

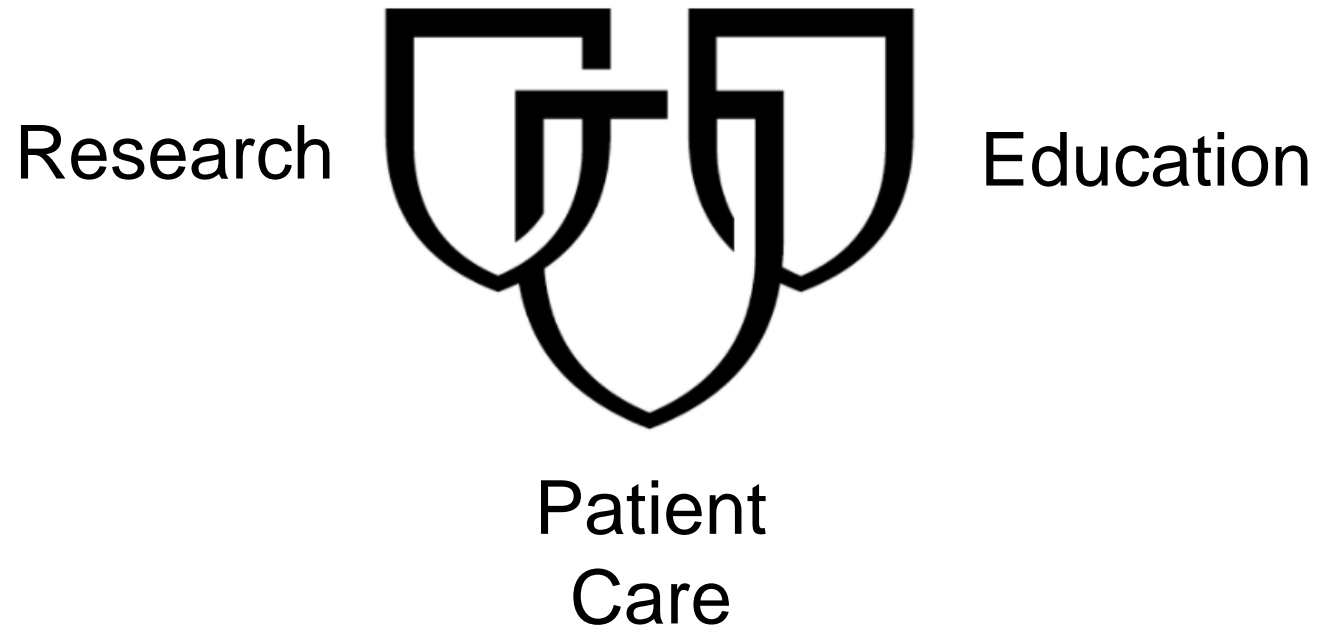


# Clinical Cardiac Electrophysiology Fellowship

Mayo Clinic Arizona  
2021 Interview Season

Dan Sorajja, MD, FACC, FHRS  
Program Director

# The 3 Shields of Mayo Clinic



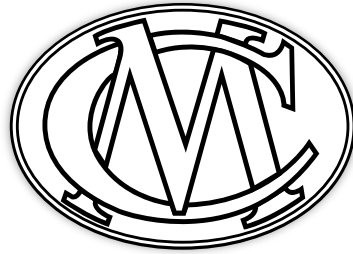
Primary value:

“The needs of the patient come first”

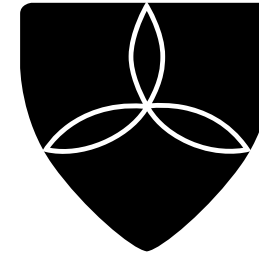


"The **best interest of the patient is the only interest to be considered** and in order that the sick may have the benefit of advancing knowledge, **union of forces is necessary.**"

-W.M. Mayo



Mayo Clinic logo –  
1927



Mayo Clinic logo –  
1973

## Mayo Clinic Mission

“To inspire hope and contribute to health and well-being by providing the best care to every patient through integrated clinical practice, education and research”



Mayo Clinic logo – 1986



Mayo Clinic logo – 2001



## Mayo Clinic is...

The first and largest integrated, not-for-profit medical group practice in the world.



# 1987 – Mayo Clinic expanded to Scottsdale, AZ



# 1989 – Mayo Graduate School was established



Photos  
from 1989  
MGS  
brochure.



# 1998 - Mayo Clinic Hospital opened in Phoenix, AZ





# Mayo Clinic Today

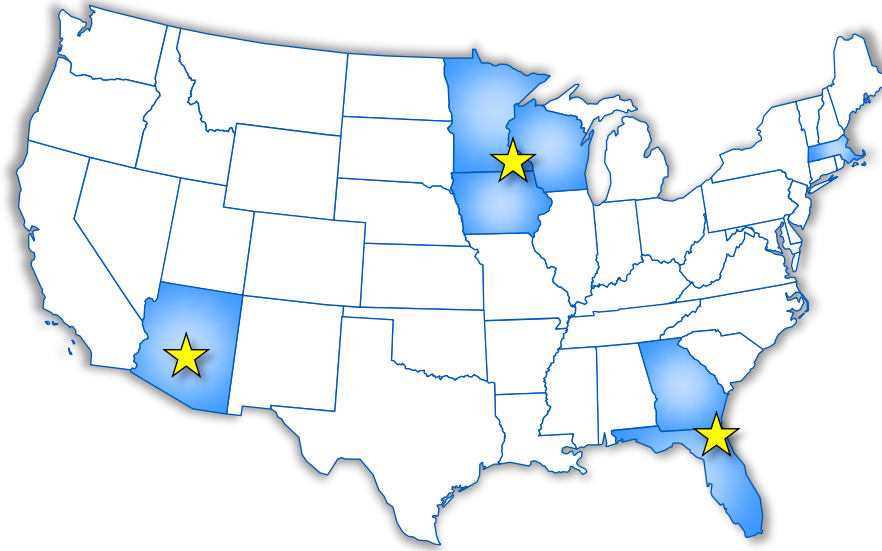
**6** US STATES

**5** SCHOOLS

**65,000** EMPLOYEES

**1.3 million** UNIQUE PATIENTS  
from every state  
& 143 countries

**\$14 billion** ENTERPRISE REVENUE  
all income reinvested



London

Abu Dhabi



# Mayo Clinic Arizona

- 100,000 patients/year
- 557 staff physicians
- 65 specialties
- 224 residents & fellows
- 6,223 total employees
- Campuses
  - Phoenix
  - Scottsdale
  - Glendale
  - Thunderbird
  - San Tan



# Mayo Clinic Today

- Mayo Clinic is one of the best-known and most-trusted names in medicine throughout the world.
- More than one million people receive care at Mayo Clinic locations each year, and millions more benefit from innovations and discoveries that provide answers, healing and hope.





# 2021-2022

## US News and World Report Rankings



### Highlights of the 2021-22 U.S. News & World Report Best Hospitals Rankings

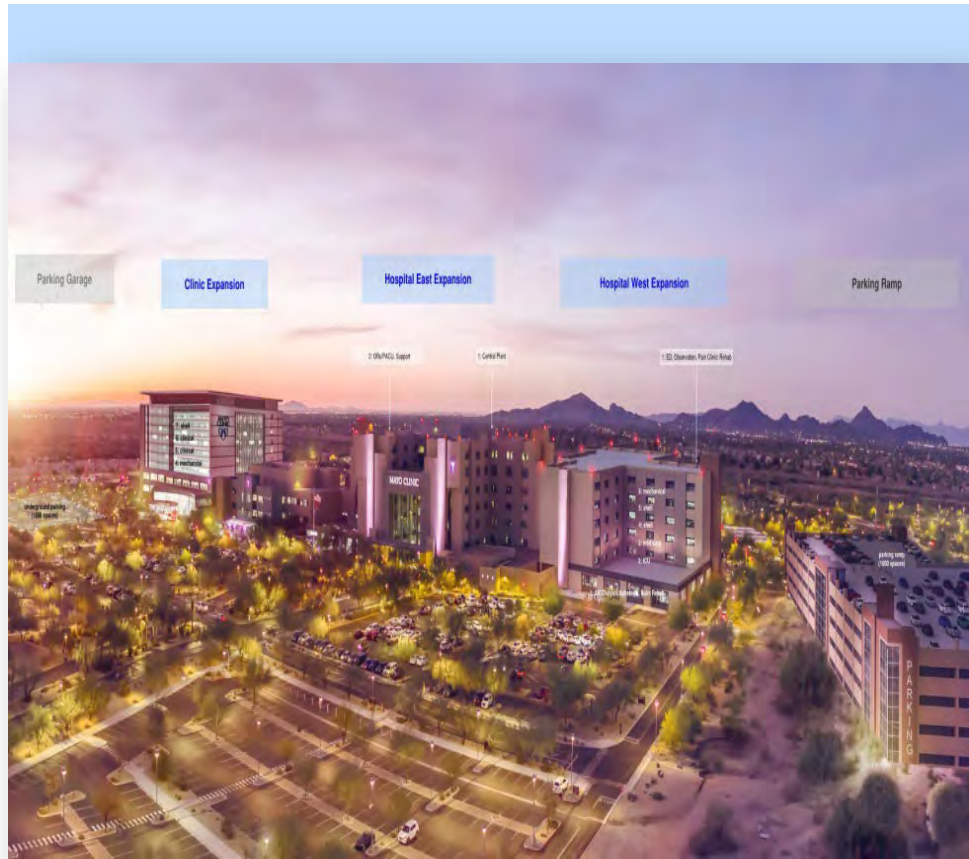
- Arizona is No. 15 on the Honor Roll.
- Arizona nationally ranked in 10 data driven specialties
- Rochester is No. 1 on the Honor Roll.
- Rochester is nationally ranked in 14 adult specialties

For cardiology –

Mayo Arizona is nationally ranked #22 (#1 in Arizona - 8 years in a row)

Mayo Rochester is nationally ranked #2

# Future Mayo Clinic Arizona Arizona. Bold. Forward. (In Progress)



- Expansion to include additional:
  - 94 inpatient beds including 18 incremental Critical Care beds
  - 5 ORs, expansion of pre-op, PACU, Surgical Pathology
  - 31 incremental ED beds adjacent to Observation Unit
  - 2 CT, 2 MRI, and Radiology support

# Goals of Mayo GME



- Prepare physicians and scientists to meet the nation's evolving health needs
- Ensure that the medical students, biomedical graduate students, residents, fellows, faculty, and health care workforce are diverse and culturally competent
- Advance medical knowledge, therapies, and technologies to prevent disease, alleviate suffering, and improve quality of life



# Mayo School GME Quick Facts

- **Arizona GME**

- 224 residents and fellows
- 153 residents in accredited programs
- 61 fellows in accredited programs
- 10 fellows in unaccredited programs
- 50 current active programs

- **All of Mayo GME**

- 305 total programs
- 1827 total trainees



**WHO IS DOING  
THE TEACHING?**



# CCEP Faculty



Dan Sorajja, MD  
Program Director (PD), CCEP  
Associate Prof. of Medicine



Hicham El-Masry, MD  
Associate Program Director  
Assistant Prof. of Medicine



Luis Scott, MD  
Prior PD, CCEP  
Chair, CV Diseases  
Associate Prof. of Medicine



Win-Kuang Shen, MD  
Prior Chair, CV Diseases  
Prof. of Medicine



Komandoor Srivathsan, MD  
Prior PD, CCEP  
Prof. of Medicine



Arturo Valverde, MD  
Assistant Prof. of Medicine  
EP Division Chair



Justin Lee, MBBS  
Assistant Prof. of Medicine



# CCEP Faculty



Dan Sorajja, MD  
38 articles  
12 book chapters



Hicham El-Masry, MD  
12 articles  
1 book chapter



Luis Scott, MD  
50 articles  
1 book chapter



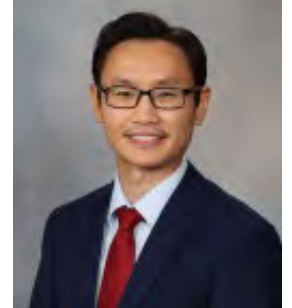
Win-Kuang Shen, MD  
290 articles  
44 book chapters



Komandoor Srivathsan, MD  
75 articles  
4 book chapters



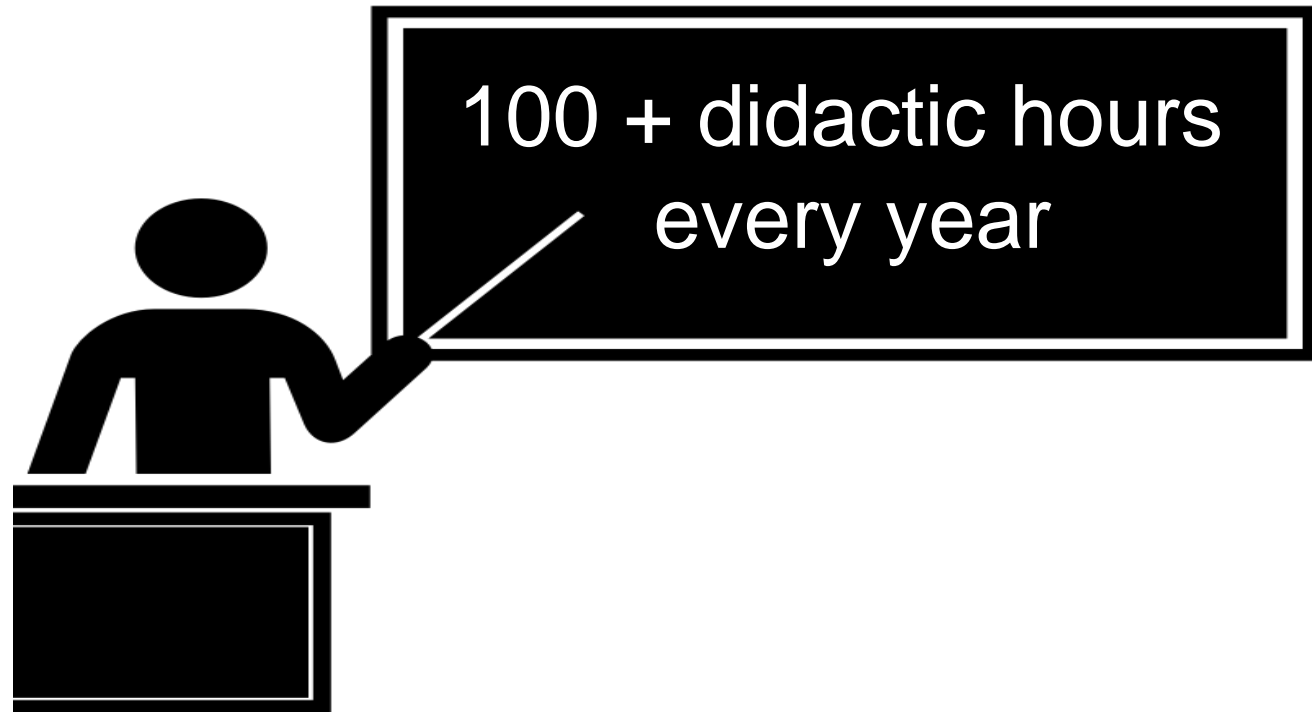
Arturo Valverde, MD  
5 articles



Justin Lee, MBBS  
42 articles  
3 book chapters

# The Teaching

- **Tuesday morning**
  - Device programming and troubleshooting
  - Classic EP physiology and in-depth article review
  
- **Wednesday morning**
  - EP grand rounds
  - Case presentations
  - Journal club
  - Morbidity and mortality



# Clinical Workload



- EP lab: 4 days per week
- Continuity Clinic: ½ day per week
- Device Clinic: ½ day per week
  - Outpatient during 1<sup>st</sup> year
  - Inpatient during 2<sup>nd</sup> year
- Weekend call: 1 weekend per month
- Away rotations
  - Phoenix Children's Hospital, 1 month during 2<sup>nd</sup> year
  - Mayo Clinic Jacksonville, 1 month during 2<sup>nd</sup> year
  - Other electives are available
- Research block: 2 months total
  - Can be taken 1 week at a time throughout fellowship
- Case presentations about 1 per month

# Benefits

- Salary:
  - PGY 7: \$76445
  - PGY 8: \$79396
- Meal Stipend
- Vacation:
  - 15 days annually + 6 Mayo holidays
  - Can roll over 5 days to next year
- Paid parental leave: 5 days
- Comprehensive medical care and dental plan
  - PCP provided within 30 days of starting
- FREE parking (including a parking garage)
- We care about your well-being







# Other Perks – Trips / Meetings

- Presentations
  - 10 trip days (National and International)
- Attendance
  - 1 local attendance conference per year (up to 5 days)
  - 1 national attendance conference per year
  - Heart Rhythm Society Scientific Sessions in May
  - Annual EP course in December
  - Annual Sedona Cardiology Conference in August
  - Heart Rhythm Society board review course
  - Industry sponsored conferences



# Other Perks – EP Library Books

Textbook	Editor and Authors
<b>Cardiac Electrophysiology: From Cell to Bedside</b>	6 <sup>th</sup> ed. Ed. by Zipes DP and Jalife J. 2014.
<b>Clinical Cardiac Pacing, Defibrillation, and Resynchronization Therapy</b>	4 <sup>th</sup> ed. Ed. by Ellenbogen KA et al 2011.
<b>Electrophysiologic Testing</b>	5 <sup>th</sup> ed. Ed. by Fogoros RN. 2012.
<b>Essential Concepts of Electrophysiology through Case Studies: Intracardiac EGMs</b>	Ed. by Ellenbogen KA. 2015.
<b>Josephson’s Clinical Cardiac Electrophysiology</b>	5 <sup>th</sup> ed. Ed. by Josephson ME. 2016.
<b>Mayo Clinic Electrophysiology Manual</b>	Ed. by Asirvatham SJ. 2014.
<b>A Case-Based Approach to Pacemakers, ICDs, and Cardiac Resynchronization</b>	Ed. by Friedman PA et al. 2013.
<b>Electrophysiological Maneuvers for Arrhythmia Analysis</b>	1 <sup>st</sup> ed. Ed. by Klein GJ et al. 2014.
<b>Anatomy for Cardiac Electrophysiologists: A Practical Handbook</b>	Ed. by Ho S Yen, Ernst S. 2012.
<b>Evidence-Based Cardiology</b>	4 <sup>th</sup> ed. Ed. by Steinberg BA, and Cannon CP. 2016.
<b>Syncope: Mechanisms and Management</b>	2 <sup>nd</sup> ed. Ed. by Grubb BP and Olshansky B. 2005.
<b>Handbook of Cardiac Electrophysiology. A Practice Guide to Invasive EP Studies and Catheter Ablation</b>	Murgatroyd FD, et al. 2002.
<b>Implantable Cardioverter-Defibrillators. Step by Step. An Illustrated Guide</b>	Stroobandt RX et al. 2009.
<b>Heart and Coronary Arteries: An Anatomical Atlas for Clinical Diagnosis, Radiological Investigation, and Surgical Treatment</b>	McAlpine WA. 1975.
<b>Practical Cardiac Electrophysiology</b>	1 <sup>st</sup> ed. Ed. by Bhargava K and Asirvathsam S. 2017.
<b>Case Studies in Clinical Cardiac Electrophysiology</b>	Miller JM, Das M, Zipes, DP. 2018
<b>Clinical Arrhythmology and Electrophysiology. A Companion to Braunwald’s Heart Disease</b>	3 <sup>rd</sup> ed. Ed. by Issa ZF, Miller JM, Zipes DP. 2019.
<b>Fluoroscopy Reduction Techniques for Catheter Ablation of Cardiac Arrhythmias</b>	Ed. by Razminia M, and Zei, Paul C.

# Other Perks



- Online access to:
  - Cardiosource
  - UpToDate
  - ACC SAP
  - K2P
  - Mayo Clinic library online access to hundreds of journals
- One book: Case Studies in CCEP (Miller et. al)
- \$1200 for library use
- Special invitations for outside courses offered at no charge

# Where Are Our Graduates Now?

Program Dates	Fellow	Current Location
June 2007 – June 2008	Erik Wissner	University of Illinois; Chicago, IL
June 2008 – June 2009	Daniel Ng	Kaiser Permanente; Walnut Creek, CA
June 2009 – June 2010	Sandeep Arora	Excelsa Health; Greensburg, PA
Sept 2010 – August 2011	Sushmitha Patibandla	Banner Estrella, Phoenix; AZ
July 2011 – August 2012	Vatsal Inamdar	Village Heart & Vein Center; Lady Lake, FL
June 2012 – June 2014	Fernando Tondato	Mr. Talbert Medical; Clackamas, OR
June 2014 – June 2016	Jeffrey Munro	Phoenix Heart; Glendale, AZ
June 2015 – June 2017	Narendra Duddyala	LSU Health; Shreveport, LA
July 2016 – June 2018	Naktal Hamoud	Memorial Hermann TMC; The Woodlands, TX
July 2017 – June 2019	Victor Abrich	MercyOne Waterloo; Waterloo, IA
July 2018 – June 2020	Vatsal Ladia	Self Regional Healthcare, Greenwood, SC
July 2019 – June 2021	Nareg Minaskeian	Southwest Cardiovascular Associates, Mesa, AZ

 2 year fellowship

 Academic appointments



**Cardiovascular  
Diseases at Mayo  
Clinic Arizona**



# Cardiology Attending Staff and Fellows

- 34 staff
  - 7 EP
  - 12+ Echo/imaging
  - 4 Interventional
  - 5 CHF
  - 2 Adult congenital
  - 1 Vascular
  - 10 General
  - 2 PhD
- Other Cardiology Fellows
  - 12 General cardiology
  - 1 Echo
  - 1 CHF
  - 2 NP Cardiology fellows
  - 2 EP fellows (including yourself)

# General Cardiology Conferences

- Summer core curriculum
- Cardiology Grand Rounds weekly
- Internal Medicine Grand Rounds weekly
- Professor rounds weekly
- ECG conference bi-monthly
- Weekly case presentation conference
  - Cath, EP, echo
- Board review / Journal club bi-monthly
- Vascular conference





# Other Things You Should Know





# Diversity



The Mayo Foundation values and promotes diversity as a *strategic* advantage to create a caring service environment where individual differences are valued, allowing all staff to contribute to the fullest potential

# Life in Phoenix



- 5th Largest city in US
- 1.6 million population in Phoenix
- 4.5 million in Phoenix metro
- 310 sunny days per year
  - (More sunny days than any other major metropolitan area)
- Cost of living is 5% lower than national average



# Life in Phoenix

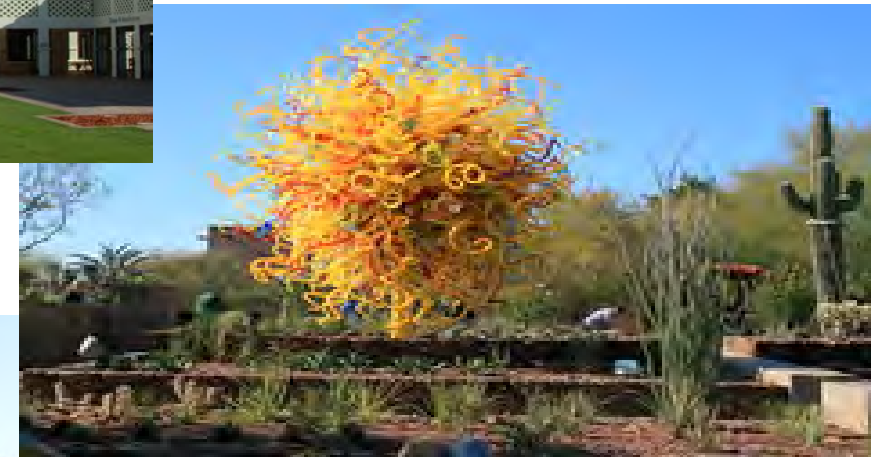
- Hiking, Biking, & Equestrian trails
  - Largest municipal park in North America –
    - South Mountain Park and Preserve is 16,500 acres big
  - Sedona
  - Grand Canyon
  - Page
- 6 Lakes within 75 miles





# Life in Phoenix

- Barrett Jackson car show
- Museums
  - Musical Instrument Museum
  - Heard Museum
  - Desert Botanical Garden
  - Taliesin West
- Every concert tour





# Life in Phoenix - Sports

- Waste Management Golf Open
- Cactus League MLB Spring Training (15 teams + Arizona Diamondbacks)
- Phoenix Suns basketball
- Arizona Cardinals Football
- Arizona Coyotes hockey
- Nascar (2 events)
- 200+ golf courses
- College sports



# The End

- Life is good here
- For your EP training, the opportunity to train here is one to take

