



Francisco Galdos

- Affiliate, Department Funds
- Resident in Pediatrics

Bio

INSTITUTE AFFILIATIONS

- Member (Student), Cardiovascular Institute

HONORS AND AWARDS

- Jacob Goldfield Scholarship, Harvard University (2011 - 2015)
- Amgens Scholars Fellowship, Amgen Scholars Program (2013)
- Detur Book Prize, Harvard University (2013)
- Herschel Smith Harvard Undergraduate Research Fellowship, Harvard University (2014)
- Dorothy Dee and Marjorie Helena Boring Trust iHeart Research Award, Stanford Cardiovascular Institute (2016)
- Stanford Society of Physician Scholars Research Award, The Stanford Society of Physician Scholars (2016)
- Ruth L. Krischstein Predoctoral NRSA F30, National Institutes of Health (2016 - 2021)
- Harold M. Weintraub Graduate Student Award, Fred Hutch Cancer Center (2023)

PROFESSIONAL EDUCATION

- Ph.D, Stanford University , Stem Cell and Regenerative Biology (2022)
- M.D., Stanford University , Medicine (2024)
- B.A., Harvard University , Human Developmental and Regenerative Biology (2015)

Research & Scholarship

LAB AFFILIATIONS

- Sean Wu (3/1/2015)

Publications

PUBLICATIONS

- **Benchmarking cell type and gene set annotation by large language models with AnnDictionary.** *Nature communications*
Crowley, G., Quake, S. R.
2025; 16 (1): 9511
- **IGFBP2 Mediates Human iPSC-Cardiomyocyte Proliferation in a Cellular Contact-Dependent Manner.** *Circulation research*
Lee, S., Heinrich, P., Lee, D., Kang, Y., Robinson, H., Humphrey, S. J., Yun, J., Goodyer, W. R., Buikema, J. W., Paik, D. T., Galdos, F. X., Kim, B., Belbachir, et al
2025

- **IGFBP2 Regulates Human iPSC-Derived Cardiomyocyte Proliferation Beyond Contact Inhibition**
Lee, S., Heinrich, P., Lee, D., Kang, Y., Goodyer, W., Buikema, J., Galdos, F., Moretti, A., Wu, S.
LIPPINCOTT WILLIAMS & WILKINS.2025
- **Cardiac Development at a Single-Cell Resolution.** *Advances in experimental medicine and biology*
Wei, N., Lee, C., Duan, L., Galdos, F. X., Samad, T., Raissadati, A., Goodyer, W. R., Wu, S. M.
2024; 1441: 253-268
- **Cardiac ACTN2 enhancer regulates cardiometabolism and maturation.** *Nature cardiovascular research*
Galdos, F. X., Lee, C., Wu, S. M.
2024; 3 (6): 616-618
- **Cardiac ACTN2 enhancer regulates cardiometabolism and maturation** *NATURE CARDIOVASCULAR RESEARCH*
Galdos, F. X., Lee, C., Wu, S. M.
2024
- **Modeling hiPSC-to-Early Cardiomyocyte Differentiation Process using Microsimulation and Markov Chain Models**
Rajendiran, S., Galdos, F., Lee, C., Xu, S., Harvell, J., Singh, S., Wu, S. M., Lipke, E. A., Cremaschi, S.
edited by Bassett, M., Cremaschi, S., Adams, T. A., Zafir, M.
PSE Press.2024: 344-350
- **Combined lineage tracing and scRNA-seq reveals unexpected first heart field predominance of human iPSC differentiation.** *eLife*
Galdos, F. X., Lee, C., Lee, S., Paige, S., Goodyer, W., Xu, S., Samad, T., Escobar, G. V., Darsha, A., Beck, A., Bak, R. O., Porteus, M. H., Wu, et al
2023; 12
- **The Role of Single-Cell Profiling and Deep Immunophenotyping in Understanding Immune Therapy Cardiotoxicity.** *JACC: CardioOncology*
Huang, Y. V., Waliyany, S., Lee, D., Galdos, F. X., Witteles, R. M., Neal, J. W., Fan, A. C., Maecker, H. T., Nguyen, P. K., Wu, S. M., Zhu, H.
2022; 4 (5): 629-634
- **devCellPy is a machine learning-enabled pipeline for automated annotation of complex multilayered single-cell transcriptomic data.** *Nature communications*
Galdos, F. X., Xu, S., Goodyer, W. R., Duan, L., Huang, Y. V., Lee, S., Zhu, H., Lee, C., Wei, N., Lee, D., Wu, S. M.
2022; 13 (1): 5271
- **In vivo visualization and molecular targeting of the cardiac conduction system.** *The Journal of clinical investigation*
Goodyer, W. R., Beyersdorf, B. M., Duan, L., van den Berg, N. S., Mantri, S., Galdos, F. X., Puluca, N., Buikema, J. W., Lee, S., Salmi, D., Robinson, E. R., Rogalla, S., Cogan, et al
2022
- **Identification of Pathogenic Immune Cell Subsets Associated With Checkpoint Inhibitor-Induced Myocarditis.** *Circulation*
Zhu, H., Galdos, F. X., Lee, D., Waliyany, S., Vivian Huang, Y., Ryan, J., Dang, K., Neal, J. W., Wakelee, H. A., Reddy, S. A., Srinivas, S., Lin, L. L., Witteles, et al
2022: 101161CIRCULATIONAHA121056730
- **The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans.** *Science (New York, N.Y.)*
Jones, R. C., Karkanias, J., Krasnow, M. A., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., Harper, W., Hemenez, M., Ponnusamy, R., Salehi, et al
2022; 376 (6594): eabl4896
- **Publisher Correction: Cell types of origin of the cell-free transcriptome.** *Nature biotechnology*
Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium, Quake, S. R., Jones, R. C., Karkanias, J., Krasnow, M., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., et al
2022
- **Cell types of origin of the cell-free transcriptome.** *Nature biotechnology*
Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium, Quake, S. R., Jones, R. C., Karkanias, J., Krasnow, M., Pisco, A. O., Quake, S. R., Salzman, J., Yosef, N., Bulthaupt, B., Brown, P., et al
2022
- **The Role of Single-Cell Profiling and Deep Immunophenotyping in Understanding Immune Therapy Cardiotoxicity** *JACC: CardioOncology*
Huang, Y. V., Waliyany, S., Lee, D., Galdos, F. X., Witteles, R. M., Neal, J. W., Fan, A. C., Maecker, H. T., Nguyen, P. K., Wu, S. M., Zhu, H.

2022; 4 (5): 629–634

- **RNA splicing programs define tissue compartments and cell types at single-cell resolution** *ELIFE*
Olivieri, J., Dehghannasiri, R., Wang, P. L., Jang, S., de Morree, A., Tan, S. Y., Ming, J., Wu, A., Consortium, T., Quake, S. R., Krasnow, M. A., Salzman, J.
2021; 10
- **CRISPR/Cas9-based targeting of fluorescent reporters to human iPSCs to isolate atrial and ventricular-specific cardiomyocytes.** *Scientific reports*
Chirikian, O., Goodyer, W. R., Dzilic, E., Serpooshan, V., Buikema, J. W., McKeithan, W., Wu, H., Li, G., Lee, S., Merk, M., Galdos, F., Beck, A., Ribeiro, et al
2021; 11 (1): 3026
- **Purification of Pluripotent Stem Cell-Derived Cardiomyocytes Using CRISPR/Cas9-Mediated Integration of Fluorescent Reporters.** *Methods in molecular biology (Clifton, N.J.)*
Galdos, F. X., Darsha, A. K., Paige, S. L., Wu, S. M.
2021; 2158: 223–40
- **Single-cell Transcriptomic Analysis Reveals Developmentally Impaired Endocardial Population in Hypoplastic Left Heart Syndrome**
Miao, Y., Tian, L., Martin, M., Paige, S., Galdos, F. X., Lee, S., Grossfeld, P. D., Mital, S., Wu, J. C., Rabinovitch, M., Nelson, T. J., Nie, S., Wu, et al
LIPPINCOTT WILLIAMS & WILKINS.2020
- **Patient-Specific Induced Pluripotent Stem Cells Implicate Intrinsic Impaired Contractility in Hypoplastic Left Heart Syndrome.** *Circulation*
Paige, S. L., Galdos, F. X., Lee, S., Chin, E. T., Ranjbarvaziri, S., Feyen, D. A., Darsha, A. K., Xu, S., Ryan, J. A., Beck, A. L., Qureshi, M. Y., Miao, Y., Gu, et al
2020; 142 (16): 1605–8
- **Intrinsic Endocardial Defects Contribute to Hypoplastic Left Heart Syndrome.** *Cell stem cell*
Miao, Y., Tian, L., Martin, M., Paige, S. L., Galdos, F. X., Li, J., Klein, A., Zhang, H., Ma, N., Wei, Y., Stewart, M., Lee, S., Moonen, et al
2020
- **Immune Profiling and Causal Antigen Discovery in Mouse and Human Models of Immune Checkpoint Inhibitor-induced Myocarditis**
Zhu, H., Lee, D., Sarah, W., Galdos, F. X., D'Addabbo, J., Fowler, M. B., Reddy, S., Heather, W., Neal, J. W., Witteles, R., Maecker, H. T., Davis, M., Nguyen, et al
LIPPINCOTT WILLIAMS & WILKINS.2020
- **Wnt Activation and Reduced Cell-Cell Contact Synergistically Induce Massive Expansion of Functional Human iPSC-Derived Cardiomyocytes.** *Cell stem cell*
Buikema, J. W., Lee, S. n., Goodyer, W. R., Maas, R. G., Chirikian, O. n., Li, G. n., Miao, Y. n., Paige, S. L., Lee, D. n., Wu, H. n., Paik, D. T., Rhee, S. n., Tian, et al
2020; 27 (1): 50–63.e5
- **Levitating Cells to Sort the Fit and the Fat.** *Advanced biosystems*
Puluca, N. n., Durmus, N. G., Lee, S. n., Belbachir, N. n., Galdos, F. X., Ogut, M. G., Gupta, R. n., Hirano, K. I., Krane, M. n., Lange, R. n., Wu, J. C., Wu, S. M., Demirci, et al
2020: e1900300
- **Single-Cell Delineation of Who's on First and Second Heart Fields During Development** *CIRCULATION RESEARCH*
Galdos, F. X., Wu, S. M.
2019; 125 (4): 411–13
- **Single-Cell Delineation of Who's on First and Second Heart Fields During Development.** *Circulation research*
Galdos, F. X., Wu, S. M.
2019; 125 (4): 411-413
- **Hypoplastic Left Heart Syndrome Patient-Derived Induced Pluripotent Stem Cells Exhibit Impaired Ventricular Cardiomyocyte Formation and Contractile Function**
Paige, S. L., Galdos, F. X., Lee, S., Beck, A., Dzilic, E., Lahm, H., DreBen, M., Laugwitz, K., Moretti, A., Krane, M., Wu, S. M.
LIPPINCOTT WILLIAMS & WILKINS.2018
- **Apolipoprotein E is a pancreatic extracellular factor that maintains mature β -cell gene expression.** *PLoS one*

Mahmoud, A. I., Galdos, F. X., Dinan, K. A., Jedrychowski, M. P., Davis, J. C., Vujic, A., Rachmin, I., Shigley, C., Pancoast, J. R., Lee, S., Hollister-Lock, J., MacGillivray, C. M., Gygi, et al
2018; 13 (10): e0204595

● **Cardiac Regeneration Lessons From Development** *CIRCULATION RESEARCH*

Galdos, F. X., Guo, Y., Paige, S. L., VanDusen, N. J., Wu, S. M., Pu, W. T.
2017; 120 (6): 941-959

● **Nkx2.5+ Cardiomyoblasts Contribute to Cardiomyogenesis in the Neonatal Heart.** *Scientific reports*

Serpooshan, V. n., Liu, Y. H., Buikema, J. W., Galdos, F. X., Chirikian, O. n., Paige, S. n., Venkatraman, S. n., Kumar, A. n., Rawnsley, D. R., Huang, X. n., Pijnappels, D. A., Wu, S. M.
2017; 7 (1): 12590