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EDUCATION

1999-2002	Bachelor of Science	Syracuse University, Syracuse, NY Valedictorian, Division of Art & Sciences, Utica College Summa Cum Laude Senior Thesis: Effects of a New Potassium Channel Blocker on Repolarizing Potassium Currents of the Cardiac Action Potential.
		Advisor: Charles Antzelevitch, Ph.D
2002-2006	Doctor of Medicine	SUNY Upstate Medical University, Syracuse, NY Julius Schwartz Cardiology Scholar Graduate Research Thesis: <i>Alveolar Instability Does Not Cause Gross</i> <i>Alveolar Tearing</i> .
POSTGRAD	DUATE TRAINING	
2006-2007	Internship	Internal Medicine. Physician Scientist Pathway. Case Western Reserve University, MetroHealth Campus, Cleveland, OH
2007-2008	Residency	Internal Medicine. Physician Scientist Pathway. Case Western Reserve University, MetroHealth Campus, Cleveland, OH
2008-2011	Research Fellowship	Biomedical Engineering: Cell Therapy & Tissue Engineering for Cardiac Arrhythmias. Physician Scientist Pathway. Heart and Vascular Research Center. Case Western Reserve University, MetroHealth Campus & Cleveland Clinic Foundation, Cleveland, OH.
		Advisors: Marc S. Penn, M.D., Ph.D. & Kenneth R. Laurita, Ph.D.

2011-2013	Clinical Fellowship	Cardiology. Physician Scientist Pathway. Heart and Vascular Center. Case Western Reserve University, MetroHealth Campus, Cleveland, OH
2013-2015	Advanced Clinical Fellowship	Clinical Cardiac Electrophysiology. Division of Cardiology. New York-Presbyterian Hospital/Weill Cornell Medical Center, Cornell University, New York, NY
		Chairman: Bruce B. Lerman, M.D.
2015-2016	Advanced Clinical Fellowship	Advanced Clinical Cardiac Electrophysiology & Complex Ablation, Heart and Vascular Center. Case Western Reserve University, MetroHealth Campus, Cleveland, OH

POSTGRADUATE HONORS AND AWARDS

2006	Physician Scientist Pathway Match, Case Western Reserve University, MetroHealth Campus (Internal Medicine, Postdoctoral Research, & Cardiology Pre-match)- Awarded to one trainee nationally per year.
2007	SUNY Upstate Medical University President's Award as founder of the <i>No One Dies Alone Program</i> .
2008	Internal Medicine Resident Performance Award: Given to the resident with the highest performance based on faculty evaluations.
2010	The 2010 Cardiac Electrophysiology Society Annual Meeting, Chicago, Il. Fellow Poster Presentation Finalist.
2012	The 21st Annual Meeting of the Ohio Chapter of the American College of Cardiology, Columbus, OH. Young Investigator Award Winner and First Place in Oral Presentation Category.
2014	The 24 th Annual Meeting of the New York State Chapter of the American College of Cardiology & the 86 th Annual Scientific Sessions of the New York Cardiology Society, Albany, NY. Young Investigator Award Winner.
2018	Emerging Early Career Leader Award, Medtronic, Inc.
PROFESSI	ONAL LICENSES
Medical Lic	censure: Rhode Island, No. MD-15548 (2016-present)

Medical Licensure: Florida, No. ME-129175 (2016-2018)

ACADEMIC APPOINTMENTS

2016-Present	Assistant Professor of Medicine, The Warren Alpert Medical School of Brown University, Providence, RI
2015-2016	Clinical Instructor in Medicine Case Western Reserve University School of Medicine, Cleveland, OH
HOSPITAL APPOIN	<u>ITMENTS</u>
2016-present	Attending Physician, Clinical Cardiac Electrophysiology, Cardiovascular Institute, The Warren Alpert Medical School of Brown University, The Rhode Island & Miriam Hospitals
2015-2016	Staff Cardiac Electrophysiologist & Research Scientist, Case Western Reserve University, MetroHealth Campus, Cleveland, OH

OTHER APPOINTMENTS

2017-Present	Journal Reviewer, Journal for Interventional Cardiac Electrophysiology
2017-Present	Honorable Editor, Journal of Applied of Bionics & Biomechanics, Edmond, OK
2000-present	Physician & Translator, Medical, Eye, Dental International Care Organization, Georgetown, TX
2000-present	Physician & Field Coordinator, Child Family Health International, San Francisco,CA

HOSPITAL COMMITTEES

2017-Present	Cardiovascular Disease Fellowship Committee, The Warren Alpert Medical School of Brown University, Providence, RI
2016-2017	Search Committee, Clinical Cardiac Electrophysiology Division Director, The Warren Alpert Medical School of Brown University, Providence, RI
2016-2017	Search Committee, Clinical Cardiac Electrophysiology Faculty, The Warren Alpert Medical School of Brown University, Providence, RI
2007-2013	Selection Committee, Physician Scientist Pathway Training Program, Case Western Reserve University, MetroHealth Campus, Cleveland, OH

MEMBERSHIP IN SOCIETIES

2004-2009	American Medical Association, Member
2009-2012	American Society of Gene and Cell Therapy, Member
2009-2013	National Center for Stem Cell and Regenerative Medicine, Affiliate Member
2009-present	American College of Cardiology, Member
2010-present	Heart Rhythm Society, Member
2010-present	Cardiac Electrophysiology Society, Member

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. Costa AR, **Panda NC**, Mayorga ME, Pawlowski G, Penn MS, Laurita KR. Cardiac electrophysiology of mesenchymal stem cells in situ. *American Journal of Physiology: Heart and Circulatory Physiology*. 2012;302(1):H270-7 PMID: 22037193
- 2. **Panda NC**, Zuckerman S, Mesubi O, Fan K, Pawlowski G, Rosenbaum DS, Penn MS, Donahue JK, Alsberg E, Laurita KR. Improved conduction and increased cell retention in healed MI using mesenchymal stem cells suspended in alginate hydrogel. Abstract. *Journal of the American College of Cardiology* 2013; 61(10): A132
- 3. **Panda NC**, Zuckerman S, Mesubi O, Fan K, Pawlowski G, Rosenbaum DS, Penn MS, Donahue JK, Alsberg E, Laurita KR. Improved conduction and increased cell retention in healed MI using mesenchymal stem cells suspended in alginate hydrogel. *Journal of Interventional Cardiac Electrophysiology* 2014; 41(2):117-127 PMID: 25234602
- 4. Al'Aref S, Ip JE, Markowitz SM, Liu CF, Thomas G, Frenkel D, **Panda NC**, Weinsaft JW, Lerman BB, Cheung JW. Differentiation of papillary muscle from fascicular and mitral annular ventricular arrhythmias in patients with and without structural heart disease. *Circulation: Arrhythmia and Electrophysiology* 2015; 8: 616-624 PMID: 25925230
- 5. Dakay K, Hemendinger M, Cutting S, McTaggart R, Jayaraman M, Chu A, **Panda NC**, Song S, Merkler A., Gialdini G., Kummer B., Lerario M., Kamel H, Elkind M, Furie KL, Yaghi S. Left atrial enlargement and anticoagulation status in patients with acute ischemic stroke and atrial fibrillation 2017. J Stroke Cerebrovasc S1052-3057(17)30435-4. PMID: 28918087
- 6. Yaghi S, Chang A, Hung P, Mac Grory B, Collins S, Gupta A, Reynolds J, Finn CB, Hemendinger M, Cutting SM, McTaggart RA, Jayaraman M, Leasure A, Sansing L, Panda NC, Song C, Chu A, Merkler A, Gialdini G, Sheth K, Kamel H, Elkind M, Greer D, Furie K, Atalay M. Left atrial appendage morphology and embolic stroke of undetermined source: A cross-sectional multicenter pilot study. J Stroke Cerebrovasc Dis. 2018 Jun;27(6):1497-1501. PMID: 29398537

OTHER PEER-REVIEWED PUBLICATIONS

- 1. **Panda NC,** Cheung JW. Complications from catheter ablation of atrial fibrillation: impact of current and emerging ablation technologies. *Current Treatment Options in Cardiovascular Medicine* 2014; 16(10): 344 1-15 PMID: 25183020
- 2. **Panda, NC,** Lewis W, Ziv O. Atrial fibrillation classification and ablation strategy: time for a new paradigm. *Arrhythmia: Open Access* 2016; 1(110): 1-3.

BOOKS AND BOOK CHAPTERS

1. **Panda, NC,** Ziv. O. Atrial fibrillation in advanced heart failure: novel ablation strategies and current and future options for treatment. Book Chapter in *Arrhythmia and Heart Failure*. Accepted for publication.

OTHER NON-PEER REVIEWED PUBLICATIONS

- Al'Aref S, Ip JE, Markowitz SM, Liu CF, Thomas G, Frenkel D, Panda NC, Weinsaft JW, Lerman BB, Cheung JW. Response to Letter by Yamada et al Regarding "Differentiation of Papillary Muscle From Fascicular and Mitral Annular Ventricular Arrhythmias in Patients With and Without Structural Heart Disease". *Circulation: Arrhythmia and Electrophysiology* 2015; 8(5) 1302 PMID: 26487630
- Dakay K, Hemendinger M, Cutting S, McTaggart R, Jayaraman M, Chu A, Panda NC, Song S, Merkler A., Gialdini G., Kummer B., Lerario M., Kamel H, Elkind M, Furie KL, Yaghi S. Short versus Long-Term Cardiac Monitoring in Patients with Embolic Stroke of Unknown Source: Comparing Rates of Atrial Fibrillation Detection and Recurrent Stroke. Manuscript in preparation.
- 3. Arunachalam K, Zhang Z, Kolte D, Dudley S, **Panda NC**, Chu A, Maan A. Racial and demographic variations in the patients with out of hospital cardiac arrest: A nationwide study. Manuscript in preparation.

ABSTRACTS

- Pavone LA, Simonson DA, DiRocco JD, Gatto LA, Adams AB, Panda NC, J.D. Kuebler, D.J. Dries, G.F. Nieman. Alveolar Instability Does Not Cause Gross Alveolar Tearing. Abstract. *Annals of the American Thoracic Society* 2004; 7(1). American Thoracic Society Annual Meeting.
- 2. Costa AR, **Panda NC**, Mayorga ME, Taylor RA, Penn MS, Laurita KR. Stem cell therapy restores electrophysiological function in healed myocardial infarction. Abstract. *Heart Rhythm Journal* 2009; 6(5):S1-S54

- 3. **Panda NC**, Zuckerman S, Fan K, Gopinath D, Rosenbaum DS, Penn MS, Donahue JK, Alsberg E, Laurita KR. Mesenchymal stem cells delivered with alginate hydrogel improve conduction at the border zone of healed MI. Abstract. *Heart Rhythm Journal* 2010; 7(11): 1714
- 4. Frenkel D, Al-Kazaz M, D'Amato SA, Markowitz SM, Liu CF, Thomas G, Ip JE, **Panda NC**, Lerman BB, Dele-Michael AO, Cheung JW. Impact of novel oral anticoagulant use compared to warfarin use on rates of left atrial filling defect detection by transesophageal echocardiography prior to cardioversion and catheter ablation of atrial fibrillation and flutter. Abstract. *Heart Rhythm Journal* 2015; 12(5) S1-S618
- 5. Al-Kazaz M, D'Amato SA, Frenkel D, Markowitz SM, Liu CF, Thomas G, Ip JE, **Panda NC**, Lerman BB, Dele-Michael AO, Cheung JW. Is routine transesophageal echocardiography necessary in low CHA₂DS₂VASc score patients on adequate novel oral anticoagulant therapy prior to catheter ablation of atrial fibrillation? Abstract. *Heart Rhythm Journal* 2015; 12(5): S1-S618
- 6. **Panda, NC**, Ziv O. Identification and elimination of adenosine-induced dormant pulmonary vein exit conduction. Abstract. *Heart Rhythm Journal* 2016; 12 (5S): 10751
- 7. Torbey, E, Kirk M, **Panda NC**, Donaldson D, Chu, Antony. Risk factors for atrial fibrillation after ablation for supraventricular tachycardia. Abstract. Heart Rhythm Journal 2017.
- 8. Dakay K, Hemendinger M, Cutting S, McTaggart R, Jayaraman M, Chu A, **Panda NC**, Song S, Merkler A., Gialdini G., Kummer B., Lerario M., Kamel H, Elkind M, Furie KL, Yaghi S. A Simple Score That Predicts Paroxysmal Atrial Fibrillation on Outpatient Cardiac Monitoring After Embolic Stroke of Unknown Source. Abstract. International Stroke Conference 2018.
- 9. Dakay K, Hemendinger M, Cutting S, McTaggart R, Jayaraman M, Chu A, **Panda NC**, Song S, Merkler A., Gialdini G., Kummer B., Lerario M., Kamel H, Elkind M, Furie KL, Yaghi S. Left atrial appendage morphology is similar in embolic stroke of undetermined source and cardioembolic stroke and different from atherothrombotic subtype. Abstract. International Stroke Conference 2018.
- 10. Dakay K, Hemendinger M, Cutting S, McTaggart R, Jayaraman M, Chu A, **Panda NC**, Song S, Merkler A., Gialdini G., Kummer B., Lerario M., Kamel H, Elkind M, Furie KL, Yaghi S. Recurrent stroke rates in short versus long term cardiac monitoring in patients with embolic stroke of unknown source. Submitted to International Stroke Conference 2019.

REGIONAL INVITED PRESENTATIONS

- 2009 Internal Medicine Grand Rounds, MetroHealth Medical Center, Cleveland, OH. *Cell Therapy for MI*.
- 2010 Case Western Reserve University Annual Cardiovascular Retreat, Cleveland, OH. *Stem Cell Therapy Restores Electrophysiological Function in Healed Myocardial Infarction.*

2012	The 21st Annual Meeting of the Ohio Chapter of the American College of Cardiology, Columbus, OH. Young Investigator Award Winner and First Place in Oral Presentation Category. <i>Mesenchymal Stem Cells Delivered with Alginate Hydrogel Improve</i> <i>Conduction in the Border Zone of Healed MI.</i>
2012	Cardiology Grand Rounds, MetroHealth Medical Center, Cleveland, OH. Case Conference: Cardiac Diagnoses in the Peripartum Patient.
2013	Cardiology Grand Rounds, MetroHealth Medical Center. Cleveland, OH. Cell Therapy & Tissue Engineering for Healed MI.
2014	The 24 th Annual Meeting of the New York State Chapter of the American College of Cardiology & the 86 th Annual Scientific Sessions of the New York Cardiology Society, New York, NY. <i>Improved Conduction and Increased Cell Retention in Healed MI Using Mesenchymal Stem Cells Suspended in Alginate Hydrogel.</i>
2016	Cardiovascular Research Center, Rhode Island Hospital, Brown University, Providence, Rhode Island. <i>Cell Therapy and Tissue Engineering for Cardiac Arrhythmias</i> .
2016	Cardiology Grand Rounds, Division of Cardiology, Tulane Medical Center, New Orleans, LA. <i>Cell Therapy and Tissue Engineering for Cardiac Arrhythmias</i> .
2017	Clinical Cardiac Electrophysiology Speaker Symposium, Brown University, Rhode Island Hospital. <i>New Strategies for the Ablation of Persistent Atrial Fibrillation</i>
2017	The 4th Annual Brown Arrhythmia Symposium, Brown University, Cardiovascular Institute, Providence, RI. Panel Discussion- <i>Clinical Cases Cardiac Death in the Young</i> .
2017	The 4th Annual Brown Arrhythmia Symposium, Brown University, Cardiovascular Institute, Providence, RI. <i>Dysautonomias and Cardiac Arrhythmia Management</i> .
2017	The 4th Annual Brown Arrhythmia Symposium, Brown University, Cardiovascular Institute, Providence, RI. <i>Pacemaker Electrogram Interpretation</i> .
2017	Lifespan Cardiovascular Institute Community Lecture, Providence, RI. When Do You Need To Worry About Cardiac Arrhythmias?
2018	The 5th Annual Brown Arrhythmia Symposium, Brown University, Cardiovascular Institute, Providence, RI. Anticoagulation and Atrial Fibrillation Ablation.
2019	Cardiovascular Institute Faculty Research in Progress Meeting. Brown University, Rhode Island Hospital, Providence, RI. <i>Low Voltage Directed Catheter Ablation for Atrial Fibrillation</i> .

2019 The 6th Annual Brown Arrhythmia Symposium, Brown University, Cardiovascular Institute, Providence, RI. *Cardiac Ablation—Basics*.

NATIONAL INVITED PRESENATIONS

2004	American Thoracic Society International Conference, Orlando, FL. Invited Oral Presentation.
2010	The 2010 Cardiac Electrophysiology Society Annual Meeting, Chicago, Il. Fellow Poster Presentation Finalist.
2010	The 2010 Cardiac Electrophysiology Society Annual Meeting, Chicago, Il. Mesenchymal Stem Cells Delivered with Alginate Hydrogel Improve Conduction in the Border Zone of Healed MI.
2011	National Center for Stem Cell and Regenerative Medicine Annual Meeting, Cleveland, OH. Mesenchymal Stem Cells Delivered with Alginate Hydrogel Improve Conduction in the Border Zone of Healed MI.
2013	The 62nd Annual Scientific Sessions of the American College of Cardiology, San Francisco, CA. Featured Research Poster Presentation.
2013	The 2013 Northwestern Cardiovascular Young Investigators' Forum, Chicago, Il. Featured Oral Presentation. <i>Mesenchymal Stem Cells Delivered with Alginate Hydrogel</i> <i>Improve Conduction in the Border Zone of Healed MI</i> .
2016	The 37 th Annual Scientific Sessions of the Heart Rhythm Society, San Francisco, CA. Featured Research Poster Presentation. <i>Identification and Elimination of Adenosine-Induced Dormant Pulmonary Vein Exit Conduction</i> .
<u>GRANTS</u>	
2004	SUNY Upstate Medical University College of Medicine Research Fellowship, Principal Investigator, Amount ~ \$3000.
2009-2010	National Institutes of Health Ruth L. Kirschstein NRSA T32 Postdoctoral Training Grant, Principal Investigator, Amount ~\$50,000
2016-Present	Co-Principal Investigator. <i>Identification and Elimination of Adenosine-Induced Dormant Exit Conduction</i> . Multi-Center Clinical Study Protocol. Anticipated start of patient enrollment 9/2016.
2016-Present	Co-Principal Investigator. Scar-Directed Catheter Ablation for Atrial Fibrillation (SD-CAF) Multi-Center Clinical Study Protocol. Anticipated start of patient enrollment 9/2016

2017-Present Co-Principal Investigator. *Biosense Webster Investigator Initiated Clinical Research Protocol Grant Co-Recipient for Low Voltage-Directed Catheter Ablation for Atrial Fibrillation (LD-CAF).* Amount of Support: \$150,000 Anticipated start of patient enrollment 8/2018

UNIVERSITY TEACHING ROLES

- 2006 Comparative Health Policy and Law Course, Syracuse University, Syracuse, NY. HIV and Infant Mortality in Zambia's Copperbelt. 30 students
- 2008-2009 Research mentor to Rachel Taylor. Biomedical Engineering Undergraduate, Case Western Reserve University, Cleveland, OH Current Position: Pediatrics Resident & Electrophysiology Research Resident, University Hospitals Case Medical Center, Cleveland, OH
- 2010-2011 Research mentor to Rotimi Mesubi, M.D. Internal Medicine Resident, Case Western Reserve University, MetroHealth Campus, Cleveland, OH *Current Position: Clinical Cardiac Electrophysiology Fellow & Electrophysiology Research Fellow, Johns Hopkins Hospital, Baltimore, MD*
- 2010-2013 Instructor in Cardiovascular Physical Diagnosis, Case Western Reserve University School of Medicine, Cleveland, OH
- 2012-2013 Instructor in Electrocardiogram Interpretation, Case Western Reserve University School of Medicine, Cleveland, OH
- 2017 Brown University Second Year Medical Students Pathophysiology Course, Cardiology Section, The Warren Alpert Medical School of Brown University, Providence, RI. Pathophysiology of Arrhythmias.
- 2017-2018 Research mentor to Abhishek Maan, M.D. Cardiology Fellow, Brown University. Future Position (2018): Clinical Cardiac Electrophysiology Fellow & Research Fellow, Massachusetts General Hospital, Harvard University, Boston, MA
- 2019-Present Research mentor to Esseima Sharma, M.D. Cardiology Fellow, Brown University
- 2018-Present Research mentor to Sydney Lo, Biology Undergraduate, Brown University
- 2018-Present Research mentor to Lauren Raynor, Biomedical Engineering Undergraduate, Brown University

HOSPITAL TEACHING ROLES

2005	Cardiology Fellows Didactic Curriculum, SUNY Upstate Medical University Hospital. Syracuse, NY. <i>Electrophysiological Mechanisms of Antiarrhythmics</i> .
2014-2015	Internal Medicine Resident Didactic Curriculum, Weill Cornell Medical College/New York Presbyterian Hospital, New York, NY. <i>Wide Complex Tachycardia</i> .
2014-2015	Internal Medicine Resident Didactic Curriculum, Weill Cornell Medical College/New York Presbyterian Hospital, New York, NY. <i>Pacemakers and ICDs</i> .
2015	Cardiology Fellows Didactic Curriculum, MetroHealth Campus, Case Western Reserve University, Cleveland, OH. Cardiac Antiarrhythmics.
2015-Present	Field Cardiac Electrophysiologist & Device Implantation Instructor, Heartbeat International, Lakeland, Fl. Implant free pacemakers & ICDs to those in need in developing countries and provide instruction to local physicians & cardiologists on device implantation.
2016	Cardiology Advanced Practice Providers Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Pacemakers & ICDs</i> .
2016	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence RI. <i>Cardiac Antiarrhythmics I</i> .
2016	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. Cardiac Antiarrhythmics II.
2016-2017	Clinical Cardiac Electrophysiology mentor to Arslan Johangar, M.D. Cardiac Device Fellow, Brown University. <i>Current Position: Private Practice, Hartford, CT</i> .
2016-2017	Clinical Cardiac Electrophysiology mentor to Estelle Torbey, M.D. Clinical Cardiac Electrophysiology Fellow, Brown University. <i>Present Position: Clinical Cardiac Electrophysiologist, Robert Wood Johnson University Hospital, New Brunswick, NJ</i> .
2016-Present	Clinical Cardiac Electrophysiology mentor to Jerome Kalifa, M.D., Ph.D. Clinical Cardiac Electrophysiology Fellow, Brown University.
2017	Cardiology Fellows Didactic Curriculum, Division of Cardiology, Brown University, Rhode Island Hospital, Providence, RI. <i>Introduction to the Electrophysiology Lab and the</i> <i>Electrophysiology Study</i> .
2017	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. Advanced AV Nodal Physiology.
2017	Clinical Cardiac Electrophysiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Roof-Dependent Atrial Flutters</i> .

2017	Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Intracardiac Electrograms</i> .
2017	Internal Medicine Residents Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Electrocardiogram Interpretation</i> .
2017	Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. AV Nodal Reentrant Tachycardia.
2017	Internal Medicine Residents Didactic Curriculum, Brown University, Veterans Administration Hospital, Providence, RI. <i>Acute Management of Supraventricular</i> <i>Tachycardia & Atrial Fibrillation</i> .
2017	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Device Electrogram</i> .
2017	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. Introduction to Pacemakers and ICDs
2017	Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. Supraventricular Tachycardias.
2017-2018	Clinical Cardiac Electrophysiology mentor to Abhishek Maan, M.D, Combined Cardiology & Clinical Cardiac Electrophysiology Fellow, Brown University. <i>Present</i> <i>Position: Clinical Cardiac Electrophysiology & Research Fellow, Massachusetts</i> <i>General Hospital, Harvard University, Boston, MA</i>
2017-2018	Clinical Cardiac Electrophysiology mentor to Zain Ahmed, M.D. Internal Medicine Resident (Brown Internal Medicine Residency Preceptorship Program)- Electrophysiology Clinic Preceptor
2018	Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. AV Nodal Reentrant Tachycardia.
2018	Internal Medicine Resident Curriculum, Brown University, Miriam Hospital, Providence, RI. Supraventricular Tachycardia & Electrocardiogram Interpretation
2018	Cardiology Advanced Practice Provider Didactic Curriculum, Rhode Island Hospital, Providence, RI. <i>Antiarrhythmics</i> .
2018	Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. Acute Management of SVT and Atrial Fibrillation.
2018	Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. <i>Wide Complex Tachycardia</i> .

- 2018-Present Clinical Cardiac Electrophysiology mentor to Harsha Ganga, M.D. Clinical Cardiac Electrophysiology Fellow, Brown University.
- 2018-Present Clinical Cardiac Electrophysiology mentor to Robert Vasquez, M.D. Cardiac Device Fellow, Brown University.
- 2019 Cardiology Fellows Curriculum. Brown University, Rhode Island Hospital. *EKG Interpretation*.
- 2019 Clinical Cardiac Electrophysiology & Cardiology Fellows Didactic Curriculum, Brown University, Rhode Island Hospital, Providence, RI. *Free Wall and Septal Accessory Pathways*.