

When: Friday, November 1<sup>st</sup>, 2019, 12:15pm-1:15pm Where: Exley 058 Lunch provided for attendees. Open to the entire Wesleyan community!

> With speaker: Helen Karimi BA/MA in NS&B

## All good things come in pairs:

uncovering the activity of BcnI through co-localization microscopy



Restriction endonucleases (REases) are a large family of enzymes that make sequence-specific cuts in DNA. Type IIP REases usually cleave sequences as homodimers. However, BcnI, an enzyme belonging to this subtype, acts as a monomer. Since it contains a single active site, its mechanism of cleavage likely differs significantly from other members of this subtype. My work aims to observe the fine details of BcnI's cleavage mechanism by using Total Internal Reflection Fluorescence (TIRF) microscopy, an imaging technique in which only molecules within a few hundred nanometers of a glass surface are illuminated.