Volunteers needed for research on Down syndrome and aging at the Cleveland Clinic in Cleveland, Ohio

What is the purpose of this research?
Individuals with Down syndrome have a higher chance of developing Alzheimer’s disease than the general population. The goal of this research is to investigate links between Down syndrome and Alzheimer’s disease by studying the brain using magnetic resonance imaging (MRI). Although most individuals with Down syndrome show brain changes that are similar to those seen in Alzheimer’s disease, not all of those individuals develop dementia. The ultimate goal of this work is to find a measure that can predict which individuals will develop dementia before they show any outward signs.

What does this research involve?
This study requires two visits to the Main Campus of the Cleveland Clinic. The first visit will include a clinical assessment, cognitive testing, and an MRI. There will be a practice MRI session before the real MRI, to show the participant what the MRI will be like. The second visit includes a blood draw and a lumbar puncture. Blood samples will be used to measure treatable issues that may cause dementia-like symptoms (such as a vitamin deficiency). The lumbar puncture will be used to collect cerebrospinal fluid. This fluid will be used to measure the amount of amyloid in the brain. Amyloid is a protein that is related to Alzheimer’s disease, and an accurate measure of amyloid is very important to this research. Both blood and cerebrospinal fluid samples will be entered into a biological specimen bank at the Center for Brain Health at the Cleveland Clinic. This will allow future research to be completed without the need to perform another needle stick. Compensation for your time will be provided.

Who can participate in this research?
To participate in this research individuals must be 25 to 35 years old and have a medical diagnosis of Down syndrome. Potential participants should not show signs of dementia and should have a family member or caregiver who can attend appointments and give information about the participant.

Who is conducting this research?
The head of this research is Katherine A. Koenig, PhD, a researcher in the Department of Imaging Sciences at The Cleveland Clinic. This research is approved by the Cleveland Clinic Institutional Review Board (Title: Neuroimaging, amyloid, and cognitive function in Down syndrome; IRB number 16-390). This research is funded by the Alzheimer’s Association.

How can you learn more?
For more information, please call Dr. Katherine Koenig at 216-445-9834 or email koenigk@ccf.org. Thank you.