

Beta Cell Interest Group (BIG)

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](#).

Keywords: islet beta cell

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Meeting Details

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| Start Date / Time | April 26, 2017 at 9:00 AM |
| End Date / Time | April 26, 2017 at 9:55 AM |
| Duration | 55 minutes |
| Location | 206 Preston Research Building |
| Presenter Name | Diane Saunders (Powers' laboratory) |
| Presentation Title | Endothelial cells in the islet microenvironment promote β -cell proliferation |
| Status | This meeting has already occurred |

Meeting Agenda/Notes

Pancreatic islets are highly vascularized, highly innervated mini-organs in which the local islet microenvironment of endocrine cells, endothelial cells, macrophages, and extracellular matrix interact and play critical roles in β -cell mass and function. Our group has shown that bone marrow-derived macrophages recruited to pancreatic islets are required for β -cell regeneration, and we are further interrogating this process by determining the role of proliferating and quiescent endothelial cell signaling in macrophage recruitment and subsequent β -cell regeneration. We are also extending these studies to human islets, which differ considerably from rodent islets, by investigating the structural and transcriptional changes in human intra-islet endothelial cells with aging and determining their role in human β -cell proliferation.