

# Black Women's Health Study



BOSTON UNIVERSITY  
SCHOOL OF MEDICINE



HOWARD UNIVERSITY  
COLLEGE OF MEDICINE

## July 2003 Newsletter



### News from the Black Women's Health Study

**WORKING TOGETHER TO IMPROVE  
THE HEALTH OF BLACK WOMEN**

## BWHS 2003 HEALTH QUESTIONNAIRE



It's that time again—time to fill out the 2003 BWHS health questionnaire. It's

very short and should take no more than 5 or 10 minutes to complete.

The study has been a success because of you (some recent findings are described in this newsletter).

Please let's continue! If you haven't received a questionnaire, please let us know by calling **1-800-786-0814** or e-mailing **[bwhs@slone.bu.edu](mailto:bwhs@slone.bu.edu)**

If you prefer, you can fill out the questionnaire on-line at **[www.bu.edu/bwhs/](http://www.bu.edu/bwhs/)** Many thanks.

For updates and information on publications from the BWHS, visit our website at

**[www.bu.edu/bwhs/](http://www.bu.edu/bwhs/)**

You can also complete your 2003 health questionnaire on-line.

BLACK WOMEN'S HEALTH STUDY  
SLONE WOMAN POPULATION CENTER  
1015 COMMERCIAL AVENUE  
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## BWHS LOTTERY WINNERS

Twenty BWHS participants, chosen at random from among the women who completed the 2001 health update, were the lucky winners of the BWHS lottery. The BWHS represents all areas of the country—North, East, South, Midwest, and

West—and so do the winners. The states represented are California (2 winners), Georgia (3), Illinois (1), Maryland (2), Michigan (1), Minnesota (2), New Jersey (2), New York (3), South Carolina (1), and Virginia (3).

# NEW RESEARCH COLLABORATION BETWEEN BWHS AND HOWARD UNIVERSITY GENOME CENTER

The BWHS is about to begin a collaboration with the National Human Genome Center of Howard University. A worldwide effort to map the human genome has made headlines over the past few years. The hope is that knowledge of human genes will make it easier to find the causes of disease, predict susceptibility to an illness, and choose which medications work best for treatment. To bring multicultural perspectives and resources to this effort, the National Human Genome Center at Howard University was formed in 2001 by Dr. Georgia M. Dunston and colleagues. The Howard Center recently announced plans to create a large bank of DNA from black Americans. In a separate effort, scientists from the Howard Center will be working with BWHS investigators to study disease susceptibility in the BWHS population.

## Key Components of the Howard University National Human Genome Center



Dr. Rick Kittles, who will be the main scientific collaborator with the BWHS, is co-director of the Molecular Genetics Core of the Howard Center. The Molecular Genetics Core seeks to develop a database of gene variations that are linked to diseases common in African peoples. Current projects focus on asthma, diabetes, and hypertension, conditions that occur at particularly high rates among African-Americans and for which there appears to be a genetic component. Researchers are also analyzing the breast cancer predisposing genes, BRCA1 and BRCA2, in African-American families at high risk for hereditary breast cancer.

Another crucial component of the Center is the GenEthics Core, led by Dr. Charmaine D. Royal. The goal of this unit is to incorporate the unique as well as the shared experiences of African-Americans, other African Diaspora populations, and other people of color into human genome research. The hope is to minimize potential harm to people of color and maximize the benefits of improved diagnosis, treatment, and prevention of disease. An equally important anticipated outcome is enhanced overall well-being of these populations and humanity as a whole, brought about by increased appreciation for the diversity that is inherently characteristic of our species.

## BWHS-Howard Genetics Project

Dr. Julie Palmer, one of the leaders of the BWHS, has received a grant from the National Cancer Institute to collect cheek cell samples from BWHS participants who are willing to provide them. The cheek cell collection will be a simple procedure that involves swishing with mouthwash, placing the mouthwash in a small container, and sending it to Dr. Rick Kittles' laboratory at Howard University. There the DNA will be extracted from the mouthwash solution, frozen, and stored for later analyses.



The focus of the BWHS-Howard Genome Center study will be on subtle gene variations called *polymorphisms*. Many genes have polymorphisms—different forms that have different actions. These gene variations may explain why some people are more susceptible than others to harmful substances. For example, in a gene involved in metabolism of outside substances, one polymorphism may cause a faster breakdown of a toxic substance like cigarette smoke to a safer byproduct, thus making persons who have that polymorphism less susceptible to the adverse effects of cigarette smoke. So far, gene variations that have been identified seem to have only a small effect on disease risk and are not of clinical importance to individuals. However, they are of great research interest because they can contribute important information about how diseases develop. The hope is that this information will lead to disease prevention and better treatments. Combining BWHS questionnaire data with DNA data will allow us to examine how genetic vulnerabilities interact with social conditions or other factors to cause disease.

## Confidentiality

As is true for the BWHS questionnaire data, all genetic information used in this study will be kept confidential. Cheek cell samples sent to the laboratory will be identified only by an ID number, with no names or other personal identifiers attached. At no time will names be provided to any investigators who analyze the DNA data. The BWHS has a Confidentiality Certificate from the U.S. government which protects the study data.

## RECENT FINDINGS FROM THE BWHS

You can learn about findings based on data from the BWHS at the BWHS website: [www.bu.edu/bwhs/](http://www.bu.edu/bwhs/). Here's a brief update of a few recent findings.

- Reliable information on what people eat is needed for studies of the effect of diet on disease. Results of the BWHS diet validation study (in which about 400 BWHS participants took part), published in *Annals of Epidemiology* in February of 2002, show that dietary information BWHS participants provided on the BWHS questionnaires is reliable enough to be highly useful in studies of diet and disease.  

- Results on the effect of childbearing on breast cancer occurrence were published in the *Journal of the National Cancer Institute* in March 2003. There was an increased occurrence of breast cancer related to childbearing at young ages (when breast cancer occurs rarely) and a reduced occurrence at older ages (when breast cancer occurs more commonly). This information contributes to understanding about the mechanisms of breast cancer occurrence.
- African-American babies are about twice as likely to be born premature (at least three weeks early) as white babies and preterm babies tend to have more problems than full-term babies. BWHS findings published in November 2002 in *Epidemiology* suggest that experiences of racism may contribute to the higher rate of preterm birth among African-Americans.  

- The age at which women become menopausal (stop menstruating) is related to the occurrence of some diseases. BWHS results published in the *American Journal of Public Health* in February 2003 show that women who smoke have an earlier menopause than those who do not.