Stanford

Nicole Krentz

Postdoctoral Research Fellow, Endocrinology and Metabolism

Bio

BIO

Nicole completed her PhD at the University of British Columbia under the supervision of Francis Lynn in 2018. Her PhD research focused on pancreas development and endocrine cell genesis using mouse embryos and human embryonic stem cell differentiation as models. In 2018, Nicole joined Anna Gloyn's group at the Wellcome Centre for Human Genetics at the University of Oxford. For her post-doctoral studies, Nicole is investigating the role of diabetes associated genes in pancreas development using genome-editing in human induced pluripotent stem cell models. In 2020, Nicole relocated to Stanford University where she will continue her post-doctoral research on the translation of genetic association signals for type 2 diabetes.

HONORS AND AWARDS

- Robert Turner Research Associate, Green Templeton College at University of Oxford (2018-2019)
- NSERC Postgraduate Scholarship, Natural Science and Engineering Research Council of Canada (2015-2017)
- Four Year Doctoral Fellowship, University of British Columbia (2014-2018)
- Sue Carruther's Graduate Studentship, BC Children's Hospital Research Institute (2014-2016)
- Transplant Training Research Program, University of British Columbia (2011-2013)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of British Columbia (2018)
- Bachelor of Science, University of British Columbia (2011)
- PhD, University of British Columbia , Cell and Developmental Biology (2018)
- BSc, University of British Columbia , Cell Biology and Genetics (2011)

STANFORD ADVISORS

- Anna Gloyn, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Anna Gloyn (3/2/2020)

Publications

PUBLICATIONS

- **Insights into pancreatic islet cell dysfunction from type 2 diabetes mellitus genetics.** *Nature reviews. Endocrinology*

Krentz, N. A., Gloyn, A. L.
2020

- **Loss of ZnT8 function protects against diabetes by enhanced insulin secretion.** *Nature genetics*
  Dwivedi, O. P., Lehtovirta, M., Hastoy, B., Chandra, V., Krentz, N. A., Kleiner, S., Jain, D., Richard, A. M., Abaitua, F., Beer, N. L., Grotz, A., Prasad, R. B., Hansson, et al
  2019; 51 (11): 1596–1606

- **TrxG Complex Catalytic and Non-catalytic Activity Play Distinct Roles in Pancreas Progenitor Specification and Differentiation.** *Cell reports*
  Campbell, S. A., McDonald, C. L., Krentz, N. A., Lynn, F. C., Hoffman, B. G.
  2019; 28 (7): 1830–44.e6

- **Single-Cell Transcriptome Profiling of Mouse and hESC-Derived Pancreatic Progenitors.** *Stem cell reports*
  Krentz, N. A., Lee, M. Y., Xu, E. E., Sproul, S. L., Maslova, A., Sasaki, S., Lynn, F. C.
  2018; 11 (6): 1551–64

- **Phosphorylation of NEUROG3 Links Endocrine Differentiation to the Cell Cycle in Pancreatic Progenitors.** *Developmental cell*
  Krentz, N. A., van Hoof, D., Li, Z., Watanabe, A., Tang, M., Nian, C., German, M. S., Lynn, F. C.
  2017; 41 (2): 129–42.e6

- **SOX4 cooperates with neurogenin 3 to regulate endocrine pancreas formation in mouse models.** *Diabetologia*
  Xu, E. E., Krentz, N. A., Tan, S., Chow, S. Z., Tang, M., Nian, C., Lynn, F. C.
  2015; 58 (5): 1013–23

- **TALEN/CRISPR-mediated eGFP knock-in add-on at the OCT4 locus does not impact differentiation of human embryonic stem cells towards endoderm.** *PloS one*
  Krentz, N. A., Nian, C., Lynn, F. C.
  2014; 9 (12): e114275

- **A regulatory network controls nephrocan expression and midgut patterning.** *Development (Cambridge, England)*
  Hou, J., Wei, W., Saund, R. S., Xiang, P., Cunningham, T. J., Yi, Y., Alder, O., Lu, D. Y., Savory, J. G., Krentz, N. A., Montpetit, R., Cullum, R., Hofs, et al
  2014; 141 (19): 3772–81

- **Npas4 is a novel activity-regulated cytoprotective factor in pancreatic #-cells.** *Diabetes*
  Sabatini, P. V., Krentz, N. A., Zarrouki, B., Westwell-Roper, C. Y., Nian, C., Uy, R. A., Shapiro, A. M., Poitout, V., Lynn, F. C.
  2013; 62 (8): 2808–20