Current and ongoing beta cell research is presented in this weekly seminar by faculty, postdoctoral fellows and students. If you are interested in attending the Beta Cell Interest Group (BIG) seminars and joining the BIG community, please contact David Jacobson.

Meeting Details

**Start Date / Time**
January 23, 2019 at 9:00 AM

**End Date / Time**
January 23, 2019 at 9:55 AM

**Duration**
55 minutes

**Location**
206 PRB

**Presenter Name**
Diane Saunders (Powers lab)

**Presentation Title**
NTPDase3 antibody: targeting adult human pancreatic β cells for in vitro and in vivo analysis

**Status**
This meeting is currently scheduled

Meeting Agenda/Notes

Our group recently identified ectonucleoside triphosphate diphosphohydrolase-3 (NTPDase3) as a highly enriched biomarker expressed on adult human β cells, showing that an NTPDase3 antibody can be used for in vivo live β cell sorting and imaging. I will summarize immunohistochemical data, including for donors with diabetes, and describe the dynamic expression of NTPDase3 during postnatal human pancreas development. I will also present our cell sorting strategy using an NTPDase3 antibody to isolate a highly pure β cell subpopulation from dispersed human islets, and describe experiments to detect human β cells in vivo. We hope that the NTPDase3 antibody will become a useful reagent in the field, and look forward to discussion about its possible applications.