



# CLARK UNIVERSITY

Gustaf H. Carlson School of Chemistry and Biochemistry

## FALL 2021 SEMINAR SERIES

**Steven Beasley, Ph.D. Graduate Student**

### **Research Proposal Presentation**

#### **“Point-of-Care detection of Prostate Cancer Biomarkers”**

**Abstract:** The primary goal of this research proposal is to develop a simple, quick, inexpensive, and accurate Point-of-Care test-strip based assay that uses multiple prostate cancer biomarkers to help Urologists provide better screening and treatment options for patients at risk for prostate cancer. Prostate cancer will be diagnosed in 1 in 9 men during their lifetime according to the Prostate Cancer Foundation. The treatment of this disease benefits from early detection and screening. However, the current testing methods are particularly invasive and/or rely on biomarkers with both low specificity and low sensitivity. Significant advances in the past decade to identify novel biomarkers as well as development of the CRISPR/Cas system in diagnostics will allow for the development of test strips to help identify early detection of prostate cancer at an earlier stage as well as differentiate prostate cancer from other symptomatically similar prostatic conditions. This will ultimately provide patients a timely, inexpensive, non-invasive screening option during the management of prostate disease.

**Friday, October 22<sup>nd</sup> 2021**

**12:15 PM | Via Zoom**