

## **Abstract: Impact of Studying on Vitamin D Levels among College Students**

**Dr. Jennifer Gay, College of Public Health**

Vitamin D (25 hydroxy Vitamin D) is essential for bone and immune health in adults. Sun exposure and diet are the two main sources of vitamin D. In college students, levels of Vitamin D likely fluctuate during a semester due to changes in time spent indoors (e.g. too hot, too cold, rainy) or dietary choices. A potential confounding factor is time spent studying. Vitamin D levels may drop at times when students are preparing for exams or papers, increasing risk for deficiency. This may be problematic for immune health as periods of stress (i.e. around exams or paper deadlines) may also weaken the body's defenses.

The purpose of this study is to examine the perturbations in Vitamin D relative to amount of time spent studying across the course of an academic semester.

Participants will provide a blood sample and self-report dietary intake, time spent indoors and outdoors, and the amount of time spent studying. Measures will be taken at four time points during the semester, with specific attention paid to mid-term and final exam weeks. Analyses will include repeated measures analysis of covariance (ANCOVA) controlling for potential confounders such as outdoor physical activity participation, weather, and weight status. Participants will also be asked about their knowledge of Vitamin D.

The results of the proposed study may be used to inform awareness-raising strategies regarding Vitamin D and health. This project will be conducted in partnership with the University Health Center.