Stanford

Jennifer Ikle

Instructor, Pediatrics - Endocrinology and Diabetes

Curriculum Vitae available Online

CLINICAL OFFICES

- **Medicine Specialties Clinic**

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Bio

BIO

Dr. Jen Ikle completed a combined MD/PhD program at the University of Colorado Denver, Anschutz Medical campus. While earning her PhD, she worked in the lab of Dr. David Clouthier studying genetics and transcriptional regulatory networks, with an emphasis on craniofacial development in the embryo. After completion of her MD, Jen completed both Pediatrics Residency and Fellowship in Pediatric Endocrinology and Diabetes at Washington University in St. Louis and St. Louis Children's Hospital. During her fellowship, Jen worked in the lab of Dr. Colin Nichols where she developed a passion for regulation of insulin secretion from the beta cells of the pancreas. She has a specific interest in the role of ATP-sensitive potassium (KATP) channels. Genetic disruption of these channels leads to neonatal diabetes (in KATP gain of function mutations) or congenital hyperinsulinism (in KATP loss of function mutations). Jen also has a clinical interest in diabetes and hyperinsulinism.

CLINICAL FOCUS

- Pediatrics

ACADEMIC APPOINTMENTS

- Instructor, Pediatrics - Endocrinology and Diabetes
- Member, Maternal & Child Health Research Institute (MCHRI)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Diabetes Association (2020 - present)
- Member, Pediatric Endocrine Society (2017 - present)
- Member, American Academy of Pediatrics (2013 - present)

PROFESSIONAL EDUCATION

- Fellowship: St Louis Children's Hospital Washington University (2020) MO
- Board Certification: Pediatrics, American Board of Pediatrics (2017)
- Residency: St Louis Children's Hospital Washington University Pediatric Residency (2017) MO
- Medical Education: University of Colorado School of Medicine (2014) CO

- Fellowship, Washington University and St. Louis Children's Hospital , Pediatric Endocrinology and Diabetes (2020)
- Board Certification, American Board of Pediatrics , General Pediatrics (2017)
- Residency, Washington University and St. Louis Children's Hospital , Pediatrics (2017)
- Internship, Washington University and St. Louis Children's Hospital , Pediatrics (2015)
- Ph.D., University of Colorado Denver , Cells, Stem Cells, and Developmental Biology (2012)
- M.D., University of Colorado Denver (2014)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Jen is interested in the genetic factors that lead to abnormal beta-cell function and insulin secretion, causing disorders such as hyperinsulinism and neonatal diabetes.

Jen’s current research focus is the use of zebrafish models, combined with genetics and genomics, to understand cellular and molecular mechanisms of glucose metabolism and elucidate previously unknown players involved in the regulation of insulin secretion.

Publications

PUBLICATIONS

- **Beta-cell excitability and excitability-driven diabetes in adult Zebrafish islets.** *Physiological reports*
  Emfinger, C. H., L#rincz, R., Wang, Y., York, N. W., Singareddy, S. S., Ikle, J. M., Tryon, R. C., McClenaghan, C., Shyr, Z. A., Huang, Y., Reissaus, C. A., Meyer, D., Piston, et al
  2019; 7 (11): e14101
- **Nkx2.5 regulates endothelin converting enzyme-1 during pharyngeal arch patterning.** *Genesis (New York, N.Y. : 2000)*
  Iklé, J. M., Tavares, A. L., King, M., Ding, H., Colombo, S., Firulli, B. A., Firulli, A. B., Targoff, K. L., Yelon, D., Clouthier, D. E.
  2017; 55 (3)
- **Identification and characterization of the zebrafish pharyngeal arch-specific enhancer for the basic helix-loop-helix transcription factor Hand2.** *Developmental biology*
  Iklé, J. M., Artinger, K. B., Clouthier, D. E.
  2012; 368 (1): 118–26
- **Pathogen entrapment by transglutaminase--a conserved early innate immune mechanism.** *PLoS pathogens*
  Wang, Z., Wilhelmsson, C., Hyrsl, P., Loof, T. G., Dobes, P., Klupp, M., Loseva, O., Mörgelin, M., Iklé, J., Cripps, R. M., Herwald, H., Theopold, U.
  2010; 6 (2): e1000763
- **Cardiac expression of the Drosophila Transglutaminase (CG7356) gene is directly controlled by myocyte enhancer factor-2.** *Developmental dynamics : an official publication of the American Association of Anatomists*
  Iklé, J., Elwell, J. A., Bryantsev, A. L., Cripps, R. M.
  2008; 237 (8): 2090–99