



## The Atherosclerosis Risk in Communities (ARIC) Study

The Johns Hopkins University  
5 Public Square  
Professional Arts Building  
Hagerstown, Maryland 21740

Phone: 301-791-1847  
Fax: 301-791-3541

### Return Service Requested

Affiliated with the University  
of North Carolina at Chapel Hill

NONPROFIT ORG  
US Postage  
**PAID**  
Chapel Hill NC  
Permit 177



The Atherosclerosis Risk in Communities (ARIC) Study • Fall 2010

## Preparing for the Next ARIC Exam Visit

### Dear ARIC Study Participant,

For most of you it has been over 10 years since an ARIC exam visit—now we are very pleased to be able to invite you back to the ARIC center for the 5th examination of the ARIC cohort! This ARIC visit is again funded by the National Heart, Lung, and Blood Institute (NHLBI), with participation by other institutes and centers of the National Institutes of Health (NIH). All of us in ARIC are very excited to see you again.



generosity in sharing your time with us, and from your answers to the many questions we have asked you since ARIC was launched in 1987-89. Through this successful study, each one of our ARIC participants has influenced the lives of others in their own generation and of those that follow us.

### Your Role in ARIC

You will be proud to know that ARIC has become one of the most important studies on the factors that influence health, and how to prevent several of the disease that affect us later in life. Your own participation in ARIC has been critical to helping scientists and physicians better understand diseases of the heart, the brain, and of the blood vessels in individuals who had life experiences similar to yours. This is because your active participation in ARIC represents many of your neighbors, the residents of communities where the ARIC study is conducted, and well beyond. And because of this, many have benefitted over the years from your willingness to participate in ARIC, from your



### The Role of the ARIC Investigators

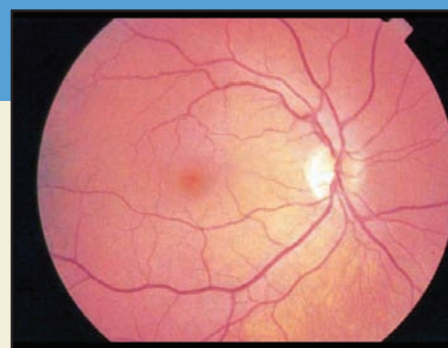
On our part, the ARIC staff and investigators have worked hard to put all the information the ARIC participants have contributed to good use. We have processed, analyzed and interpreted the large amount of detailed data assembled in ARIC. From this, more than 800 scientific publications—and even more presentations at national and international research meetings—have shared findings from ARIC with other scientists, health practitioners, and health policy makers, without ever revealing any personal data. This too is a testimonial to your contributions as a study participant by allowing us to take measurements and tests on you, and by

*continued on page 2*

## Your Eyes Tell a Story

In previous ARIC visits researchers took a picture of the back of your eye—your retina. An image of the retina is shown on the right. The retina is the light-sensitive tissue at the back of your eye that helps you see. Like the brain and spinal cord, the retina is part of the central nervous system, but it is the only part of this system that doctors can see and analyze just by taking a photo. In this way the retina can serve as a window into the health of your body.

Researchers have been working on these ARIC data to learn more about diseases of the heart, brain and circulation from the images on the retina. They found that there was a relationship between physical activity and the health of the retina (Tikellis and collaborators, 2010). ARIC participants who were more active in sports and work than their peers had less retinopathy, or small spots of damage to the retina. This was the case even when taking into



account other known risk factors for cardiovascular disease. Researchers also found that people with retinopathy were more likely to have signs of loss of brain cells related to aging than those without retinopathy, as measured by MRI images (Kawaski and colleagues, 2010).

## The Next ARIC Exam Visit continued from page 1

your patience in answering our questions.

### Where is ARIC's Next Visit happening?

ARIC continues to be conducted in four areas of the United States: the city of Jackson, Mississippi; suburban Minneapolis, Minnesota; Forsyth County, North Carolina; and Washington County, Maryland. You are one of almost 4,000 ARIC participants originally selected to represent your area. Since some of you no longer live close to your ARIC center, it is important that we plan ahead for your exam visit so that dates can be selected that are convenient for you. For those that want to participate but find it difficult to come to the ARIC center, ARIC staff can come to your local place of residence to conduct a shorter



version of the exam. ARIC staff will be glad to review with you the options that work best.

### What is Involved?

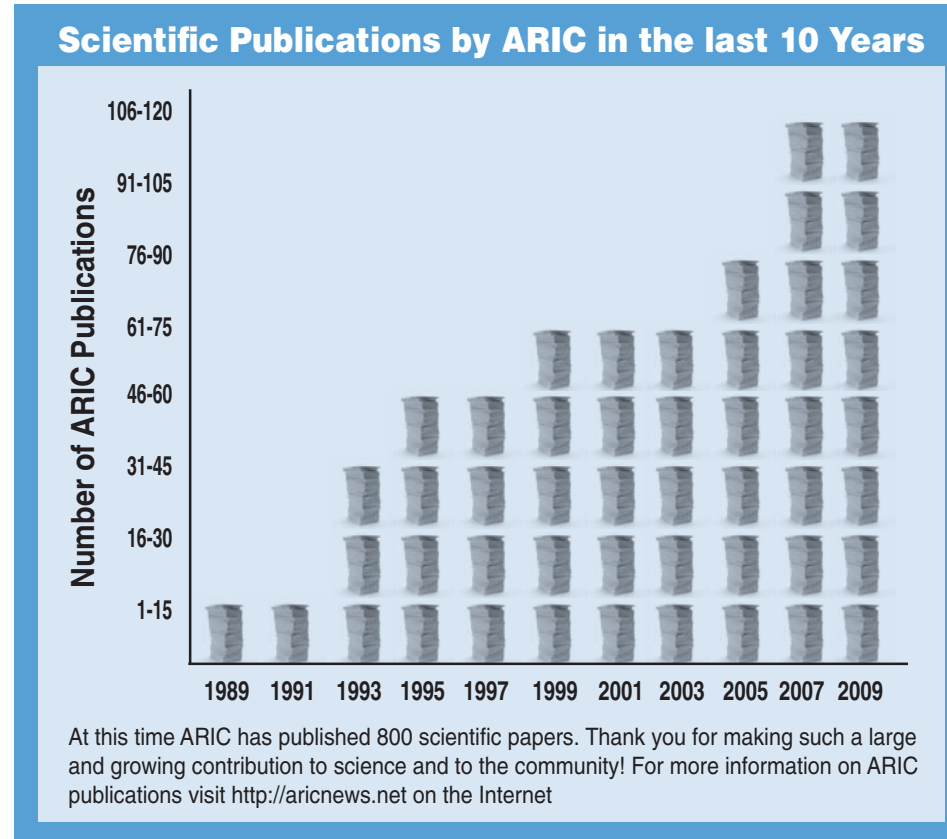
The focus of this new exam will be on two important areas of health research: our heart and our brain. In this new ARIC exam we will conduct state-of-the-art tests of how well your heart works, and of the ways blood flow to the brain sustains our memory.

A condition that is becoming more common in the age group of the ARIC participants is heart failure, related to a reduced capacity of the heart to fill with blood or to pump blood. To learn more about this we will perform an echocardiogram to look at sound wave pictures of your heart and to measure how well it works. The results will be shared with you.

In this exam we will also build on the information the ARIC participants have given us over the years to better understand why some persons retain their mental capacities through life while others experience some memory issues with advancing age. Some of you will then be invited to participate in an additional study that will include a brief neurologic examination, and images of the brain using an MRI machine. Neither the test of your heart nor the images of your brain will use X rays or other technology that could be harmful.

### Will You Get Any Test Results From This Examination?

We will also check your blood pressure, do a screen for aneurysms (ballooning) of the large blood vessel supplying blood to the abdomen and legs, measure physical functioning, and will do many of the blood tests a physician would order for a check-up.



As before, the results will be provided to you, or the person you designate. This visit will last approximately 5 hours and we will ask you to fast for the first part of the exam. Then a snack and lunch will be provided to you.



Local transportation and parking will be available, and there will be a small compensation for your time.

### What are the Options About Participating?

If you feel that you need assistance in making decisions about participation in all or part of the exam, please feel free to contact the ARIC staff identified on the reverse of this newsletter, and to identify a family member or a trusted friend to help you with decision making. This research partner can come with you to the ARIC center for the exam, or can be available to

assist you or the ARIC staff over the phone, if preferred. Before your exam visit we will send you printed materials and a video that will describe the exam in greater detail, so that you, and those near to you, can be well informed about the exam.

### Welcome Back to the ARIC Center

We want you to have a pleasant experience at our exam center and to feel at home. We will contact you in advance of the exam to schedule a convenient time; if you prefer, feel free to call the ARIC contact person listed on the reverse to ask our study staff any questions in advance, or to mention any concerns that you may have. At the time of the exam, if you decide that you no longer want to participate in all or part of the exam visit you may ask the staff to stop any test or procedure at any time. We will look after your needs and answer all your questions.

We appreciate your participation in ARIC and hope you will choose to participate in this upcoming visit. Appointments for the exam will begin in May of 2011 and will occur over two years.

