Stanford



Megan Martin

Ph.D. Student in Bioengineering, admitted Autumn 2024

Bio

BIO

I am a Bioengineering PhD student in the Radiological Sciences Laboratory. My research interest is in advancing magnetic resonance imaging (MRI) techniques to understand brain physiology, enhance disease diagnosis, and improve patient care. Before joining Stanford Bioengineering in 2024, I investigated the impact of congenital heart defects on neurodevelopment as part of the Pediatric Heart and Brain Research Group at UCSF. I graduated from the University of San Francisco in 2021 with a BS in Chemistry and Mathematics.

EDUCATION AND CERTIFICATIONS

- Bachelor of Chemistry, University of San Francisco , Chemistry, Mathematics (2021)
- B.S., University of San Francisco , Chemistry, Mathematics (2021)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Characterization of brain waste clearance with motion-encoding MRI

Publications

PUBLICATIONS

- **Environmental Exposures Influence Fetal Brain Growth and Risk of Neonatal Brain Injury in Congenital Heart Disease.** *Pediatric cardiology*
  DeRose, L., Martin, M., George, E., Silva, K. L., Gallegos, F. N., Steurer, M., Xu, D., McQuillen, P., Peyvandi, S.
  2026
- **Patterns of MRI Brain Injury in Children after Out-of-Hospital Cardiac Arrest.** *AJNR. American journal of neuroradiology*
  Shih, J. J., Baker, A., Vassar, R., Mehta, N., Wietstock, S. O., Amorim, E., George, E., Lindan, C., Glenn, O., Hetts, S., Martin, M., McCulloch, C. E., Xu, et al
  2026; 47 (4): 1081-1088
- **Effect of Fetal Brain Oxygenation and Volume on Brain Maturation and Neurodevelopmental Outcomes in Congenital Heart Disease.** *Radiology*
  George, E., Liu, J., Martin, M., Kuang, A., Scheffler, A., Christopher, L., Xu, D., McQuillen, P., Peyvandi, S.
  2025; 317 (1): e250651