

Kelly Brennan

Contingent Employee, Medicine - Med/Cardiovascular Medicine

Bio

INSTITUTE AFFILIATIONS

- Member (Staff), Cardiovascular Institute

Publications

PUBLICATIONS

- **Reducing diverse sources of noise in ventricular electrical signals using variational autoencoders** *EXPERT SYSTEMS WITH APPLICATIONS*
Ruiperez-Campillo, S., Ryser, A., Sutter, T. M., Deb, B., Feng, R., Ganesan, P., Brennan, K. A., Rogers, A. J., Kolk, M. Z. H., Tjong, F. V. Y., Narayan, S. M., Vogt, J. E.
2026; 300
- **The impact of preoperative antiobesity medications on weight loss in adolescents undergoing metabolic and bariatric surgery - a COSMIC study.** *Surgery for obesity and related diseases : official journal of the American Society for Bariatric Surgery*
Chinn, J. O., Shacker, M., Brennan, K. A., Kochis, M., Stetson, A., Bizimana, C., Rodrigues de Oliveira Filho, J., Hornick, M. A., Pratt, J. S., Abu El Haija, M., Griggs, C.
2025
- **Deep Learning-Based Continuous QT Monitoring Identifies High-Risk Prolongation Events After Class III Antiarrhythmic Initiation**
Rogers, A., Ansari, R., Bandyopadhyay, S., Trivedi, R., Brennan, K., Ganesan, P., Perino, A., Ashley, E., Wang, P., Perez, M., Ouyang, D., Narayan, S.
LIPPINCOTT WILLIAMS & WILKINS.2025
- **Development of Personalized Myocardial Surface Mesh Models with LGE Scar Integration: a Pipeline for Machine Learning and Digital Twins**
Liu, X., Qayyum, A., Ganesan, P., Bandyopadhyay, S., Somani, S., Brennan, K., Wang, P., Niederer, S., Narayan, S., Rogers, A.
LIPPINCOTT WILLIAMS & WILKINS.2025
- **Abstract 4367773: Predicting Peak Heart Rate from Resting 12-Lead ECGs in Patients Undergoing Stress Testing using Deep Learning**
Liu, X., Bandyopadhyay, S., Ganesan, P., Somani, S., Brennan, K., Karius, A., Baykaner, T., Perino, A., Wang, P., Ashley, E., Perez, M., Narayan, S., Rogers, 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
- **Identifying optimum ECG features to predict sudden cardiac arrest at varying time points before the event**
Bandyopadhyay, S., Ganesan, P., Brennan, K., Ruiperez-Campillo, S., Ansari, R., Clopton, P., Perino, A., Wang, P., Ashley, E., Perez, M., Narayan, S., Rogers, A.
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

- **Automated End-to-End Framework for Extracting Raw ECG Waveforms and ST Segment Values from ECG Reports and Predicting ST Elevation by Machine Learning**
Ganesan, P., Liu, X., Bandyopadhyay, S., Ansari, R., Somani, S., Brennan, K., Karius, A., Baykaner, T., Perino, A., Wang, P., Ashley, E., Perez, M., Narayan, et al
LIPPINCOTT WILLIAMS & WILKINS.2025
- **Non-Contact Magnetocardiography Localizes Atrial Foci as Accurately as High-Resolution Contact ECG**
Brennan, K., Bandyopadhyay, S., Ganesan, P., Ansari, R., Somani, S., Liu, X., Baykaner, T., Perino, A., Wang, P., Narayan, S., Rogers, A.
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
- **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
- **Timing of Antiobesity Medications and Adolescent Metabolic and Bariatric Surgery.** *JAMA surgery*
Chinn, J. O., Shacker, M., Brennan, K. A., Esquivel, M. M., Pratt, J. S.
2025
- **Does the MBSAQIP Bariatric Surgical Risk/Benefit Calculator Accurately Predict Weight Loss in Adolescents?** *Obesity surgery*
Kochis, M. A., Chinn, J. O., Nzenwa, I. C., Brennan, K. A., Pratt, J. S., Griggs, C. L.
2025
- **Physics-Inspired Diffusion Probabilistic Models for Improved Denoising in Intracardiac Time Series.** *Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference*
Ruipe Rez-Campillo, S., Rau, M., Ganesan, P., Brennan, K. A., Feng, R., Bandyopadhyay, S., Rogers, A. J., Narayan, S. M., Vogt, J. E.
2025; 2025: 1-5
- **Comparing Phenotypes for Acute and Long-Term Response to Atrial Fibrillation Ablation Using Machine Learning.** *Circulation. Arrhythmia and electrophysiology*
Ganesan, P., Pedron, M., Feng, R., Rogers, A. J., Deb, B., Chang, H. J., Ruiperez-Campillo, S., Srivastava, V., Brennan, K. A., Giles, W., Baykaner, T., Clopton, P., Wang, et al
2025: e012860
- **Engineering of Generative Artificial Intelligence and Natural Language Processing Models to Accurately Identify Arrhythmia Recurrence.** *Circulation. Arrhythmia and electrophysiology*
Feng, R., Brennan, K. A., Azizi, Z., Goyal, J., Deb, B., Chang, H. J., Ganesan, P., Clopton, P., Pedron, M., Ruipe Rez-Campillo, S., Desai, Y., De Larocheilière, H., Baykaner, et al
2024: e013023
- **AUTOMATED, ACCURATE IDENTIFICATION OF VENTRICULAR TACHYCARDIA FROM ELECTRONIC HEALTH RECORDS USING NATURAL LANGUAGE PROCESSING**
Brennan, K., Azizi, Z., Feng, R., Goyal, J., Liu, X., Ganesan, P., Ruiperez-Campillo, S., Baykaner, T., Badhwar, N., John, R. M., Viswanathan, M., Perino, A., Wang, et al
ELSEVIER SCIENCE INC.2024: 2644