Stanford

Jessica Kain

Ph.D. Student in Genetics, admitted Autumn 2021

Research & Scholarship

CURRENT CLINICAL INTERESTS

- Rare Diseases
- Metabolism, Inborn Errors
- Personalized Medicine

RESEARCH PROJECTS

- Detecting and monitoring rare disease with untargeted metabolomics and multi-omic integration

LAB AFFILIATIONS

- Michael Snyder (6/1/2022)

Publications

PUBLICATIONS

- **Mendelian randomization and pathway analysis demonstrate shared genetic associations between lupus and coronary artery disease.** *Cell reports. Medicine*
  Kain, J., Owen, K. A., Marion, M. C., Langefeld, C. D., Grammer, A. C., Lipsky, P. E.
  2022; 3 (11): 100805
- **Pioneer factor Foxa2 enables ligand-dependent activation of type II nuclear receptors FXR and LXRα.** *Molecular metabolism*
  Kain, J., Wei, X., Reddy, N. A., Price, A. J., Woods, C., Bochkis, I. M.
  2021; 53: 101291
- **Genes causative of primary immunodeficiency are risk factors for and are over-expressed in systemic lupus erythematosus** *FRONTIERS IN IMMUNOLOGY*
  Davis, H., Owen, K. A., Labonte, A. C., Hubbard, E. L., Kerns, S., Kain, J., Kegerreis, B., Bachali, P., Grammer, A. C., Lipsky, P. E.
  2026; 17: 1494343
- **GREGoR: accelerating genomics for rare diseases.** *Nature*
  Dawood, M., Heavner, B., Wheeler, M. M., Ungar, R. A., LoTempio, J., Wiel, L., Berger, S., Bernstein, J. A., Chong, J. X., Délot, E. C., Eichler, E. E., Lupski, J. R., Shojaie, et al
  2025; 647 (8089): 331-342
- **Genetic association with autoimmune diseases identifies molecular mechanisms of coronary artery disease.** *iScience*
  Kerns, S., Owen, K. A., Daamen, A., Kain, J., Grammer, A. C., Lipsky, P. E.
  2024; 27 (9): 110715
- **Considerations for reporting variants in novel candidate genes identified during clinical genomic testing.** *Genetics in medicine : official journal of the American College of Medical Genetics*
  Chong, J. X., Berger, S. I., Baxter, S., Smith, E., Xiao, C., Calame, D. G., Hawley, M. H., Rivera-Munoz, E. A., DiTroia, S., Bamshad, M. J., Rehm, H. L.
  2024: 101199
- **Integrative analyses highlight functional regulatory variants associated with neuropsychiatric diseases.** *Nature genetics*

Guo, M. G., Reynolds, D. L., Ang, C. E., Liu, Y., Zhao, Y., Donohue, L. K., Siprashvili, Z., Yang, X., Yoo, Y., Mondal, S., Hong, A., Kain, J., Meservey, et al

2023

- **Beyond the exome: What's next in diagnostic testing for Mendelian conditions.** *American journal of human genetics*

  Wojcik, M. H., Reuter, C. M., Marwaha, S., Mahmoud, M., Duyzend, M. H., Barseghyan, H., Yuan, B., Boone, P. M., Groopman, E. E., Délot, E. C., Jain, D., Sanchis-Juan, A., Starita, et al

  2023; 110 (8): 1229-1248

- **Systemic lupus erythematosus and cardiovascular disease: A Mendelian randomization study** *FRONTIERS IN IMMUNOLOGY*

  Kerns, S., Owen, K. A., Kain, J., Lipsky, P. E.

  2022; 13: 1075400

- **Hdac3, Setdb1, and Kap1 mark H3K9me3/H3K14ac bivalent regions in young and aged liver.** *Aging cell*

  Price, A. J., Manjegowda, M. C., Kain, J., Anandh, S., Bochkis, I. M.

  2020; 19 (2): e13092