Stanford



Charles Sillett

Postdoctoral Scholar, Cardiovascular Medicine

Bio

HONORS AND AWARDS

- 2026 Electrophysiology Research Fellowship Scholarship, Heart Rhythm Society (2026-2027)
- Heart Rhythm Congress Young Investigator Award Finalist: Basic Science, Heart Rhythm Congress (2026)
- Travel Award, Stanford Cardiovascular Institute (2026)
- Travel Scholarship, Heart Rhythm Society (2024)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, King's College London , Biomedical Engineering (2025)
- Master of Physics, University of Oxford , Physics (2020)

STANFORD ADVISORS

- Sanjiv Narayan, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Noninvasive Characterization of Atrial and Ventricular Activation and Conduction Velocity by Solid-State Magnetocardiography in a Pre-Clinical Pacing Model**
  Brennan, K., Sillett, C., Bandyopadhyay, S., Lyons, J., Ganesan, P., Ansari, R., Liu, X., Wang, P. J., Narayan, S. M., Rogers, A. J.
  LIPPINCOTT WILLIAMS & WILKINS.2026: A7189

- **AUTOMATIC DIAGNOSTIC TEXT INTERPRETATION FROM 12-LEAD ECGS USING ECG-TEXT JOINT EMBEDDING FOUNDATION MODEL**
  Ganesan, P., Peralta, E., Bandyopadhyay, S., Ruiperez-Campillo, S., Sillett, C., Rogers, A. J., Baykaner, T., Clopton, P., Perino, A., Narayan, S. M.
  ELSEVIER SCIENCE INC.2026

- **Regional heterogeneity in left atrial stiffness impacts passive deformation in a cohort of patient-specific models.** *PLoS computational biology*
  Baptiste, T. M., Rodero, C., Sillett, C. P., Strocchi, M., Lanyon, C. W., Augustin, C. M., Lee, A. W., Alonso Solís-Lemus, J., Roney, C. H., Ennis, D. B., Rajani, R., Rinaldi, C. A., Plank, et al
  2025; 21 (11): e1013656

- **Large Language Models Detect Ventricular Tachycardia Recurrence in Clinical Notes and Enable Prediction of Clinical Outcomes at Scale**
  Sadri, S., Brennan, K., Bandyopadhyay, S., Desai, Y., Ganesan, P., Peralta, E., Feng, R., Sillett, C., Ruiperez-Campillo, S., Wang, P., Clopton, P., Rogers, A., Narayan, et al
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **AI-based prediction of mortality in patients with ventricular tachycardia**
  Bandyopadhyay, S., Sadri, S., Brennan, K., Ganesan, P., Clopton, P., Ruiperez-Campillo, S., Peralta, E., Sillett, C., Rogers, A., Narayan, S.

LIPPINCOTT WILLIAMS & WILKINS.2025

- **Novel Foundation Models for Detecting and Generating Text Reports of Atrial Fibrillation from 12-lead ECGs in a Large Registry**
  Ganesan, P., Peralta, E., Ruiperez-Campillo, S., Bandyopadhyay, S., Rogers, A., Chang, H., Brennan, K., Sillett, C., Clopton, P., Perino, A., Niederer, S., Narayan, S.
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Longitudinal Evaluation of Anti-Arrhythmic Drug Use to Predict Hospitalization or Death in Patients with Ventricular Tachycardia**
  Sadri, S., Brennan, K., Bandyopadhyay, S., Ganesan, P., Desai, Y., Peralta, E., Feng, R., Sillett, C., Ruiperez-Campillo, S., Wang, P., Clopton, P., Rogers, A., Narayan, et al
  LIPPINCOTT WILLIAMS & WILKINS.2025

- **Representation of women in cardiovascular disease management: a systematic analysis of ESC guidelines.** *Open heart*
  Lashkarinia, S. S., Lee, A. W., Baptiste, T. M., Barrows, R. K., Sillett, C. P., Rodero, C., Tayal, U., de Marvao, A., Panay, N., Williamson, C., Blomstrom-Lundqvist, C., Haugaa, K., Casadei, et al
  2025; 12 (2)

- **Three-dimensional left atrial strain from retrospective gated computed tomography: Comparison with speckle-tracking echocardiography in patients with aortic stenosis.** *Journal of cardiovascular computed tomography*
  Sillett, C., Androshchuk, V., Long, E., Baptiste, T. M., Strocchi, M., Solis Lemus, J. A., Lee, A. W., Roney, C. H., Rajani, R., Patterson, T., Redwood, S., Niederer, S. A.
  2025

- **Is regional atrial strain a useful surrogate of regional atrial fibrosis in atrial cardiomyopathy?** *European heart journal. Imaging methods and practice*
  Lee, A. W., Sillett, C., Solis-Lemus, J. A., Kessler Iglesias, C., Hopman, L. H., Hua, A., Wheen, P., Qayyum, A., Strocchi, M., Roney, C., Booth, T., Ismail, T. F., Chubb, et al
  2025; 3 (2): qyaf068

- **Identification of atrial myopathy and atrial fibrillation recurrence after ablation using 3D left atrial phasic strain from retrospective gated computed tomography.** *European heart journal. Imaging methods and practice*
  Sillett, C., Razeghi, O., Baptiste, T. M., Lee, A. W., Solis Lemus, J. A., Rodero, C., Roney, C. H., Feng, R., Ganesan, P., Chang, H. J., Clopton, P., Linton, N., Rajani, et al
  2025; 3 (1): qyaf027

- **A three-dimensional left atrial motion estimation from retrospective gated computed tomography: application in heart failure patients with atrial fibrillation** *FRONTIERS IN CARDIOVASCULAR MEDICINE*
  Sillett, C., Razeghi, O., Lee, A. W. C., Solis Lemus, J., Roney, C., Mannina, C., de Vere, F., Ananthan, K., Ennis, D. B., Haberland, U., Xu, H., Young, A., Rinaldi, et al
  2024; 11: 1359715

- **Novel Regional Analysis of Left Atrial Strain From Computed Tomography Separates Patients With Persistent versus Paroxysmal Atrial Fibrillation**
  Sillett, C., Razeghi, O., Lee, A., Lemus, J., Roney, C., Ganesan, P., Feng, R., Chubb, H., Nieman, K., Rogers, A. J., Rajani, R.
  LIPPINCOTT WILLIAMS & WILKINS.2023

- **Evaluation of an open-source pipeline to create patient-specific left atrial models: A reproducibility study.** *Computers in biology and medicine*
  Solís-Lemus, J. A., Baptiste, T., Barrows, R., Sillett, C., Gharaviri, A., Raffaele, G., Razeghi, O., Strocchi, M., Sim, I., Kotadia, I., Bodagh, N., O'Hare, D., O'Neill, et al
  2023; 162: 107009

- **A systematic review of cardiac in-silico clinical trials.** *Progress in biomedical engineering (Bristol, England)*
  Rodero, C., Baptiste, T. M., Barrows, R. K., Keramati, H., Sillett, C. P., Strocchi, M., Lamata, P., Niederer, S. A.
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- **Applications of multimodality imaging for left atrial catheter ablation.** *European heart journal. Cardiovascular Imaging*
  Roney, C. H., Sillett, C., Whitaker, J., Lemus, J. A., Sim, I., Kotadia, I., O'Neill, M., Williams, S. E., Niederer, S. A.
  2021; 23 (1): 31-41

- **Optimisation of Left Atrial Feature Tracking Using Retrospective Gated Computed Tomography Images.** *Functional imaging and modeling of the heart : ... International Workshop, FIMH ..., proceedings. FIMH*

Sillett, C., Razeghi, O., Strocchi, M., Roney, C. H., O'Brien, H., Ennis, D. B., Haberland, U., Rajani, R., Rinaldi, C. A., Niederer, S. A.
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