

BILL LASLEY, PhD

CNPRC Core Scientist
Professor Emeritus,
Department of Pop'l Health and Reproduction,
School of Veterinary Medicine
UC Davis Center for Health and the Environment

Healthy Aging and Early Brain Development

The central role of Primate Centers and my program is to provide a unique avenue for research to improve human health that cannot be performed in any other way. This is because many aspect of physiology are species specific and require the most similar physiology, and this is found only in the nonhuman primate animal model.

Our research in reproductive physiology and gender difference in aging are examples of investigation areas that require the nonhuman primate animal model and range from menopause to dementia to heart disease and diabetes.

Our studies on gender-specific differences in development, aging and disease include parallel studies in mid-aged women and older female macaques and effects of phthalates on fetal development.

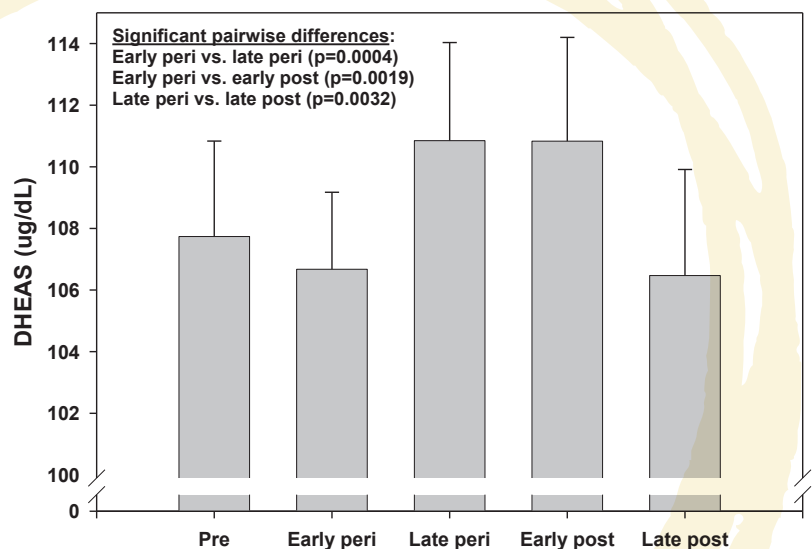
Estrogen Effects on Cognitive and Synaptic Health Over the Lifecourse

Hara Y, Waters EM, McEwen BS, Morrison JH
Physiol Rev. 2015 Jul;95(3):785-807. PMID: PMC4491541)

Ovarian Adrenal Interactions During the Menopausal Transition

Lasley BL, Crawford SL, McConnell DS
Vol. 65 - No. 6 Minerva Ginecologica 641-651

Adjusted Mean DHEAS (95% CI) by Menopause Status
SWAN Visits 00 - 09, 15371 Observations from 3069 Women



The bar graph above demonstrates a rise in circulating adrenal androgens as represented by circulating levels of dehydroepiandrosterone in 3,069 mid-aged women as they transition through the menopause. This rise does not occur in men or in any other non-primate species. This shift in contributes largely to the hormonal changes experience by most women between the ages of 45 to 55 and can only be investigated using the nonhuman primate animal model which the older females have a similar shift.