

Stanford



Albert Rogers

- Postdoctoral Medical Fellow, Cardiovascular Medicine
- Fellow in Medicine

Bio

BIO

Dr. A.J. Rogers is a Cardiovascular Medicine Fellow and Postdoctoral Research Scholar at Stanford University. He has over 10 years of medical device experience ranging from basic and translational research to device development and entrepreneurship. His undergraduate coursework in Biomedical Engineering at Duke University focused on neurobiology, signal processing, and computer modeling while his research investigated piezoelectric arrays for intracardiac ultrasound and computer vision of 3D ultrasound images for automated surgical robot tasks (Stephen Smith Laboratory). He earned his medical degree from the University of North Carolina and graduated in the inaugural class for the combined MBA degree program from the Kenan-Flagler Business School at UNC (focus in Healthcare Entrepreneurship). While working toward these degrees, A.J. participated in epidemiologic and translational research in the academic setting and worked as a clinical engineer for a start-up medical device company in the field of heart failure. He completed training in Internal Medicine and Cardiovascular Medicine at Stanford University. He joined Dr. Sanjiv Narayan's Computational Arrhythmia Research Laboratory to explore mechanisms of cardiac fibrillation using techniques of signal processing, machine learning, and in silico modeling. Outside of his research and clinical pursuits, A.J. enjoys athletics of all kinds (especially sand volleyball), travelling, and live music events.

CLINICAL FOCUS

- Fellow
- Cardiovascular Medicine
- Cardiac Arrhythmia

PROFESSIONAL EDUCATION

- M.D., University of North Carolina , Medicine (2014)
- M.B.A., UNC Kenan-Flagler Business School , Healthcare Entrepreneurship (2014)
- B.S.E., Duke University , Biomedical Engineering, Chemistry, Medicine (2009)

INTERNET LINKS

- Computational Arrhythmia Research Laboratory: <http://narayanlab.stanford.edu/>

Research & Scholarship

LAB AFFILIATIONS

- Sanjiv Narayan, Computational Arrhythmia Research Laboratory (11/10/2014)

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cardiovascular Medicine (Fellowship Program)

Publications

PUBLICATIONS

- **Propagation velocity at atrial fibrillation sources: Go with the flow** *INTERNATIONAL JOURNAL OF CARDIOLOGY*
Rogers, A. J., Bhatia, N. K., Brodt, C. R., Narayan, S. M.
2019; 286: 76–77
- **Editorial: High density mapping of atrial fibrillation sources** *JOURNAL OF CARDIOVASCULAR ELECTROPHYSIOLOGY*
Rogers, A. J., Bhatia, N. K., Brodt, C., Narayan, S. M.
2019; 30 (6): 964–65
- **Comparing phase and electrographic flow mapping for persistent atrial fibrillation** *PACE-PACING AND CLINICAL ELECTROPHYSIOLOGY*
Swerdlow, M., Tamboli, M., Alhousseini, M. I., Moosvi, N., Rogers, A. J., Leef, G., Wang, P. J., Rillig, A., Brachmann, J., Sauer, W. H., Ruppertsberg, P., Narayan, S. M., Baykaner, et al
2019; 42 (5): 499–507
- **Predictability in complex atrial arrhythmias: The N/N-1 algorithm to guide ablation of atrial tachycardias** *HEART RHYTHM*
Kaiser, D. W., Rogers, A. J., Narayan, S. M.
2019; 16 (4): 562–63
- **SITES THAT CONTROL LARGER AREAS DURING ATRIAL FIBRILLATION MAY DETERMINE TERMINATION DURING ABLATION**
Bhatia, N. K., Hossainy, S., Rogers, A., Alhousseini, M., Brodt, C., Moosvi, N., Baykaner, T., Wang, P., Rappel, W., Narayan, S.
ELSEVIER SCIENCE INC.2019: 400
- **INTRACLASS CORRELATIONS OF VOLTAGE, FRACTIONATED ELECTROGRAMS, AND DOMINANT FREQUENCY IN PATIENTS WHERE LOCALIZED ABLATION TERMINATED PERSISTENT ATRIAL FIBRILLATION**
Rogers, A. J., Moosvi, N., Singh, A., Alhousseini, M., Baykaner, T., Clopton, P., Rappel, W., Wang, P., Narayan, S.
ELSEVIER SCIENCE INC.2019: 521
- **MACHINE LEARNING IDENTIFIES SITES WHERE ABLATION TERMINATES PERSISTENT ATRIAL FIBRILLATION**
Alhousseini, M., Abuzaid, F., Clopton, P., Rogers, A., Rodrigo, M., Baykaner, T., Wang, P., Rappel, W., Narayan, S.
ELSEVIER SCIENCE INC.2019: 301
- **Structurally-based electrical predictors of atrial arrhythmias** *INTERNATIONAL JOURNAL OF CARDIOLOGY*
Rogers, A. J., Moosvi, N. F., Brodt, C. R., Narayan, S. M.
2019; 278: 151–52
- **Online webinar training to analyse complex atrial fibrillation maps: A randomized trial.** *PloS one*
Mesquita, J., Maniar, N., Baykaner, T., Rogers, A. J., Swerdlow, M., Alhousseini, M. I., Shenasa, F., Brizido, C., Matos, D., Freitas, P., Santos, A. R., Rodrigues, G., Silva, et al
2019; 14 (7): e0217988
- **Editorial: High density mapping of atrial fibrillation sources.** *Journal of cardiovascular electrophysiology*
Rogers, A. J., Bhatia, N. K., Brodt, C., Narayan, S. M.
2019
- **Structurally-based electrical predictors of atrial arrhythmias.** *International journal of cardiology*
Rogers, A. J., Moosvi, N. F., Brodt, C. R., Narayan, S. M.
2018
- **Predictability in Complex Atrial Arrhythmias: the N/N-1 Algorithm to Guide Ablation of Atrial Tachycardias.** *Heart rhythm*
Kaiser, D. W., Rogers, A. J., Narayan, S. M.
2018

- **Integrating mapping methods for atrial fibrillation.** *Pacing and clinical electrophysiology : PACE*
Rogers, A. J., Tamboli, M., Narayan, S. M.
2018
- **Interaction of Localized Drivers and Disorganized Activation in Persistent Atrial Fibrillation: Reconciling Putative Mechanisms Using Multiple Mapping Techniques** *CIRCULATION-ARRHYTHMIA AND ELECTROPHYSIOLOGY*
Kowalewski, C. B., Shenasa, F., Rodrigo, M., Clopton, P., Meckler, G., Alhusseini, M. I., Swerdlow, M. A., Joshi, V., Hossainy, S., Zaman, J. B., Baykaner, T., Rogers, A. J., Brachmann, et al
2018; 11 (6): e005846
- **Clinical Implications of Ablation of Drivers for Atrial Fibrillation A Systematic Review and Meta-Analysis** *CIRCULATION-ARRHYTHMIA AND ELECTROPHYSIOLOGY*
Baykaner, T., Rogers, A. J., Meckler, G. L., Zaman, J., Navara, R., Rodrigo, M., Alhusseini, M., Kowalewski, C. B., Viswanathan, M. N., Narayan, S. M., Clopton, P., Wang, P. J., Heidenreich, et al
2018; 11 (5)
- **Independent mapping methods reveal rotational activation near pulmonary veins where atrial fibrillation terminates before pulmonary vein isolation** *JOURNAL OF CARDIOVASCULAR ELECTROPHYSIOLOGY*
Navara, R., Leef, G., Shenasa, F., Kowalewski, C., Rogers, A. J., Meckler, G., Zaman, J. B., Baykaner, T., Park, S., Turakhia, M. P., Zei, P., Viswanathan, M., Wang, et al
2018; 29 (5): 687-95
- **CAVOTRICUSPID ISTHMUS ABLATION FOR TREATMENT OF RECURRENT ATRIAL TACHYARRHYTHMIA IN PATIENT WITH DRUG-INDUCED TORSADE DE POINTES AND SEVERE SYSTOLIC HEART FAILURE**
Rogers, A., Viswanathan, M.
ELSEVIER SCIENCE INC.2018: 2565
- **Independent mapping methods reveal rotational activation near pulmonary veins where atrial fibrillation terminates before pulmonary vein isolation.** *Journal of cardiovascular electrophysiology*
Navara, R., Leef, G., Shenasa, F., Kowalewski, C., Rogers, A. J., Meckler, G., Zaman, J. A., Baykaner, T., Park, S., Turakhia, M. P., Zei, P., Viswanathan, M., Wang, et al
2018
- **Clinical Implications of Ablation of Drivers for Atrial Fibrillation: A Systematic Review and Meta-Analysis.** *Circulation. Arrhythmia and electrophysiology*
Baykaner, T., Rogers, A. J., Meckler, G. L., Zaman, J., Navara, R., Rodrigo, M., Alhusseini, M., Kowalewski, C. A., Viswanathan, M. N., Narayan, S. M., Clopton, P., Wang, P. J., Heidenreich, et al
2018; 11 (5): e006119
- **Minimizing Radiation in the Modern Electrophysiology Laboratory** *The Journal of Innovations in Cardiac Rhythm Management*
Rogers, A. J., Brodt, C. R.
2018; 2018 (9): 3265-3270
- **Rotational Drivers in Atrial Fibrillation: Are Multiple Techniques Circling Similar Mechanisms?** *Circulation. Arrhythmia and electrophysiology*
Zaman, J. A., Rogers, A. J., Narayan, S. M.
2017; 10 (12)
- **Rotational Drivers in Atrial Fibrillation Are Multiple Techniques Circling Similar Mechanisms?** *CIRCULATION-ARRHYTHMIA AND ELECTROPHYSIOLOGY*
Zaman, J. B., Rogers, A. J., Narayan, S. M.
2017; 10 (12)
- **Drivers of persistent atrial fibrillation: do focal or rotational regions differ in their stability over time?**
Navara, R., Leef, G., Shenasa, F., Meckler, G., Kowalewski, C., Baykaner, T., Alhusseini, M., Hossainy, S., Joshi, V., Rogers, A. J., Zaman, J., Park, S., Zei, et al
OXFORD UNIV PRESS.2017: 638
- **Drivers of Persistent Atrial Fibrillation: Are Focal and Rotational Sites Transient or Stable Over Time?**
Navara, R., Leef, G., Shenasa, F., Kowalewski, C., Baykaner, T., Rogers, A., Zaman, J., Park, H., Zei, P., Wang, P. J., Narayan, S. M.
WILEY.2017: 606-7
- **Spatial relationship of sites for atrial fibrillation drivers and atrial tachycardia in patients with both arrhythmias.** *International journal of cardiology*
Baykaner, T., Zaman, J. A., Rogers, A. J., Navara, R., AlHusseini, M., Borne, R. T., Park, S., Wang, P. J., Krummen, D. E., Sauer, W. H., Narayan, S. M.

2017; 248: 188-95

- **Editorial commentary: What can lung transplantation teach us about the mechanisms of atrial arrhythmias?** *Trends in cardiovascular medicine*
Baykaner, T., Rogers, A. J., Zaman, J. A., Narayan, S. M.
2017
- **FMN fluorescence in inducible NOS constructs reveals a series of conformational states involved in the reductase catalytic cycle** *FEBS JOURNAL*
Ghosh, D. K., Ray, K., Rogers, A. J., Nahm, N. J., Salerno, J. C.
2012; 279 (7): 1306-1317
- **A High-Fiber Diet Does Not Protect Against Asymptomatic Diverticulosis** *GASTROENTEROLOGY*
Peery, A. F., Barrett, P. R., Park, D., Rogers, A. J., Galanko, J. A., Martin, C. F., Sandler, R. S.
2012; 142 (2): 266-U158
- **Simulation of Autonomous Robotic Multiple-Core Biopsy by 3D Ultrasound Guidance** *ULTRASONIC IMAGING*
Liang, K., Rogers, A. J., Light, E. D., von Allmen, D., Smith, S. W.
2010; 32 (2): 118-127
- **THREE-DIMENSIONAL ULTRASOUND GUIDANCE OF AUTONOMOUS ROBOTIC BREAST BIOPSY: FEASIBILITY STUDY** *ULTRASOUND IN MEDICINE AND BIOLOGY*
Liang, K., Rogers, A. J., Light, E. D., von Allmen, D., Smith, S. W.
2010; 36 (1): 173-177
- **3-D Ultrasound Guidance of Autonomous Robot for Location of Ferrous Shrapnel** *IEEE TRANSACTIONS ON ULTRASONICS FERROELECTRICS AND FREQUENCY CONTROL*
Rogers, A. J., Light, E. D., Smith, S. W.
2009; 56 (7): 1301-1303