# Allegheny Mountain Colloquium

**PennWest CALIFORNIA**

**Speaker**: Dr. Bismark Oduro
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**Date**: 8 November 2022, 4PM–5PM

**Zoom link**: `https://bit.ly/3ei2B8U`

**Title**: Mathematical modeling of infectious diseases

**Abstract**:

Mathematical models of biological phenomena can often uncover essential mechanisms that drive the dynamics of biological systems. The insights thus gained from modeling may then allow us to predict what would happen in the real world if one makes certain choices, for example, choices of how to implement certain control measures. Infectious diseases are examples of biological systems. In this presentation, I will illustrate how ordinary differential equations can be used to study the spread of infectious diseases and population dynamics. I will use a research project on re-infestation of Chagas insect vectors as an example.