Module Name: Intake and absorption (protein, tannins, coumarins and phenolics)

Institution: Boise State University
Principle Investigator(s): Jen Forbey, jenniferforbey@boisestate.edu

Summary:
In this module, students will:

- Understand the relevancy of toxin and nutrient absorbance to understand the physiology of animals
- Use scientific practices to quantify and compare toxin absorbance by animals
- Understand how the environment and animal morphology influences the physiological process of absorption
- Archive digital data on toxin absorbance by your animal for future iteration, collaboration and discovery

This module has been used in BSU's Animal Physiology & Nutrition (ZOOL 409) course.

Contents:
Coumarins and Phenolics

- Lab 4: Absorption
- Lab 4 Supply List
- Guide*: Analyzing Standard Curve and Dilution Data*
- Guide: *Phenolics Plate Template*
- Image: Phenolic Plate Labeled Standards
- Spreadsheet: *Analyzing Standard Curve and Dilution Data*
- Spreadsheet: *Analyzing Standard Curve and Dilution Data* (Instructor's Key)

Proteins

- Lab: Using a Standard Curve to Quantify Unknowns
- Lab Supply List

Tannins

- Lab: Radial Diffusion Tannin Assay Protocol
- Protocol: Tannin Assay Agar Recipe (Radial Diffusion Assay)
- Spreadsheet: Tannins Data Analysis (Example)

Notes:

- Coumarins and possibly tannins may be available via kit to make agar petri dishes.
- Graduate students are available to assist in teaching this lab remotely. Depending on travel and availability, they may be able to teach in person.

Questions? Contact the PI or the GEM3 PUI Liaison, Stephanie Sevigny, stephaniesevigny@boisestate.edu
Last Updated: 08/10/2020