

# Praneet Mylavarapu

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## EDUCATION

### Northwestern University

M.S. in Data Science

Chicago, IL

07/2022-07/2023

### UC San Diego Health

Internal Medicine Resident

San Diego, CA

07/2019-07/2022

### UC San Diego School of Medicine

Doctor of Medicine

San Diego, CA

08/2015-06/2019

### University of Pennsylvania

B.A. in Biology

Philadelphia, PA

08/2011-05/2015

### The Wharton School

B.S. in Economics/Healthcare Management

Philadelphia, PA

08/2011-05/2015

## RESEARCH

### Northwestern Bluhm Cardiovascular Institute

2022-Present

### Northwestern McCormick School of Engineering

#### Advisor: Faraz Ahmed, MD

- Partnership between Northwestern University McCormick School of Engineering and Northwestern Medicine Bluhm Cardiovascular Institute
- Learning Python for machine learning, human computer interaction, computer vision, and natural language processing

### HeartShare Research Fellowship

2022-Present

#### Advisor: Sanjiv Shah, MD

- One of six fellows nationally
- Conduct large-scale analysis of phenotypic data, images, and omics from patients with heart failure with preserved ejection fraction (HFpEF) and controls to characterize mechanisms of disease and identify therapeutic targets

### UCSD Cardiology – Electrophysiology

2019-Present

#### Advisor: Jonathan Hsu, MD

*Study: Using Machine Learning to Identify Patients Likely to Require Repeat Catheter Ablation for AFib*

- Learned Machine learning modeling techniques, developed and validated a Naïve Bayes algorithm
- Developed study design, assisted with registry creation, conducted analysis and write-up
- Accepted to HRS 2021; won 1<sup>st</sup> place at HRS Young Investigator Award; currently pending manuscript submission

*Study: Association Between Time from AFib Diagnosis to First Ablation and Long-Term Clinical Outcomes*

- Developed study design, assisted with registry creation, conducted analysis and write-up
- Presented as an oral presentation at AHA 2020; currently pending manuscript submission

*Study: Outcomes after AFib Ablation with and without CTI Ablation*

- Developed study design, assisted with registry creation, conducted analysis and write-up
- Presented at AHA 2020; currently pending manuscript submission

### UCSD Cardiology – General/Interventional

2015-Present

#### Advisor: Mitul Patel, MD

*Study: OCT guided atherectomy vs. initial angioplasty in the management of symptomatic PAD*

- Developed study design, created peripheral intervention registry, conducted analysis, write-up
- Presented at SCAI 2018; currently pending manuscript submission

*Study: Diversity Within the Most Competitive Internal Medicine Fellowships*

- Analyzed AAMC, NRMP residency and fellowship data to identify trends in racial and gender underrepresentation
- Manuscript published in JGIM

### UCSD Cardiology – General

2015-2019

#### Advisor: Anthony DeMaria, MD

*Study: The effect of pharmacists in increasing med adherence in pts. taking statins and ACE/ARBs*

*Study: The effect of pharmacists in reducing LDL by rapidly substituting drugs for pts. unable to take statins*

- Developed and executed pharmacist impact arm of Be There San Diego (BTSD) Stroke and CV study
- Reviewed and analyzed data from >3000 patients across 7+ local health systems
- Presented at BTSD 2018

### Perelman School of Medicine – Family Medicine and Community Health

2012-2014

#### Advisor: Kent Bream, MD

*Study: Social Determinants of Cardiovascular Disease Beliefs and Prevention in Southern India*

- Developed and executed a needs-based research study in a Southern Indian community with disproportionately higher reports of coronary artery disease and metabolic syndrome
- Conducted 50 in-person semi-structured interviews with local population in Southern India
- Identified factors (strong communal bonds, normalization of heart disease) leading to decreased perception of severity and (mistrust of medical system, perceived lack of buy-in from physicians) leading to decreased preventative healthcare utilization

## CLINICAL

<b>UC San Diego Health</b> <ul style="list-style-type: none"><li>Internal Medicine (IM) Resident – 7 months of ICU (certified on central lines, arterial lines, lumbar punctures), 5 months of inpatient ward medicine, 1 month of Advanced Heart Failure, 3 years of outpatient medicine</li><li>Selected for Gold Humanism teaching award among all ~100 IM residents (2020)</li></ul>	07/2019-07/2022
<b>La Mesa Healthcare Medical Group</b> <ul style="list-style-type: none"><li>Managed care for pts w/acute &amp; chronic conditions, obtained histories and conducted physicals</li><li>Assisted with the development of first clinic-wide Diabetes Health Fair to perform regular physical exams for high-risk individuals, prevent comorbidities, and streamline patient education</li></ul>	08/2015-06/2019
<b>VIIDAI (Viaje Interinstitucional de Integración Docente Asistencial y de Investigación)</b> <ul style="list-style-type: none"><li>Collaborated with med students from Mexico to operate free clinic for underserved pts in Tijuana</li></ul>	05/2016
<b>Penn Medical Emergency Response Team - EMT and Internal Officer</b> <ul style="list-style-type: none"><li>Served the University of Pennsylvania community as a first responder to medical emergencies</li><li>Managed an organization of 60+ EMTs as an active executive board member</li></ul>	2013-2015

## TEACHING EXPERIENCE

<b>Tried and True Tutoring</b> <ul style="list-style-type: none"><li>Lead SAT/ACT classes for first-generation college applicants through the Upward Bound program</li></ul>	2015-2019
<b>Penn Tutoring Center</b> <ul style="list-style-type: none"><li>Tutored undergraduates in Organic Chem, Biochemistry, Multivariate Calculus, and Economics</li></ul>	2013-2015
<b>Penn Science Across the Ages</b> <ul style="list-style-type: none"><li>Designed and taught science lessons to elementary schoolers at Wilson Elem. in West Philadelphia</li></ul>	2012-2013

## HONORS

**Heart Rhythm Society Young Investigator Award (2021):** Won 1<sup>st</sup> place nationally among residents, fellows, and early career attendings for study “*Using Machine Learning to Identify Patients Likely to Require Repeat Catheter Ablation for AFib*”

**UCSD Resident Research Award (2021):** Selected to present at internal medicine program wide grand rounds for study “*Using Machine Learning to Identify Patients Likely to Require Repeat Catheter Ablation for AFib*”

**Gold Humanism Honor Society (2020):** Awarded for humanism in medicine; 1 of 5 residents selected at UCSD

**Sarnoff Cardiovascular Research Fellowship (2018):** Finalist; 1 of 20 medical students selected nationally

**SAS Research Grant (2015):** Awarded for individual project “Social Determinants of CVD Beliefs and Prevention in Southern India”

**PwC Junior Case Competition (2014):** 1st place in Wharton for best merger and acquisition model

**APT Muse Case Competition (2014):** 3rd place in Wharton for developing and modeling a scalable national marketing strategy by evaluating promotional campaigns using PCA analysis, multiple regressions, and ANOVA

## PUBLICATIONS

### Manuscripts

- Mylavarapu P**, Gupta NE, Gudi V, Mylavarapu A, Daniels LB, Patel M. Diversity Within the Most Competitive Internal Medicine Fellowships: Examining Trends from 2008 to 2018. *J Gen Intern Med*. 2020 Sep;35(9):2537-2544. doi: 10.1007/s11606-020-06008-5. Epub 2020 Jul 14. PMID: 32666493; PMCID: PMC7459033.
- Mylavarapu P**, Mahmud E, Patel MP. Prolonged left ventricular unloading prior to revascularization in cardiogenic shock associated with complete ventricular recovery. *Cardiovasc Revasc Med*. 2017;18(6S1):10-13.
- Malladi CL, Darden D, Aldaas O, **Mylavarapu PS**, Eskander M, Lupercio F, Han FT, Hoffmayer KS, Raissi F, Ho G, Krummen D, Feld GK, Hsu JC. Association between specific antiarrhythmic drug prescription in the post-procedural blanking period and recurrent atrial arrhythmias after catheter ablation for atrial fibrillation. *PLoS One*. 2021 Jun 24;16(6):e0253266. doi: 10.1371/journal.pone.0253266. PMID: 34166392; PMCID: PMC8224843.
- Aldaas OM, Lupercio F, Darden D, **Mylavarapu PS**, Malladi CL, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Birgersdotter-Green U, Feld GK, Hsu JC. Meta-analysis of the Usefulness of Catheter Ablation of Atrial Fibrillation in Patients With Heart Failure With Preserved Ejection Fraction. *Am J Cardiol*. 2021 Mar 1;142:66-73. doi: 10.1016/j.amjcard.2020.11.039. Epub 2020 Dec 5. PMID: 33290688; PMCID: PMC7902199.
- Aldaas OM, Malladi CL, **Mylavarapu PS**, Lupercio F, Darden D, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Comparison of Outcomes After Ablation of Atrial Fibrillation in Patients With Heart Failure With Preserved Versus Reduced Ejection Fraction. *Am J Cardiol*. 2020 Dec 1;136:62-70. doi: 10.1016/j.amjcard.2020.09.018. Epub 2020 Sep 15. PMID: 32941815; PMCID: PMC7895309.
- Darden D, Aldaas O, Malladi CL, **Mylavarapu PS**, Munir MB, Han FT, Hoffmayer KS, Raissi F, Ho G, Krummen D, Feld GK, Hsu JC. Association between early recurrences of atrial tachyarrhythmias and long-term outcomes in patients after repeat atrial fibrillation ablation. *J Interv Card Electrophysiol*. 2021 Apr 7. doi: 10.1007/s10840-021-00987-z. Epub ahead of print. PMID: 33826085.
- Bransky N, Iyer NR, Cannon SM, Tyan AH, **Mylavarapu P**, Orosco R, Horn DB, Moazzam AA. Three Rare Concurrent Complications of Tertiary Hyperparathyroidism: Maxillary Brown Tumor, Uremic Leontiasis Ossea, and Hungry Bone Syndrome. *J Bone Metab*. 2020 Aug;27(3):217-226. doi: 10.11005/jbm.2020.27.3.217. Epub 2020 Aug 31. PMID: 32911586; PMCID: PMC7571245.

### Abstracts

- Aldaas O, Ji-Hyun K, Palakodeti S, Mylavarapu A, **Mylavarapu P**, Kahn A, Hsu J, Ho G, Han F, DeMaria A. DIRECT ORAL ANTICOAGULANTS COMPARED WITH WARFARIN FOR THE TREATMENT OF LEFT VENTRICULAR THROMBI. *J Am Coll Cardiol*. 2022 Mar, 79 (9. Supplement) 1756. [https://doi.org/10.1016/S0735-1097\(22\)02747-4](https://doi.org/10.1016/S0735-1097(22)02747-4)
- Mylavarapu PS**, Aldaas OM, Darden D, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Using Machine Learning to Identify Patients Likely to Require Repeat Catheter Ablation for Atrial Fibrillation: Insights from the UC San Diego AF Ablation Registry. *Heart Rhythm Scientific Sessions*, Boston, July 2021. Poster presentation.
- Aldaas OM, Darden D, **Mylavarapu PS**, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Utility of Isoproterenol Infusion During Catheter Ablation of Atrial Fibrillation: Insights from the UC San Diego AF Ablation Registry. *Heart Rhythm Scientific Sessions*, Boston, July 2021. Poster presentation.
- Mylavarapu P**, Aldaas OM, Malladi CL, Lupercio F, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Outcomes after Atrial Fibrillation Ablation With and Without CTI Ablation: Insights from the UC San Diego AF Ablation Registry. *Poster Presentation, American Heart Association Scientific Sessions*, Dallas, Texas (virtual). November, 2020.
- Mylavarapu P**, Aldaas OM, Malladi CL, Lupercio F, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Association Between Time from Atrial Fibrillation Diagnosis to First Ablation With Long-Term Outcomes: Insights from the UC San Diego AF Ablation Registry. *Speaker Presentation, American Heart Association Scientific Sessions*, Dallas, Texas (virtual). November, 2020.
- Malladi CL, Darden D, Aldaas OM, **Mylavarapu PS**, Eskander M, Lupercio F, Han FT, Hoffmayer KS, Raissi F, Ho G, Krummen D, Feld GK, Hsu JC. Association between Antiarrhythmic Drug Therapy Prescription in the Blanking Period and Recurrent Atrial Arrhythmias after First-time Catheter Ablation for Atrial Fibrillation. *Poster Presentation, AHA Scientific Sessions*, Dallas, TX (virtual). November, 2020.
- Aldaas OM, Lupercio F, Malladi CL, **Mylavarapu PS**, Darden D, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Catheter ablation of atrial fibrillation in patients with heart failure with preserved ejection fraction: a systematic review and meta-analysis. *Poster presentation, European Society of Cardiology Congress* 2020. August, 2020.

- Aldaas OM, Malladi CL, **Mytavarapu, PS**, Lupercio F, Han FT, Hoffmayer KS, Krummen D, Ho G, Raissi F, Feld GK, Hsu JC. Outcomes After Catheter Ablation of Atrial Fibrillation in Patients with Heart Failure with Preserved Ejection Fraction: Insights from the UC San Diego AF Ablation Registry. Poster presentation, American College of Cardiology, Scientific Sessions, Chicago, IL. March, 2020.
- **Mytavarapu P**, Al-Khiami B, Hasan M, Al-Masoud A, Omran J, Walters D, Ang L, Reeves R, Mahmud E, Patel M, Ocelot (OCT) guided directional atherectomy vs. initial angioplasty strategies in management of symptomatic peripheral arterial disease: safety and efficacy outcomes of consecutive patients over 5 years. Cath and Cardiovasc Interv. 2018
- Pourdjabbar A, Altwijri F, Ang L, **Mytavarapu P**, Behnamfar O, Reeves R, Mahmud E, Patel M. The safety and clinical feasibility of OCT guided atherectomy in the percutaneous management of patients with peripheral arterial disease: A single center, real world experience from a tertiary care center. Cath and Cardiovasc Interv. 2017;89: S1–S216. doi:10.1002/ccd.27053