk-factor information and rely instead on data that are relatively easy and inexpensive to obtain, such as age, weight, lifestyle, and personal or family medical histories.

Among the presenters were EGRP grantees John Witte, Ph.D., of University of California, San Francisco, who spoke on "Genome-Wide Meta Analysis: Promises and Pitfalls"; and Jianfeng Xu, M.D., of Wake Forest University, who spoke on "How Can We Assess the Clinical Validity and Utility of Genome Profiles in Risk Assessment and Control of Prostate Cancer?"

To access the workshop agenda, participants list, and presentations, go to *http://cancercontrol.cancer.gov/od/phg/workshop.html*. The workshop recommendations will be published in 2009. Notice of the publication date will be announced via EGRP's listserv. (See page 16 for listserv subscription instructions.)

New Research Consortium Established for Breast Cancer Studies on Women of African Ancestry

EGRP, with the assistance of NCI's Division of Cancer Epidemiology and Genetics (DCEG), convened a day-long forum on December 16, 2008, to discuss ways to further research on genetic factors associated with risk for breast cancer among women of African ancestry. The meeting, attended by invited extramural and intramural investigators with study populations and biospecimens of women of African ancestry, resulted in the establishment of a new consortium to advance research in the area—the African-American Breast Cancer Consortium (ABC).

Compared to American women of European descent, African-American women are more likely to be diagnosed with aggressive, high-grade, and estrogen- and progesterone-negative breast cancer. This phenotype is found at even higher rates in Africa, which suggests a genetic component to the high risk seen in African-American women. Large-scale genetic studies conducted in women of African ancestry are needed to understand the breast cancer phenotype common in African-American women, but no single breast cancer study with a sufficient number of cases exists to be able to conduct a comprehensive investigation of common genetic variation. Adequate power to discover genetic variations that may predispose African Americans to important clinical subtypes of the cancer can be achieved only by pooling cases across several studies.

During the forum, investigators presented summaries of relevant research being conducted in the United States and internationally. They also discussed next steps and potential collaborations needed to make greater strides in understanding the etiology of breast cancer and improve disease outcomes in this population.

Members of the ABC, who represent both prospective cohort and case-control studies, include:

- **Christine Ambrosone, Ph.D.,** of Roswell Park Cancer Institute, Principal Investigator (PI) of a study of risk factors for early aggressive breast cancer in African-American women;
- **Stefan Ambs, Ph.D., M.P.H.,** of NCI's Center for Cancer Research (CCR) Laboratory of Human Carcinogenesis, who is studying breast tumors by gene expression profiling and immunohistochemistry;
- **Larry Beeson, Dr.P.H.,** of Loma Linda University, co-investigator of the Adventist Health Study;
- **Leslie Bernstein, Ph.D.,** of the City of Hope, PI of the California Teachers Study and an investigator with the Los Angeles component of The Women's Contraceptive and Reproductive Experiences Study;
- **William Blot, Ph.D.,** of Vanderbilt University and the International Epidemiology Institute, PI of the Southern Community Cohort Study;
- **Stephen Channock, M.D.,** of DCEG, Director of the NCI Core Genotyping Facility and co-leader of the Cancer Genetic Markers of Susceptibility (CGEMS) project;
- **Christopher Haiman, Ph.D.,** of the Norris Comprehensive Cancer Center at the University of Southern California (USC), an investigator with the Multiethnic Cohort Study;
- **Anselm Harris, Ph.D.,** of The University of the West Indies, co-PI of the Barbados National Cancer Study;
- **Robert Hoover, M.D., Sc.D.,** of DCEG, an investigator with the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial;
- **Esther John, Ph.D.,** of the Northern California Cancer Center, PI of the Northern California component of the Breast Cancer Family Registry (B-CFR);
- **Robert Millikan, D.V.M., Ph.D.,** of the University of North Carolina, Chapel Hill, PI of the Carolina Breast Cancer Study;
- **Barbara Nemesure, Ph.D.,** of the State University of New York at Stony Brook, co-PI of the Barbados National Cancer Study;
- **Olufunmilayo (Funmi) Olopade, M.D.,** of the University of Chicago, PI of a study of the genetics of breast cancer in African-American women;
- **Julie Palmer, Ph.D.,** of Boston University, PI of a study to create a DNA repository for samples from African-American women enrolled in the Black Women's Health Study (BWHS);
- **Timothy Rebbeck, Ph.D.,** of the University of Pennsylvania, PI of a study of prophylactic surgery in carriers of *BRCA1* and *BRCA2* gene mutations;
- **Lynn Rosenberg, Sc.D.,** of Boston University, PI of the BWHS;
- **Lisa Signorello, Sc.D.,** of Vanderbilt University and the International Epidemiology Institute, an investigator with the Southern Community Cohort Study;
- **Giske Ursin, M.D., Ph.D.,** of the Norris Comprehensive Cancer Center at USC; and
- **Wei Zheng, M.D., Ph.D., M.P.H.,** of Vanderbilt University, PI of several breast cancer studies, including a population-based case-control study of breast cancer in Nashville, TN.

Participation in this new consortium is open to all investigators who have appropriate studies and biospecimens. For more information about the ABC consortium or the forum, contact the organizer, Elizabeth Gillanders, Ph.D., Chief, Host Susceptibility Factors Branch, at *lgilland@mail.nih.gov*.

NCI Cohort Consortium Holds Annual Meeting: Choosing Research Directions and Devising Consortial Strategies

The annual Cohort Consortium meeting, sponsored by EGRP and the Division of Cancer Epidemiology and Genetics (DCEG), convened November 4–6, 2008, in Bethesda, MD. The Cohort Consortium is an extramural-intramural partnership designed to facilitate the type of large-scale collaborations needed to assemble sufficient data and biospecimens for studies of gene-gene and gene-environment interactions in the etiology of cancer.

Three new cohorts joined the Cohort Consortium in 2008: the Canadian Study of Diet, Lifestyle, and Health; U.S. Radiologic Technologists Cohort; and the Women's Lifestyle and Health Cohort. Their addition brings the total to 37 cohorts (24 of which are supported by EGRP) that include more than 4 million individuals from diverse populations. The cohorts range in size from 14,000 to more than 500,000 study participants. Some of the cohorts currently are enrolling participants; others have completed enrollment and are conducting followup. Although not all cohorts have biospecimens, DNA and/or serum biospecimens are available on more than 2 million individuals.

The Cohort Consortium has five active projects: the Breast and Prostate Cancer Cohort Consortium (BPC3); Vitamin D Pooling Project (VDPP); Pancreatic Cancer Cohort Consortium (PanScan); Cancer Genetic Markers of Susceptibility (CGEMS) Project; and the newest project, initiated in 2008, the Obesity and Mortality Pooling Project. In addition to these projects, the Cohort Consortium Secretariat has approved 16 other projects that are in various stages of implementation.

Through the various projects, Cohort Consortium members study genetic variation in different cancer sites, serum vitamins, hormones, and inflammation markers; use select questionnaire data for mega-data problems; explore advances and challenges in methods for cohort studies; and address mortality and other noncancer outcomes.

The purpose of the 2008 annual meeting was to review scientific accomplishments and opportunities and devise the best research strategies for the next 3 years. Representatives of the member cohorts discussed challenges, reviewed and evaluated ongoing projects, considered proposals for new initiatives, and implemented a strategic plan to sustain the cohorts and their ongoing projects.

A workshop on research methodology for cohort and consortial studies fostered discussion of advances and challenges in research methods, expanding ascertainment of cancer and noncancer outcomes, and statistical views of time and privacy in cohort studies. EGRP grantee Julie Palmer, Sc.D., of Boston University and the Black Women's Health Study, moderated the session on advances and challenges in research methods. The session included presentations by EGRP grantees Leslie Bernstein, Ph.D., of the City of Hope's Beckman Research Institute, Principal Investigator (PI) of the California Teachers Study, who discussed obtaining tumor blocks for breast cancer cases; and Susan Hankinson, Sc.D., of Harvard University, PI of the Nurses' Health Study I, who talked about data collection in an aging cohort.

EGRP grantee James Cerhan, M.D., Ph.D., of the Mayo Clinic, PI of the Iowa Women's Health Study, moderated a session on expanding the ascertainment of outcomes, which included a presentation by grantee Beth Virnig, Ph.D., of the University of Minnesota, who spoke about Medicare linkage to the Iowa Women's Health Study. The Cohort Consortium's major goals are to: (1) continue support for major ongoing projects; (2) foster additional genome-wide association studies in other uncommon cancers and relevant subpopulations, such as African-American men; (3) launch a large analysis from questionnaire data (e.g., BMI and cancer risks); (4) explore alternative ways to fund cohort infrastructure maintenance; (5) continue to develop research methodologies, such as sample collection processes and standardization of data collection, in new and established cohorts; (6) continue to foster new opportunities for consortial projects; (7) develop liaisons with other consortia; and (8) enhance statistical advice across projects.

Participants reviewed progress on achieving goals and plans to develop a comprehensive approach to support cancer epidemiology cohorts. They discussed identifying issues common to cohort operations, developing a better understanding of the challenges faced by larger cancer epidemiology cohorts, and exploring new mechanisms and management approaches to maintain, update, and evaluate cohorts in tight financial times. They also were tasked with addressing future directions for studies of genetic variants and other high-priority research questions; issues related to data harmonization, biospecimens, questionnaires, statistical analyses, and noncancer endpoints; resource needs; and models for interacting with other consortia.

As a result of the meeting, participants developed a Strategic Plan that focuses on: (1) emphasizing the Cohort Consortium's core strengths—prospective data, large sample size, and some repositories; (2) avoiding duplication of what can be done elsewhere; and (3) improving the ease and speed of projects the membership supports. The Plan is available at *http://epi.grants.cancer.gov/Consortia/cohort_plan.html*.

In addition, several Cohort Consortium research projects and working groups held ancillary meetings in conjunction with the meeting, including the BPC3, VDPP, PanScan, and working groups focused on liver, gastrointestinal system, endometrial, brain, and male breast cancers.

To learn more about the Cohort Consortium, its research, and its working groups, go to *http://epi.grants.cancer.gov/Consortia/cohort.html*.

Cohort Consortium Secretariat (left to right): Patricia Hartge, Sc.D., DCEG; Robert N. Hoover, M.D., Sc.D., DCEG; Julie Palmer, Sc.D., Boston University; James Cerhan, M.D., Ph.D., Mayo Clinic; Anne Zeleniuch-Jacquotte, M.D., New York University; Michael J. Thun, M.D., American Cancer Society; Deborah Winn, Ph.D., EGRP; Chinonye Harvey, M.P.H., EGRP; and Geoffrey Tobias, DCEG. Not pictured: Daniela Seminara, Ph.D., M.P.H., EGRP.

EGRP Staff News

Deborah Winn, Ph.D., Appointed Deputy Director of DCCPS

Deborah Winn, Ph.D.

Robert T. Croyle, Ph.D., Director of NCI's Division of Cancer Control and Population Sciences (DCCPS) announced the appointment of **Deborah (Debbie) Winn, Ph.D.,** as DCCPS Deputy Director, effective January 1, 2009. She has served as the Acting Associate Director of DCCPS' Epidemiology and Genetics Research Program (EGRP) since 2006. Prior to that, Dr. Winn was a Senior Epidemiologist and Chief of the former Clinical and Genetic Epidemiology Research Branch in EGRP.

During her tenure in EGRP, Dr. Winn has directed and coordinated NCI's extensive extramural program of population-based research in cancer epidemiology. She played critical roles in NCI's bioinformatics efforts in population sciences and served as a key spokesperson for NCI on epidemiologic topics of interest to Congress and the public. In addition to her longstanding collaborations and research activities in head and neck cancer epidemiology, she represented NCI on several NIH working groups and advisory committees for genetics research. She also has served on national and international committees focusing on issues such as women's health and the environment and tobacco-related health risks and regulation.

Before joining DCCPS in 2000, Dr. Winn was an intramural Senior Investigator and Branch Chief for oral epidemiology at NIH's National Institute of Dental and Craniofacial Research (NIDCR). She also is a former Deputy Director of the Division of Health Interview Statistics at the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). Dr. Winn holds an M.S.P.H. and a Ph.D. in Epidemiology from the School of Public Health, University of North Carolina at Chapel Hill.

In addition to Dr. Winn's numerous scientific accomplishments, she is uniformly respected for her thoughtful approach to many complex and controversial issues at the interface of science, policy, the environment, and public health. Her appointment reflects the importance of epidemiology research to the mission and constituency of DCCPS.

During the past 2 years, Dr. Winn led the reorganization of EGRP to better advance and serve today's scientific questions in cancer epidemiology research. EGRP has been strengthened substantially by the recruitment of outstanding new staff who complement the experienced members of the Program. The EGRP staff list is available on page 16 of this *Bulletin* and at *http://epi.grants.cancer.gov/staff.html*.

Dr. Winn will remain the Acting Associate Director of EGRP until a permanent appointment is made.

Gillanders Named Chief of EGRP's Host Susceptibility Factors Branch

Elizabeth Gillanders, Ph.D.

EGRP appointed **Elizabeth M. Gillanders, Ph.D.,** as Chief of EGRP's Host Susceptibility Factors Branch (HSFB), effective January 4, 2009. Dr. Gillanders joined EGRP in 2007 as a Program Director in the HSFB. This branch focuses on personal susceptibility factors—such as genetic, epigenetic, immunological, and hormonal biological pathways—and social, cultural, and racial/ethnic factors.

Dr. Gillanders represents EGRP in the NIH Genes, Environment and Health Initiative (GEI) Genetics Program and has contributed to the development of several GEI post-genome-wide association study (GWAS) funding opportunities. Dr. Gillanders has been involved with numerous NCI and NIH committees developing data access policies for GWAS. She also recently organized a new consortium for breast cancer studies among women of African ancestry, featured on page 9 of this *Bulletin*.

Prior to joining EGRP, Dr. Gillanders worked intramurally at the National Human Genome Research Institute (NHGRI), where she headed its Genetic Epidemiology Unit within the Cancer Genetics Branch. Her applied research at NHGRI focused primarily on genetic epidemiology of cancer susceptibility, with an emphasis on melanoma, prostate cancer, and breast cancer. She also investigated novel methods that could improve on the power of conventional methods of gene discovery for complex traits in general. Her honors include a research training fellowship to study the genetic epidemiology of melanoma.

Dr. Gillanders received her B.A. in French and Art History from The College of William and Mary, Williamsburg, VA; M.S. in Molecular Genetics from The Johns Hopkins University; and Ph.D. in Genetic Epidemiology from the Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, where she investigated genetic factors contributing to melanoma susceptibility and evaluated the value of molecular haplotyping information in a family-based linkage study. She is an Adjunct Assistant Professor at the Johns Hopkins Bloomberg School of Public Health, where she teaches an introductory human genetics course.

EGRP greatly appreciates the service and leadership provided by **Mukesh Verma, Ph.D.,** who served simultaneously as Acting Branch Chief for the Host Susceptibility Factors Branch and Chief of EGRP's Methods and Technologies Branch since EGRP's reorganization in 2007. Thank you, Dr. Verma!

Freedman Named Chief of EGRP's Clinical and Translational Epidemiology Branch

Andrew Freedman, Ph.D.

EGRP is pleased to announce the appointment of **Andrew N. Freedman, Ph.D.,** as Chief of its Clinical and Translational Epidemiology Branch (CTEB). The branch supports, directs, and stimulates research on clinical, environmental, and genomic factors that influence cancer progression, recurrence, new primary cancers, and mortality. It also supports and coordinates research on factors that contribute to the development of cancer among individuals with underlying diseases and conditions. His appointment became effective May 25, 2009.

Dr. Freedman joined NCI's DCCPS in 1997 as a molecular epidemiologist in the Applied Research Program's (ARP) Risk Factor Monitoring and Methods Branch. He developed and supported a program of research in cancer risk prediction, genetic susceptibility testing, pharmacoepidemiology, and pharmacogenomics; and managed research contracts, interagency and cooperative agreements, and a grant portfolio pertaining to these research areas. Dr. Freedman also directed multidisciplinary molecular clinical and translational epidemiology studies within the Health Maintenance Organization (HMO) Cancer Research Network (CRN); Department of Veterans Affairs medical system; NCI's Surveillance, Epidemiology, and End Results (SEER) Program; and the NIH-AARP Diet and Health Study. He is

internationally recognized for his work in molecular cancer epidemiology and cancer risk prediction.

In the areas of pharmacoepidemiology and pharmacogenomics, Dr. Freedman has developed research collaborations with several NIH Institutes and Centers and other agencies within the U.S. Department of Health and Human Services (HHS). He is Chair of the Trans-NCI Pharmacoepidemiology and Pharmacogenomics Working Group and represents NCI on the Trans-NIH Pharmacogenomics Working Group and the Institute of Medicine (IOM) Roundtable on Translating Genomic-Based Research for Health.

His research interests include developing, applying, and evaluating prediction models for cancer risk and prognosis; developing benefit/risk indices for pharmaceuticals used to prevent and treat cancer; and identifying clinical, epidemiologic, and pharmacogenomic factors related to cancer treatment outcomes.

Before joining DCCPS, Dr. Freedman was a Postdoctoral Research Fellow in the Genetic Epidemiology Branch of NCI's Division of Cancer Epidemiology and Genetics (DCEG). He earned his Ph.D. in Epidemiology from the University of Buffalo and Roswell Park Cancer Institute. He also received an M.S. in Social and Preventive Medicine from the University of Buffalo and a B.S. in Biology from the University of Binghamton.

Two Nutritional Epidemiologists Join EGRP

Somdat Mahabir, Ph.D., M.P.H., and **L. Joseph Su, Ph.D., M.P.H.,** have joined EGRP's Modifiable Risk Factors Branch (MRFB) as Program Directors responsible for managing the diet, nutrition, and energy balance research portfolios.

Somdat Mahabir, Ph.D., M.P.H.

Dr. Mahabir comes to EGRP from The University of Texas M.D. Anderson Cancer Center, where he was an Assistant Professor in the Department of Epidemiology, Division of Cancer Prevention and Population Sciences. He also was a Member of the Nutritional Epidemiology Working Group, an Associate Member of the Center for Research on Environmental Disease, and an Affiliated Faculty member of the Center for Research on Minority Health.

Dr. Mahabir has been the Principal Investigator (PI) and Co-investigator for grants funded by NIH, the Lance Armstrong Foundation, and the American Cancer Society-M.D. Anderson Institutional Research Grant Program. His research interests include understanding how genetic variation modifies the relationship between nutritional factors and cancer risk, methodological issues in nutritional exposure assessment, and understanding how obesity affects nutritional metabolism in pathways leading to increased cancer risk.

Before joining M.D. Anderson, Dr. Mahabir was a Cancer Prevention Fellow at NCI, a Project Director with Memorial Sloan-Kettering Cancer Center's Department of Epidemiology and Biostatistics, and an Adjunct Assistant Professor with the New York Institute of Technology. He holds a Ph.D. in Nutrition from New York University, an M.P.H. in Epidemiology from New York Medical College, and an M.S. in Clinical Nutrition from New York Institute of Technology.

L. Joseph Su, Ph.D., M.P.H.

Dr. Su joins EGRP from the Louisiana State University's (LSU) School of Public Health in New Orleans, where he was an Associate Professor of Epidemiology and Curriculum Coordinator for the Epidemiology Program. He also held a joint appointment in the LSU Department of Pathology, where he had a laboratory for nutrient biomarker analysis.

He has been the PI or Co-investigator for a variety of grants and contracts supported by NIH and other federal agencies, the State of Louisiana, and other funding sources. His research interests include dietary intake assessment and/or biomarkers associated with cancer etiology and prognosis; potential carcinogenic chemicals in foods; and molecular mechanisms such as epigenetic changes that underlie cancer risk, and especially risk for cancers of the prostate, ovary, pancreas, colon, and lung.

Before joining LSU, Dr. Su was a Graduate Research Assistant at the University of North Carolina (UNC) at Chapel Hill's School of Public Health, and later was an Adjunct Associate Professor with that School and the School of Journalism and Mass Communication. Dr. Su also has experience as a reviewer for NIH's Center for Scientific Review's Epidemiology and Cancer (EPIC) Study Section and the NCI Special Emphasis Panel. He holds a Ph.D. in Nutritional Epidemiology, specializing in biomarkers of exposure in cancer epidemiology, from UNC at Chapel Hill and an M.P.H. in Public Health Nutrition from the University of Minnesota.

Employment Opportunities

NCI Seeks Associate Director for the Epidemiology and Genetics Research Program

NCI seeks a senior scientist to serve as an Associate Director in its Division of Cancer Control and Population Sciences (DCCPS). The Division provides national scientific leadership and oversight of NCI-funded research in the areas of epidemiology, surveillance, health services, survivorship, and behavioral science. DCCPS also is committed to addressing health disparities through transdisciplinary research.

The Associate Director will lead EGRP, which manages a comprehensive program of grant-supported, population-based research to increase understanding of cancer etiology and prevention. It is the largest funder of etiologic cancer epidemiology grants nationally and worldwide, supporting about 400 research grants and numerous interagency agreements and consortia annually. EGRP's grants, contracts, interagency agreements, and operating budgets totaled more than $197 million in Fiscal Year 2008.

This position offers the qualified candidate opportunities to make a national and international impact and develop transdisciplinary collaborations and initiatives on the cutting edge of cancer epidemiology and genetics, while working in a scientifically energizing and collegial environment.

The Associate Director will:

- Lead EGRP, which includes its Office of the Associate Director and four branches (Clinical and Translational Epidemiology, Host Susceptibility Factors, Methods and Technologies, and Modifiable Risk Factors);
- Provide scientific and administrative leadership for EGRP;
- Develop and facilitate collaborations with funders of other types of population science, including NIH Institutes and Centers, Centers for Disease Control and Prevention (CDC), and many nongovernmental organizations; and
- Represent NCI to a wide variety of professional, academic, and advocacy organizations.

This challenging and highly visible position requires broad scientific expertise, a passion for public service, commitment to collaboration, and an ability to develop effective strategies to identify gaps in research and overcome barriers to scientific progress. Exploiting scientific opportunities requires visionary leadership and sound scientific judgment to ensure the greatest payoff from NCI's investments. Therefore, a broad perspective on cancer epidemiology and other population sciences that informs development of creative and cost-effective strategies to advance cancer control science is essential.

The successful applicant will be an experienced epidemiologist (M.D.- or Ph.D.-level training required) with leadership experience, excellent communication skills, and a strong record of peer-reviewed publications. Strong leadership skills, an ability to work effectively across disciplinary boundaries, and a commitment to the highest standards of scientific integrity and quality are required. Experience in managing complex research projects, scientific staff, training programs, interdisciplinary collaborations, and/or funded programs is highly valued. Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

This position is an excepted service position (Title 42), with a salary range of $160,000–$195,000. Applications will be considered until the position is filled. Please submit a letter of interest and CV to the Search Committee Chair:

Rachel Ballard-Barbash, M.D., M.P.H.
Applied Research Program
Division of Cancer Control and Population Sciences
National Cancer Institute
EPN 4005
6130 Executive Boulevard, MSC 7344
Bethesda, MD 20892-7344
Rockville, MD 20852 (Express Mail)

Program Directors Sought for EGRP's Clinical and Translational Epidemiology and Host Susceptibility Factors Branches

EGRP anticipates openings in 2009 for Program Directors in its Clinical and Translational Epidemiology Branch and Host Susceptibility Factors Branch. These positions offer:

- Opportunities to develop initiatives on the cutting edge of cancer epidemiology,
- Responsibility for a diverse portfolio of grant-supported research,
- Opportunities for transdisciplinary collaboration,
- Research opportunities, and
- A scientifically energizing and collegial environment.

Candidates must have formal training in epidemiology, a relevant doctoral degree, and a strong interest in developing and managing research initiatives for the extramural community (predominantly university-based) that will move

forward our understanding of the etiology of cancer. Other qualifications include experience and expertise in genetic, clinical, or translational epidemiology. Experience in administering grant programs is an asset but not required. Knowledge of and interest in transdisciplinary approaches that include epidemiologic principles is highly preferred. U.S. citizenship is required.

The positions will be advertised on the USAJOBS Web site (*http://www.usajobs.gov*) as a Health Scientist Administrator. These positions are likely to be advertised at the GS 13/14 level, for which the 2009 pay range is $86,927 to $133,543 per year.

Successful candidates will have opportunities to conduct collaborative epidemiologic research, present findings at scientific meetings, and publish results in peer-reviewed journals. In addition to scientific management of cancer epidemiology grants and influencing the trajectory of research in cancer epidemiology, successful candidates will have significant collaboration and leadership opportunities with scientists across NCI involved in large scientific endeavors and initiatives in areas of relevance to cancer epidemiology, such as cancer control, cancer research consortia, health disparities research, and bioinformatics.

To be considered for these positions, candidates must formally apply through the USAJOBS Web site. The USAJOBS advertisement also will include contact information in case candidates have specific questions regarding these positions. When additional information is available (including timelines and links to USAJOBS notices) pertaining to the positions described above, it will be shared via EGRP's listserv (see page 16 for details on how to subscribe).

EGRP's offices are located in Rockville, MD, a suburb of Washington, DC. For further information about EGRP and DCCPS, go to *http://epi.grants.cancer.gov* and *http://cancercontrol.cancer.gov*.

NCI is the primary federal agency responsible for cancer research and is part of the National Institutes of Health (NIH), U.S. Department of Health and Human Services (DHHS). *DHHS, NIH, and NCI are Equal Opportunity Employers.*

Epidemiology and Genetics Research Program (EGRP) Staff

Epidemiology and Genetics Research Program
Telephone: 301-496-9600; Fax: 301-435-6609
Web site: *http://epi.grants.cancer.gov*

Office of the Associate Director
Deborah M. Winn, Ph.D., EGRP Acting Associate Director
Barbara Guest, M.S.W., M.P.H., Program Analyst
Diane Horn-Cruder, Program Analyst
Christie Kaefer, M.B.A., R.D., Communications Coordinator
Scott Rogers, M.P.H., Public Health Advisor
Daniela Seminara, Ph.D., M.P.H., Scientific Consortia Coordinator and Program Director
Marta Thompson, Program Specialist

Clinical and Translational Epidemiology Branch
Andrew N. Freedman, Ph.D., Chief
Jay Choudhry, M.S., Program Director
Carol H. Kasten, M.D., Medical Officer, Geneticist, and Project Officer
Leah B. Sansbury, Ph.D., M.S.P.H., Program Director

Host Susceptibility Factors Branch
Elizabeth M. Gillanders, Ph.D., Chief
Damali N. Martin, Ph.D., M.P.H., Program Director
Sheri Dixon Schully, Ph.D., Program Director

Methods and Technologies Branch
Mukesh Verma, Ph.D., Chief
Rao Divi, Ph.D., Program Director
Adrienne Overton, Program Analyst

Modifiable Risk Factors Branch
Britt C. Reid, D.D.S., Ph.D., Chief
Gary L. Ellison, Ph.D., M.P.H., Program Director
Chinonye (Nonye) Harvey, M.P.H., Public Health Advisor
Somdat Mahabir, Ph.D., M.P.H., Program Director
Vaurice Starks, Program Director
L. Joseph Su, Ph.D., M.P.H., Program Director

Sources of Information on Grant Policies and Funding

- Our NCI Division of Cancer Control and Population Sciences (DCCPS) Home page: *http://cancercontrol.cancer.gov* for grant policy alerts and information on funding opportunities.
- NCI Division of Extramural Activities (DEA): *http://deainfo.nci.nih.gov*
- *http://grants.gov* (central resource to find and apply for U.S. grants)
- Research Resources
  - NCI directory of more than 175 products: *http://resresources.nci.nih.gov*
  - DCCPS Public Use Data Sets: *http://cancercontrol.cancer.gov/cr-dataset.html*
- Subscribe to:
  - EGRP's Listserv (occasional Bulletins, News Flashes) contact: *kaeferc@mail.nih.gov*
  - NCI Cancer Bulletin (biweekly newsletter): *http://www.cancer.gov/ncicancerbulletin*
  - NIH Guide for Grants and Contracts: *http//:grants.nih.gov/grants/guide/listserv.htm*
  - NIH Inside eRA for Partners (Electronic Research Administration or "The Commons") (occasional updates): *http://era.nih.gov/eranews*
  - NIH Extramural Nexus (monthly newsletter for grantees): *http://grants.nih.gov/grants/nexus.htm*
- **Everything you wanted to know about the NCI Grants Process...but were afraid to ask** (2005). Access online at *http://www.cancer.gov/admin/gab* or order a print copy via NCI's online Publications Locator: *https://cissecure.nci.nih.gov/ncipubs*. **(The publication does not include information about NIH's mandatory transition to electronic submission of applications and the new form; see *http://era.nih.gov/ElectronicReceipt/index.htm*.)**

Epidemiology and Genetics Research Program
Division of Cancer Control and Population Sciences
National Cancer Institute
6130 Executive Boulevard, Room 5113, MSC 7395, Bethesda, MD 20892-7395
Telephone: 301-496-9600; Fax: 301-435-6609