

## CEREBROVASCULAR RISK, AGING, AND THEIR EFFECTS ON THE BRAIN

Changes in memory, thinking, and organizational skills occur in the course of normal aging, but can sometimes indicate an underlying disease. These changes in thinking ability can occur as a result of medical conditions (such as high blood pressure, diabetes and high cholesterol), which are associated with heart disease, the effects of alcohol abuse over time, or may represent the earliest stages of Alzheimer's disease.

The purpose of the CIRCA study is to understand the relationship between cerebrovascular disease risk and aging, as well as how these illnesses affect the structure and function of the brain. Our ultimate goal is to use this information to develop interventions that will improve the quality of life people with cerebrovascular risk and the overall aging population.



# CIRCA

**Cerebrovascular  
Integrity and  
Risk for  
Cognitive Decline in  
Aging**



GRECC (182-1P)

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## WHY IS YOUR PARTICIPATION IMPORTANT?

There are many risk factors associated with cerebrovascular disease, including high blood pressure, diabetes, and alcohol abuse. These risk factors may contribute to cognitive decline and brain changes.

For these reasons, it is important to improve our understanding of how cerebrovascular disease impacts learning and memory abilities. Ultimately this understanding may be used to help individuals lower their risk for cerebrovascular disease.

In research, it is important to include both the affected and the non-affected. It is extremely important that both people with a history of risk factors for cerebrovascular disease and those without volunteer to participate. Only through a careful comparison of both groups can we gain a full understanding of the risk factors for cerebrovascular disease.

## WHAT DOES THE STUDY INVOLVE?

First Two Sessions: VA in Jamaica Plain (8 hours total):

- Blood test (3 Test tubes from the arm vein)

- Brief Medical Examination
- Completion of a medical history and health questionnaire
- Completion of questionnaires related to mood and daily activities
- Computerized and paper and pencil tests of basic learning and memory

Third Session: Magnetic Resonance Imaging; MRI (2 hours):

- MRI, detailed picture of the anatomy of the brain taken while participant lies motionless on a table that slides into the MRI machine

**Participants will be reimbursed up to \$130 for the first two sessions and \$75 for their participation in the third, MRI, session.**

## WHO IS ELIGIBLE?

Currently we are looking for people between the ages of 30 and 90, both *with* and *without* the following risk factors:

- Diabetes or insulin resistance
- Overweight
- High cholesterol
- High blood pressure
- Drinking may be a problem
- Drink more than 2-3 drinks/day
- Cognitive abilities have declined over recent years

## STUDY PERSONNEL

Marge Ahlquist, B.A.  
Catherine Fortier, Ph.D.  
Colleen Jackson, Ph.D.  
Elizabeth Lertz, Ph.D.  
Regina McGlinchey, Ph.D.  
William Milberg, Ph.D.  
Leslie Nordstrom, B.S.  
David Salat, Ph.D.  
Nikki Stricker, Ph.D.  
Nicolette Schwarz, Ph.D.

## HOW TO REACH US

Please contact us if you are interested in participating or if you have any questions regarding this study.

Please contact us at:

857-364-6290

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