Stanford



Jessica L. Ruiz

Instructor, Pediatrics - Endocrinology

Bio

BIO

Dr. Jessica Ruiz is a pediatric endocrinologist and Instructor at Stanford University and the Lucile Packard Children's Hospital.

As a pediatrician-scientist and bioengineer, Dr. Ruiz's scholarly interest is pediatric type 2 diabetes. Her passion is to better predict, prevent and treat type 2 diabetes through digital phenotyping. Dr. Ruiz's vision is to apply data science and machine learning approaches to continuous glucose monitoring (CGM) data. Her work seeks to parameterize glucose kinetics to ultimately build CGM-based type 2 diabetes risk profiles. She is also involved in multiple clinical studies using dynamic CGM metrics to inform clinical care for patients with diabetes - including staging of diabetes as it develops.

Clinically, Dr. Ruiz enjoys caring for all pediatric patients seeking general endocrinology and diabetes care.

A native Texan, Dr. Ruiz obtained a B.S. in Bioengineering from Rice University (Houston, TX). She completed her M.D. at Harvard Medical School in the Harvard-MIT Health Sciences and Technology (HST) program (Boston, MA). She remained at Harvard to complete her training in Pediatrics in the Boston Combined Residency Program (Boston Children's Hospital and Boston Medical Center), followed by her training in Pediatric Endocrinology at Boston Children's Hospital. She was on the faculty at Boston Children's Hospital/Harvard Medical School as an Instructor for 2 years prior to moving to Stanford.

Dr. Ruiz also enjoys mentoring trainees and was formerly a Harvard Medical School Faculty Advisor and Associate Program Director for the Boston Children's Pediatric Endocrinology Fellowship Program.

ACADEMIC APPOINTMENTS

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

PROFESSIONAL EDUCATION

- Board Certification, American Board of Pediatrics , Pediatric Endocrinology (2025)
- Fellowship, Boston Children's Hospital Pediatric Endocrinology Fellowship (2024)
- Board Certification, American Board of Pediatrics , Pediatrics (2021)
- Residency, Boston Combined Residency Program , Pediatrics (2021)

- M.D., Harvard Medical School (2018)
- B.S., Rice University , Bioengineering (2013)

Publications

PUBLICATIONS

- **Pediatric Inpatient Continuous Glucose Monitor Accuracy by Sensor Wear Day, Hospital Day, and Glucose Rate of Change.** *Diabetes technology & therapeutics*
  Ruiz, J. L., Stein, A. B., Wheelock, A., Stewart, B., Bernique, A. S., Jost, E., Garvey, K. C., Astley, C. M., Cobry, E. C.
  2026: 15209156261486139
- **Continuous glucose monitoring evidence of celiac disease in type 1 diabetes.** *Journal of pediatric endocrinology & metabolism : JPEM*
  Ruiz, J. L., Asaro, L. A., Bernique, A. S., Healey, E., Silvester, J. A., Wypij, D., Agus, M. S., Astley, C. M.
  2025; 38 (11): 1126-1134
- **A case study on using a large language model to analyze continuous glucose monitoring data.** *Scientific reports*
  Healey, E., Tan, A. L., Flint, K. L., Ruiz, J. L., Kohane, I.
  2025; 15 (1): 1143
- **Hispanic Caregivers' experience of pediatric type 1 diabetes: A qualitative study.** *Pediatric diabetes*
  Tremblay, E. S., Ruiz, J., Dykeman, B., Maldonado, M., Garvey, K.
  2021; 22 (7): 1040-1050
- **Nanoanalytical analysis of bisphosphonate-driven alterations of microcalcifications using a 3D hydrogel system and in vivo mouse model.** *Proceedings of the National Academy of Sciences of the United States of America*
  Ruiz, J. L., Hutcheson, J. D., Cardoso, L., Bakhshian Nik, A., Condado de Abreu, A., Pham, T., Buffolo, F., Busatto, S., Federici, S., Ridolfi, A., Aikawa, M., Bertazzo, S., Bergese, et al
  2021; 118 (14)
- **Health Care Transition in Youth With Type 1 Diabetes and an A1C >9%: Qualitative Analysis of Pre-Transition Perspectives.** *Diabetes spectrum : a publication of the American Diabetes Association*
  Tremblay, E. S., Ruiz, J., Buccigrosso, T., Dean, T., Garvey, K.
  2020; 33 (4): 331-338
- **Zooming in on the genesis of atherosclerotic plaque microcalcifications.** *The Journal of physiology*
  Ruiz, J. L., Weinbaum, S., Aikawa, E., Hutcheson, J. D.
  2016; 594 (11): 2915-27
- **Genesis and growth of extracellular-vesicle-derived microcalcification in atherosclerotic plaques** *NATURE MATERIALS*
  Hutcheson, J. D., Goettsch, C., Bertazzo, S., Maldonado, N., Ruiz, J. L., Goh, W., Yabusaki, K., Faits, T., Bouten, C., Franck, G., Quillard, T., Libby, P., Aikawa, et al
  2016; 15 (3): 335-+
- **Cardiovascular calcification: current controversies and novel concepts.** *Cardiovascular pathology : the official journal of the Society for Cardiovascular Pathology*
  Ruiz, J. L., Hutcheson, J. D., Aikawa, E.
  2015; 24 (4): 207-12
- **Effect of pramlintide on prandial glycemic excursions during closed-loop control in adolescents and young adults with type 1 diabetes.** *Diabetes care*
  Weinzimer, S. A., Sherr, J. L., Cengiz, E., Kim, G., Ruiz, J. L., Carria, L., Voskanyan, G., Roy, A., Tamborlane, W. V.
  2012; 35 (10): 1994-9
- **Effect of insulin feedback on closed-loop glucose control: a crossover study.** *Journal of diabetes science and technology*
  Ruiz, J. L., Sherr, J. L., Cengiz, E., Carria, L., Roy, A., Voskanyan, G., Tamborlane, W. V., Weinzimer, S. A.
  2012; 6 (5): 1123-30