

## **Gail A. Greendale, MD**

### **Cognitive performance in the menopause transition (MT) and postmenopause**

Dr. Greendale had the privilege of leading a team in the first multi-racial/ethnic, longitudinal, exploration of the relation between the MT and cognitive performance in the Study of Women's Health Across the Nation (SWAN). Black, Chinese, Japanese and White women were in this analysis. The team found an isolated, unfavorable effect of the late perimenopause on cognition, which was independent of age, hot flashes, mood, or sleep symptoms. They had the rare opportunity to explore early manifestations of cognitive aging in during middle age, independent of the menopause. In recognition of SWAN's unique contributions to the field of cognition during midlife and menopause, they were invited by JAMA to author a review of this topic for clinicians.

**Greendale GA**, Huang MH, Wight RG, Seeman T, Luetters C, Avis NE, Johnston J, Karlamangla AS. Effects of the menopause transition and hormone use on cognitive performance in midlife women. *Neurology*. 2009;72(21):1850-7.

**Greendale GA**, Wight RG, Huang MH, Avis N, Gold EB, Joffe H, Seeman T, Vuge M, Karlamangla AS. Menopause-associated symptoms and cognitive performance: results from the study of women's health across the nation. *Am J Epidemiol*. 2010;171(11):1214-24.

Karlamangla AS, Lachman ME, Han W, Huang M, **Greendale GA**. Evidence for cognitive aging in midlife women: Study of Women's Health Across the Nation. *PLoS One*. 2017;12(1):e0169008.

**Greendale GA**, Karlamangla AS, Maki PM. The menopause transition and cognition. *JAMA*. 2020;323(15):1495-1496.

### **Bone health and body composition in relation to the MT and race/ethnicity**

In SWAN, they described the first multi-racial/ethnic trajectory of bone mineral density (BMD) loss in relation to the FMP, finding that BMD loss began ~1 year prior to the final menstrual period (FMP), continued at a brisk rate until ~2 years after the FMP, and slowed, but did not cease, after that. Similarly, they published the first descriptions of the MT trajectories of entire body composition, which also began to change prior to the FMP. Changes in MD and body composition differed by race/ethnicity.

**Greendale GA**, Sowers M, Han W, Huang M-H, Finkelstein JS, Crandall CJ, Lee JS, Karlamangla AS. Bone mineral density loss in relation to the final menstrual period in a multi-ethnic cohort: results from the Study of Women's Health Across the Nation (SWAN). *J Bone Miner Res*. 2012;27(1):111-118. PMID: PMC3378821.

**Greendale GA**, Sternfeld B, Huang MH, Han W, Karvonen-Gutierrez C, Ruppert K, Cauley JA, Finkelstein JS, Jiang SF, Karlamangla AS. Changes in body composition and weight during the menopause transition. *JCI Insight*. 2019;4(5):e124865. PMID: PMC6483504.

If you want to see more, the link below will take you to Dr. Greendale's complete list of list of published work.

<https://www.ncbi.nlm.nih.gov/sites/myncbi/gail.greendale.1/collections/47207456/public/>