Stanford

João P. Monteiro

Instructor, Medicine - Cardiovascular Medicine

Bio

ACADEMIC APPOINTMENTS

- Instructor, Medicine - Cardiovascular Medicine

HONORS AND AWARDS

- Postdoctoral Fellowship, American Heart Association (2024)
- Career Development Award (CDA), American Heart Association (2026)

PROFESSIONAL EDUCATION

- Ph.D., University of Edinburgh , Cardiovascular Science

Publications

PUBLICATIONS

- **Single-Cell Studies Advance Understanding of the Genetic and Molecular Basis of Atherosclerosis.** *Circulation research*
  Li, D. Y., Monteiro, J. P., Zhao, Q., Stitziel, N. O., Quertermous, T.
  2026

- **Vascular smooth muscle cell state trajectories mediate molecular mechanisms of coronary disease risk.** *Nature communications*
  Li, D. Y., Kundu, S., Cheng, P., Gu, W., Worssam, M. D., Jackson, W. R., Zhao, Q., Nguyen, T., Yu, A. M., Monteiro, J. P., Caceres, R. D., Dale, S., Palmisano, et al
  2026

- **A cell and transcriptome atlas of human arterial vasculature.** *Cell genomics*
  Zhao, Q., Pedroza, A., Sharma, D., Gu, W., Dalal, A., Weldy, C., Jackson, W., Li, D. Y., Ryan, Y., Nguyen, T., Shad, R., Palmisano, B. T., Monteiro, et al
  2025: 101034

- **Smooth muscle expression of RNA editing enzyme ADAR1 controls activation of the RNA sensor MDA5 in atherosclerosis.** *Nature cardiovascular research*
  Weldy, C. S., Li, Q., Monteiro, J. P., Peters, T. S., Guo, H., Galls, D., Gu, W., Cheng, P. P., Ramste, M., Li, D., Palmisano, B. T., Sharma, D., Worssam, et al
  2025

- **Epigenomic landscape of single vascular cells reflects developmental origin and disease risk loci.** *Molecular systems biology*
  Weldy, C. S., Kundu, S., Monteiro, J., Gu, W., Pedroza, A. J., Dalal, A. R., Worssam, M. D., Li, D., Palmisano, B., Zhao, Q., Sharma, D., Nguyen, T., Kundu, et al
  2025

- **Targeting Cis-regulatory elements for CRISPR-mediated transcriptional activation of the human MIR503HG locus.** *Vascular pharmacology*
  Monteiro, J. P., Vacante, F., De Pace, A., Bennett, M., Rodor, J., O'Carroll, D., Wu, J. C., Quertermous, T., Baker, A. H.

2025: 107521

- **Loss of conserved long non-coding RNA MIR503HG leads to altered NOTCH pathway signalling and left ventricular non-compaction cardiomyopathy.** *Cardiovascular research*
  Monteiro, J. P., Saha, D., Spiroski, A. M., Mahesh, S., Kaltzis, P., Nadavallil, A., Janbandhu, V., Murray, N. J., Severi, F., De Pace, A. L., Sánchez-Esteban, S., Rodor, J., Beqqali, et al
  2025

- **Deciphering the impact of genomic variation on function.** *Nature*
  2024; 633 (8028): 47-57

- **Genome-Wide Genetic Associations Prioritize Evaluation of Causal Mechanisms of Atherosclerotic Disease Risk.** *Arteriosclerosis, thrombosis, and vascular biology*
  Quertermous, T., Li, D. Y., Weldy, C. S., Ramste, M., Sharma, D., Monteiro, J. P., Gu, W., Worssam, M. D., Palmisano, B. T., Park, C. Y., Cheng, P.
  2024; 44 (2): 323-327

- **Extracellular vesicles from differentiated stem cells contain novel proangiogenic miRNAs and induce angiogenic responses at low doses.** *Molecular therapy : the journal of the American Society of Gene Therapy*
  Kesidou, D., Bennett, M., Monteiro, J. P., McCracken, I. R., Klimi, E., Rodor, J., Condie, A., Cowan, S., Caporali, A., Wit, J. B., Mountford, J. C., Brittan, M., Beqqali, et al
  2023

- **Discovery of Transacting Long Noncoding RNAs That Regulate Smooth Muscle Cell Phenotype.** *Circulation research*
  Shi, H., Nguyen, T., Zhao, Q., Cheng, P., Sharma, D., Kim, H. J., Brian Kim, J., Wirka, R., Weldy, C. S., Monteiro, J. P., Quertermous, T.
  2023

- **Molecular mechanisms of coronary artery disease risk at the PDGFD locus.** *Nature communications*
  Kim, H., Cheng, P., Travisano, S., Weldy, C., Monteiro, J. P., Kundu, R., Nguyen, T., Sharma, D., Shi, H., Lin, Y., Liu, B., Haldar, S., Jackson, et al
  2023; 14 (1): 847

- **From novel discovery tools and biomarkers to precision medicine - basic cardiovascular science highlights of 2021/2022.** *Cardiovascular research*
  Evans, P. C., Davidson, S. M., Wojta, J., Back, M., Bollini, S., Brittan, M., Catapano, A. L., Chaudhry, B., Cluitmans, M., Gnecchi, M., Guzik, T. J., Hoefer, I., Madonna, et al
  2022

- **The epigenomic landscape of single vascular cells reflects developmental origin and identifies disease risk loci** *bioRxiv*
  Weldy, C. S., Cheng, P. P., Pedroza, A. J., Dalal, A. R., Sharma, D., Kim, H., Shi, H., Nguyen, T., Kundu, R. K., Fischbein, M. P., Quertermous, T.
  2022

- **Single-cell RNA-seq profiling of mouse endothelial cells in response to pulmonary arterial hypertension.** *Cardiovascular research*
  Rodor, J., Chen, S., Scanlon, J. P., Monteiro, J. P., Caudrillier, A., Sweta, S., Stewart, K. R., Shmakova, A., Dobie, R., Henderson, B. E., Stewart, K., Hadoke, P. W., Southwood, et al
  2021

- **MIR503HG Loss Promotes Endothelial-to-Mesenchymal Transition in Vascular Disease.** *Circulation research*
  Monteiro, J. P., Rodor, J., Caudrillier, A., Scanlon, J. P., Spiroski, A., Dudnakova, T., Pfluger-Muller, B., Shmakova, A., von Kriegsheim, A., Deng, L., Taylor, R. S., Wilson-Kanamori, J. R., Chen, et al
  2021

- **Endothelial function and dysfunction in the cardiovascular system: the long non-coding road** *CARDIOVASCULAR RESEARCH*
  Monteiro, J. P., Bennett, M., Rodor, J., Caudrillier, A., Ulitsky, I., Baker, A. H.
  2019; 115 (12): 1692-1704