

Creighton University Department of Mathematics Invites You To Attend

# Department of Mathematics Colloquium

Friday, March 22, 2019 | 3:30 p.m. | HLSB 522

## *“Statistical Methods for Querying the Regulatory Role of DNA”*



**Leslie Myint, Ph.D.**  
**Macalester College,**  
**St. Paul, MN**

Join us in HLSB 503 at  
3:00 p.m. for a reception  
before the talk.

DNA is often called the blueprint for life because it encodes the information needed for our cells to function. A major way that DNA carries information is by encoding information needed to make proteins, a process called gene expression. However, it has been found that only a small fraction of DNA (about 1.5%) actually contains information to make proteins. What then does the rest of DNA do? A prevailing hypothesis is that much of DNA is involved in regulating its own expression. The fact that so much of DNA might fill this role makes testing these hypotheses a major focus in molecular biology research. In this talk, I'll discuss a relatively new biological assay that has been developed to test these hypotheses and the statistical methodology that we have developed to analyze data from these assays.