The Longitudinal Menopause Project

2025

The Ann S. Bowers Women's Brain Health Initiative

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Project Statement

Half of the world's population will experience menopause. Yet, researchers lack even a basic understanding of how menopause influences brain health during this pivotal midlife transition and in the decades that follow. The "**Longitudinal Menopause Project**" is poised to generate the most comprehensive study of brain health and menopause in the US to date. We will establish a diverse cohort, followed longitudinally, tracking brain, biofluid, cognitive, and health data to drive discovery during this uncharted period.

Project Goals

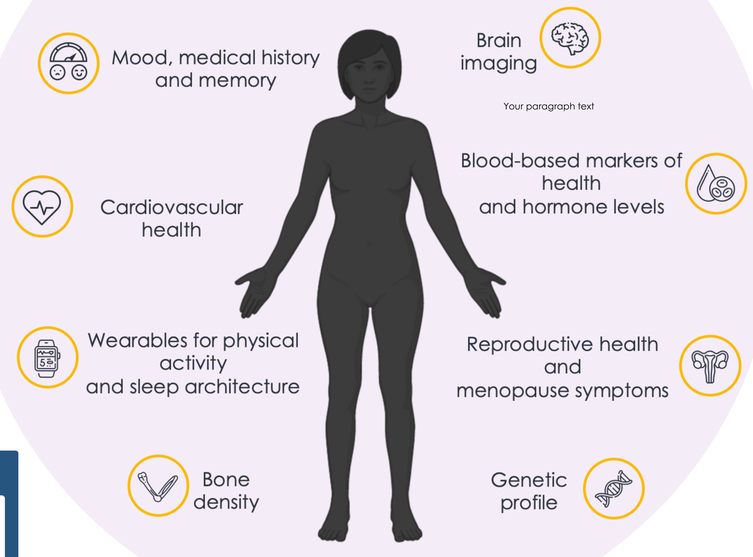
Go Broad

Build a diverse and inclusive cohort of women from sites across the US

1,000 women from demographically and geographically diverse recruitment sites

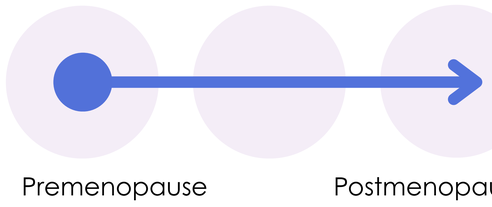
Go Deep

Apply the most recent advancements in brain imaging and multi-omic profiling



Go Long

Track changes longitudinally across the transition



A dataset of this magnitude can generate hundreds of discoveries, e.g. How does sleep quality impact the brain's ability to clear waste? What are the molecular signatures of menopause? How do they relate to cognitive resilience or later life outcomes?

LONGITUDINAL MENOPAUSE PROJECT

PREVENTION STARTS IN MIDLIFE

for info visit **wbhi.ucsb.edu**

Expertise

The LMP integrates a longitudinal, deep-phenotyping model that pools expertise across disciplines and institutions, including a **biospecimen hub** enabling multi-omic phenotyping, **advanced neuroimaging** to assess brain structure, function, perfusion, and white matter micro-structure, **neuropsychological** and **mood assessments**, and comprehensive **digital** and **wearable technologies.** Experts in neuroscience, proteomics, reproductive endocrinology, cognitive aging, sleep, and AI are joining forces to learn more than ever about menopause and the factors that promote a healthy transition into the middle decades of life.

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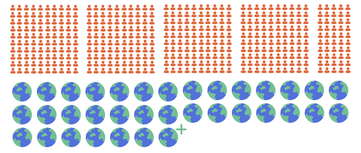
WBHI highlights

Training Opps

WBHI joined forces with **Women in Data Science (WiDS)** and **Kaggle** to launch an international datathon on women's health. WiDS provides training opportunities for students (**75% women**) to discover or hone their data science skills. The datathon spans **5,000 participants**



from **>100 countries**

Economic Impact

2025 World Economic Forum Report: "Collecting data is the first step in uncovering the drivers that will end inequities in women's health. Progress is possible. **Now is the time for action** that will improve lives and strengthen the gobal economy."

Impact

The Longitudinal Menopause Project will 1.) Establish a flagship study of the menopause transition and its implications for brain health in the United States that will result in **high impact innovation for the scientific field for decades to come**. 2.) Develop fast-track translation of experimental and medical findings to **directly impact our communities**. 3.) Create a **shared data platform and sample repository** that can be expanded on by scholars around the world. 4.) **Educate and empower** the scientific community on the importance of studying menopause, a health inflection point that science has underinvested in. A rigorous, deep study of the menopausal transition will fuel basic discoveries and clinical translation.

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