



Be Part of...

A Major New Study of Brain Connections across the Adult Lifespan

The **Lifespan Human Connectome Project Aging (HCP-A)** Study will enroll 1,500+ healthy adults ages 36-100+ to discover how individual experiences affect the ways in which different parts of your brain are connected and how these connections (the “connectome”) change across healthy adulthood.

The **HCP-A study** extends the foundational Human Connectome Project study of 1100+ healthy young adults (ages 22-35) that has provided unprecedented detail in the study of brain connections and their relationship to behavior. Sponsored by the National Institutes of Health, the **HCP-A Study** is being conducted by Dr. David Salat and colleagues at Massachusetts General Hospital. You may be eligible to participate.

Why do we need the HCP-A Study?

Changes in brain structure and function are a normal part of the aging process from middle age through older adulthood.

In the last decade, an explosion of work has focused on brain structure in disorders that occur as we age. Yet, relatively few studies have focused on healthy aging of brain circuitry and how it varies across people.

Thanks to recent technological advances pioneered by the Human Connectome Project study of healthy young adults, we can now explore how the brain typically ages and how connections change in mature and older adults. Data collected will be shared broadly so that researchers can learn as much as possible from it for years to come.

Characterizing brain aging in healthy adults will also allow us to better understand differences in people with conditions that may affect brain wiring such as dementia or major depression.

Ultimately, the **HCP-A Study** aims to collect information that we, our families, and health professionals can use to enhance our well being as we age.



Who can participate?

- Ages 36–100+
- Female or Male
- In good health
- No diagnosed history of neurologic, major psychiatric disorder

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Learn more at www.humanconnectome.org/HCP-A

Communities and Researchers are Joining Forces!

What will study participants do?

All **HCP-A Study** participants will complete a 1-2 day study visit. During this visit, you will be asked to:

- Complete questionnaires
- Complete cognitive tests and computer tasks
- Perform assessments of normal function (walk speed, hearing, vision, etc.)
- Undergo safe, non-invasive brain imaging
- Give biosamples (such as blood or saliva)

Some participants will be asked to return for a second visit about 20 months later.

What about costs?

There will be no cost to you for completing the study. You will be paid up to \$400 as compensation for your time and effort. Parking or mileage will be reimbursed, or we will provide you with a cab to and from MGH Charlestown.

What is a “Connectome” and why is it important?

A “Connectome” is a mapping of the connections, or wiring, between brain regions that can tell us how the brain works.

As we experience the world, think, and do activities, connections between specialized regions across the brain are formed and changed.

It is the connections among brain regions that allow us to “train our brain” to perform more and more complicated tasks, shaping who we are as unique individuals.

Join us in Making Scientific History

Take this opportunity to team up with the world’s leading connectome scientists. Your participation can help uncover how the brain’s wiring changes as we age and shapes who we are.



Questions the Study Could Answer:

- How stable are brain region-to-region connections over mature adulthood?
- Does the ability to form new connections change with age?
- How does the map of specialized brain areas change as we age?
- What connections are associated with creating and maintaining memory?

Want to participate? Contact Us

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