

# BCOE TUNE Summer Bridge to Research Presentation

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## Brendan Santos



**Major: Electrical  
Engineering**

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**Principal Investigator:  
Dr. Kevin Freedman**

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**Transferring From:**

**NORCO  
COLLEGE**

**Tuesday September 8th, 2020  
1:30-2pm**

**[Click Here to Register](#)**

Brendan is working in the University of California, Riverside Nanoscale Sensing and Biology Lab under Dr. Kevin Freedman to assist in the development of nanopore technology for DNA sequencing. Such technology has proven to be a massive breakthrough in allowing for the cost of genome sequencing to significantly drop and soon allow for precision medicine in the healthcare industry. Aligning with the lab's philosophy of advancing this breakthrough, Brendan has been designing and constructing a low-cost prototype amplifier to be used in patch-clamp nanopore DNA sequencing systems and determine its feasibility as a cost-effective solution.



Training from Undergraduate  
through Navy Engagement

**UC RIVERSIDE**  
Marlan and Rosemary Bourns  
College of Engineering