

**Terydon Hall, Scott Ollinger: Metabolic Research Lab (Blackfeet Community College)**

**Mentor: Jim Kipp -- Math & Science Department**

***Combining both Qualitative and Quantitative Measures***

This project investigates serum levels of cortisol within a federally recognized tribe. Cortisol, a steroid hormone, is produced and released via adrenal gland function. Relevant to this study, cortisol can be detrimental to humans, as it directly suppresses immune function and thereby increases disease susceptibility. Historically, incidence of chronic disease is markedly higher within Native American populations, than other ethnicities. This mixed-methods study, combining both quantitative and qualitative measures, seeks to determine whether this federally recognized tribe experiences prolonged high-stress events via serum sample and analysis. A further goal of this investigation is to ascertain whether or not stress levels are related to increased infection vulnerability and chronic disease, via a participant self-report survey.

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