



# Faculty Search Biology Seminar

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Speaker: **Nicholas Bellono**

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## Molecular basis of electroreception in skates and sharks



**Monday, April 02, 2018 | 12:00pm**  
**HCK 132 Refreshments at 11:45am**

Sharks, rays, and skates use unique electrosensory organs to detect and discriminate incredibly small changes in environmental electric fields for predation, communication, and navigation. We find that electrosensory cells within these organs use specialized ion channels and unusually long ribbon synapses to support the detection of small,

specific electric signals that are suited for particular behavioral contexts. These studies reveal a molecular basis for electroreception and demonstrate how discrete evolutionary modifications facilitate sensory system adaptation.

