2011-2012
Cedars-Sinai/VA Greater Los Angeles Fellowship Training Program in Cardiovascular Diseases
The Cedars-Sinai/VA Greater Los Angeles Fellowship Training Program in Cardiovascular Diseases is an ACGME-accredited program that is designed to prepare the trainee for a career of excellence in patient care, teaching and research. It is one of the largest training programs in the Western United States, with a total number of 21 fellows. The Cedars-Sinai Medical Center merged its training program with the West Los Angeles VA Medical Center beginning July 2008. Cedars-Sinai Medical Center is a tertiary care hospital ranked as one of the largest nonprofit academic medical centers in the Western United States with 958 beds. Cedars-Sinai has been consistently ranked as one of the country’s top hospitals in Heart and Heart Surgery in the annual guide to the “America’s Best Hospitals” edition of U.S. News & World Report. The WLA VA is one of the largest and most comprehensive health care facilities within the VA network with 832 beds. It serves as a tertiary care center for Southern California and is about a 20 minute drive west from CSMC. Overall, between two world class tertiary care centers that have an excellent track record in providing a rich academic environment for medical training with strong educational and research opportunities, the Fellowship Training Program in Cardiovascular Diseases offers an unrivaled opportunity for clinical training and academic growth. The overriding goal is to train future leaders in the field of Cardiovascular Diseases.

The curriculum includes 24 months of clinical rotations that comply with ACGME requirements and the COCATS guidelines and up to 12 months of research/elective time. Vacation time includes 4 weeks each year. Information regarding stipends and benefits is available at http://web.csmc.edu/research-and-education/gme/gme-policies.aspx. The following rotations listed below are completed during the fellowship.

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Faculty—CSMC</th>
<th>Faculty—WLA VA</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory</td>
<td>All CSMC Faculty</td>
<td>All VA Faculty</td>
<td>Fellows work in several different half-day clinics including cardiology</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>continuity, cardiomyopathy, pulmonary hypertension, pacemaker, and pre-cath</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>clinic.</td>
</tr>
<tr>
<td>Cath</td>
<td>Raj Makkar*</td>
<td>Jesse Currier*</td>
<td>Fellows learn to perform diagnostic coronary angiography, right heart</td>
</tr>
<tr>
<td></td>
<td>Sabal Kar</td>
<td>Raman Ebrahmi</td>
<td>catheterization, IABP insertion, hemodynamic studies, IVUS, OCT, FFR,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>endomyocardial biopsies, and assist in PCI.</td>
</tr>
<tr>
<td>CGU</td>
<td>Bojan Cercek*</td>
<td>All VA Faculty</td>
<td>The closed 12-bed Coronary Intensive Care Unit (CICU) is staffed year-round</td>
</tr>
<tr>
<td></td>
<td>Kuang-Yuh Chyu</td>
<td></td>
<td>by a dedicated attending and run by the fellow during that rotation month.</td>
</tr>
<tr>
<td></td>
<td>Joshua Goldhaber</td>
<td></td>
<td>The fellow supervises resident teams and is responsible for unit procedures</td>
</tr>
<tr>
<td></td>
<td>Sanjay Kaul#</td>
<td></td>
<td>and responding to a variety of cardiovascular emergencies throughout the</td>
</tr>
<tr>
<td>Consult</td>
<td>PK Shah**</td>
<td>All VA Faculty</td>
<td>hospital.</td>
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<tr>
<td></td>
<td>Sanjay Kaul#</td>
<td></td>
<td>Fellows run the clinical consult service comprised of residents and UCLA</td>
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<td></td>
<td></td>
<td></td>
<td>medical students and give bi-weekly didactic and ECG conferences.</td>
</tr>
<tr>
<td>Echo</td>
<td>Robert Siegel*</td>
<td>Alberta Warner*</td>
<td>The echo lab duties include performing and interpreting transthoracic,</td>
</tr>
<tr>
<td></td>
<td>Victor Cheng</td>
<td>Neda Buljubasic</td>
<td>transesophageal, intraoperative, and stress echocardiography. Fellows also</td>
</tr>
<tr>
<td></td>
<td>Swaminatha Gurudevan</td>
<td>Shelley Shapiro</td>
<td>have the opportunity to perform echo-guided pericardiocentesis and learn</td>
</tr>
<tr>
<td></td>
<td>Robert Krause</td>
<td></td>
<td>pericardial drain management. The fellows on rotation are responsible for</td>
</tr>
<tr>
<td></td>
<td>Troy Labounty</td>
<td></td>
<td>giving a weekly conference highlighting interesting cases from the lab.</td>
</tr>
<tr>
<td></td>
<td>Takahiro Shota</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kirsten Tolstrup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>Sumreet Chugh*</td>
<td>Zenaida Feliciano*</td>
<td>Fellows run the clinical EP consult service as well as learn to</td>
</tr>
<tr>
<td></td>
<td>Michael Shehata</td>
<td>Malcolm Bersohn</td>
<td>interrogate and interpret intracardiac devices (pacemaker, ICD). There is</td>
</tr>
<tr>
<td></td>
<td>Xunyang Wang</td>
<td>Janet Han</td>
<td>also opportunity to take an active role in EP studies alongside the EP</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>fellows at both sites.</td>
</tr>
<tr>
<td>Heart Failure/</td>
<td>Jon Kobashigawa*</td>
<td>Freny Mody**</td>
<td>Fellows rotate on 3 different clinical services during the month, including</td>
</tr>
<tr>
<td>Transplant</td>
<td>Babak Azarbai</td>
<td></td>
<td>Heart Failure, VAD, and Transplant. The Heart Failure Unit on the 6th floor</td>
</tr>
<tr>
<td></td>
<td>Lawrence Czer</td>
<td></td>
<td>is a dedicated 30-bed resident-run unit with invasive monitoring and</td>
</tr>
<tr>
<td></td>
<td>Antoine Hage</td>
<td></td>
<td>isotope infusion capabilities. Fellows duties include both direct patient</td>
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<tr>
<td></td>
<td>Michele Hamilton</td>
<td></td>
<td>care and supervising residents, in addition to performing cardiac</td>
</tr>
<tr>
<td></td>
<td>Michelle Kittleson</td>
<td></td>
<td>catheterization and endomyocardial biopsies. Highly specialized VAD nurses</td>
</tr>
<tr>
<td></td>
<td>Jaime Moriguchi</td>
<td></td>
<td>teach basic management and troubleshooting for LVAD and BIVAD devices.</td>
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<tr>
<td></td>
<td>Jignesh Patel</td>
<td></td>
<td>Fellows also participate in a weekly interdisciplinary transplant meeting</td>
</tr>
<tr>
<td></td>
<td>Ernst Schwarz</td>
<td></td>
<td>consisting of cardiology transplant and surgical attendings, nurse</td>
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<td></td>
<td></td>
<td></td>
<td>practitioners, social workers, psychiatrists, and infectious disease and</td>
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<td></td>
<td>pulmonary specialists to review all patients on the services and determine</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>transplant and VAD candidacy.</td>
</tr>
<tr>
<td>Imaging</td>
<td>Daniel Berman*</td>
<td>Donald Chang#</td>
<td>Fellows pre-read a variety of nuclear and PET perfusion studies which are</td>
</tr>
<tr>
<td></td>
<td>John Friedman</td>
<td></td>
<td>then over-read by the imaging attending. Fellows also run nuclear stress</td>
</tr>
<tr>
<td></td>
<td>Sean Hayes</td>
<td></td>
<td>tests including exercise, adenosine, and regadenoson stress modalities, and</td>
</tr>
<tr>
<td></td>
<td>James Min</td>
<td></td>
<td>are exposed to cardiac CT and MR imaging.</td>
</tr>
<tr>
<td></td>
<td>Louise Thomson</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**chief of cardiology; *subspecialty director; #fellowship site director
the WORK

Conferences

Daily conferences and a Core Curriculum are an integral part of fellow education. The conferences range from grand-round style presentations to case-based learning. Fellows are excused from clinical duties during conference time unless emergent clinical situations arise. Videoconferencing is used between CSMC and WLA VA for CPC and CCU conferences.

<table>
<thead>
<tr>
<th>Core Curriculum – weekly</th>
<th>Echo Didactic Lecture – 3 times each month</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCU – weekly</td>
<td>Imaging – 3 times each month</td>
</tr>
<tr>
<td>Clinical Pathological Conference (CPC) – biweekly</td>
<td>Journal Club (JC) – weekly</td>
</tr>
<tr>
<td>Cath – weekly</td>
<td>ACC/AHA Guidelines – monthly</td>
</tr>
<tr>
<td>Echo – weekly</td>
<td>Physical Exam Rounds (PEx) – monthly</td>
</tr>
<tr>
<td>EP – weekly</td>
<td>Research in Progress (RIP) – monthly</td>
</tr>
<tr>
<td>Grand Rounds – weekly</td>
<td>Medical-Surgical Case Conference (Med-Surg) – weekly</td>
</tr>
</tbody>
</table>

Conference Schedule

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>7am</td>
<td>Med-Surg (VA)</td>
<td>Core Curriculum</td>
<td>Cath</td>
<td></td>
</tr>
<tr>
<td>8am</td>
<td>EP</td>
<td></td>
<td>Imaging</td>
<td>PEx; ECG/Cath/Echo (VA)</td>
</tr>
<tr>
<td>9am</td>
<td></td>
<td>Grand Rounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noon</td>
<td>JC (VA)</td>
<td>Echo Didactics/JC</td>
<td>Echo/Guidelines</td>
<td>CPC/RIP; CCU</td>
</tr>
</tbody>
</table>

Call

Once weekly and one weekend per month. The general fellow is responsible for assessing emergent cases such as STEMI, heart block, dissection, tamponade, arrhythmias, and urgent consults. On weekends the fellow runs rounds in the CICU and sees urgent floor consults.

Volunteer Opportunities

The Saban Clinic located near CSMC provides an opportunity to volunteer at a free clinic for indigent patients without medical insurance. The clinic is staffed by a cardiology attending, fellow, and 2-3 medical residents/interns. The fellow performs bedside transthoracic echocardiograms at the clinic under the supervision of Cedars echo faculty.

National Meetings

Fellows receive free registration for all of the national meetings sponsored by the Cedars-Sinai Heart Institute, including the annual Controversies and Advances in the Treatment of Cardiovascular Disease, Arrhythmia Symposium, Advances in Nuclear Cardiology and Cardiac CT, and Heart Transplantation and Advanced Heart Failure. In addition, fellows are encouraged to submit their research to ACC, AHA, HRS, SCCT and other national organizations with potential for travel stipends.
the FELLOWS

3rd Year Class

Sameer Amin
Hometown: Torrance, CA
Undergrad: USC, Los Angeles, CA
Medical School: UCLA, Los Angeles, CA
Residency: Brigham and Women’s Hospital, Boston, MA
Career Plan: Interventional Fellowship, UCLA, Los Angeles, CA

Jacob Dal-Bianco
Hometown: Vienna, Austria
Medical School: University of Vienna, Vienna, Austria
Residency: Mayo Clinic, Rochester, MN
Other: University of Vienna, MGH, Boston, MA (echo, research)
Career Plan: Academic Cardiology (TBD)

Dael Geft
Hometown: Jerusalem, Israel
Undergrad: Columbia University, New York, NY
Medical School: Sackler School of Medicine, Tel Aviv, Israel
Residency: Cedars-Sinai, Los Angeles, CA
Career Plan: Advanced Heart Failure & Transplantation Fellowship, Cedars-Sinai, Los Angeles, CA

Amin Manuchehry
Hometown: Waterloo, IA
Undergrad: Northwestern University, Evanston, IL
Medical School: Northwestern University, Chicago, IL
Residency: Northwestern University, Chicago, IL
Career Plan: Interventional Fellowship, Cedars-Sinai, Los Angeles, CA

Steve Stevens
Hometown: Los Angeles, CA
Undergrad: USC, Los Angeles, CA
Medical School: UCSF, San Francisco, CA
Residency: Cedars-Sinai, Los Angeles, CA
Career Plan: Interventional Fellowship, UCLA, Los Angeles, CA

Amelia Young
Hometown: Los Angeles, CA
Undergrad: USC, Los Angeles, CA
Medical School: UMDNJ, Piscataway, NJ
Residency: Cedars-Sinai, Los Angeles, CA
Career Plan: Interventional Fellowship, UCLA, Los Angeles, CA

Jorge Castellanos
Hometown: Modesto, CA
Undergrad: Stanford University, Palo Alto, CA
Medical School: Harvard Medical School, Boston, MA
Residency: UCSF, San Francisco, CA

Vamsi Krishna
Hometown: Sugar Land, Texas
Undergrad: Illinois Institute of Technology, Chicago, IL
Medical School: University of Texas Medical Branch, Galveston, TX
Residency: UCLA, Los Angeles, CA
Other: U.S. Army Combat Medical Corps

Collins Kwarteng
Hometown: Accra, Ghana
Undergrad: UMass, Boston, MA
Medical School: Northwestern University, Proctor, MA
Residency: Emory University, Atlanta, GA
Other: U.S. Army Combat Medical Corps

Amit Noheria
Hometown: Panthikula, Haryana, India
Medical School: All India Institute of Medical Sciences, New Delhi, India
Residency: Mayo Clinic, Rochester, MN
Other: Harvard School of Public Health, Boston, MA

Krishna Ramaraj
Hometown: Theni, Tamil Nadu, India
Medical School: Madurai Medical College, Tamil Nadu, India
Residency: University of Arizona, Tucson, AZ
Other: University of Sheffield, Sheffield, UK
Imperial College of London, London, UK
Barts Cadwaladr University Health Board, London, UK

Anita Phan
Hometown: Los Angeles, CA
Undergrad: UCLA, Los Angeles, CA
Medical School: UC Davis, Sacramento, CA
Residency: Cedars-Sinai, Los Angeles, CA
Other: Advanced Heart Failure & Transplantation Fellowship, Cedars-Sinai, Los Angeles, CA

Janet Wei
Hometown: Claremont, CA
Undergrad: Northwestern University, Evanston, IL
Medical School: Northwestern University, Chicago, IL
Residency: Cedars-Sinai, Los Angeles, CA

Raymond Zimmer
Hometown: Los Angeles, CA
Undergrad: Stanford University, Palo Alto, CA
Medical School: UCLA, Los Angeles, CA
Residency: UCLA, Los Angeles, CA

2nd Year Class

Kevin Bauer
Hometown: Anchorage, AK
Undergrad: University of Washington, Seattle, WA
Medical School: New York Medical College, Valhalla, NY
Residency: UCLA, Los Angeles, CA

Jared Herr
Hometown: Amarillo, TX
Undergrad: Texas A&M University, College Station, TX
Medical School: Texas Medical School, Houston, TX
Residency: UCLA, Los Angeles, CA

Ryan Morrissey
Hometown: Rancho Cucamonga, CA
Undergrad: UCSD, Santa Barbara, CA
Medical School: Tufts University, Boston, MA
Residency: Cedars-Sinai, Los Angeles, CA
Other: Advanced Heart Failure & Transplantation Fellowship, Cedars-Sinai, Los Angeles, CA

Prashant Patel
Hometown: Tems Haute, IN
Undergrad: Northwestern University, Evanston, IL
Medical School: Indiana University, Indianapolis, IN
Residency: UCLA, Los Angeles, CA

Amir Sadrzadeh Rafie
Hometown: Tehran, Iran
Medical School: Tehran University, Tehran, Iran
Residency: Yale, New Haven, CT
Other: Stanford University, Palo Alto, CA (Postdoctoral Fellowship)

Ankit Rathod
Hometown: Ahmedabad, India
Medical School: Smt. NHL Municipal Medical College, India
Residency: Wayne State University, Detroit, Michigan

Rashmee Shah
Hometown: Diamond Bar, CA
Undergrad: Northwestern University, Evanston, IL
Medical School: Tufts University, Boston, MA
Residency: Northwestern University, Chicago, IL
Other: Stanford University, Palo Alto, CA (Postdoctoral Fellowship)

1st Year Class

Raj Patel
Hometown: Middletown, CA
Undergrad: UCSD, San Diego, CA
Medical School: UCSF, San Francisco, CA
Residency: UCLA, Los Angeles, CA
Other: UCSD, San Diego, CA (Echo, research)

Amir Sadrzadeh Rafie
Hometown: Tehran, Iran
Medical School: Tehran University, Tehran, Iran
Residency: Yale, New Haven, CT
Other: Stanford University, Palo Alto, CA (Postdoctoral Fellowship)

Ankit Rathod
Hometown: Ahmedabad, India
Medical School: Smt. NHL Municipal Medical College, India
Residency: Wayne State University, Detroit, Michigan

Rashmee Shah
Hometown: Diamond Bar, CA
Undergrad: Northwestern University, Evanston, IL
Medical School: Tufts University, Boston, MA
Residency: Northwestern University, Chicago, IL
Other: Stanford University, Palo Alto, CA (Postdoctoral Fellowship)
Key Accomplishments:

1924 - First ECG machine in Southern California (CSMC)
1952 - First use of thrombolytic enzymes (CSMC)
1954 - Cedars of Lebanon organized the first “CCU” in Southern California
1959 - First description of vasospastic angina (CSMC)
1969 - First echocardiographic description of “SAM” in hypertrophic cardiomyopathy (VAMC)
1970 - Invention of the Swan-Ganz catheter (CSMC)
1973 - First use of vasodilators to treat heart failure (CSMC)
1979 - The Diamond-Forrester Classification of chest pain was described (CSMC)
1982 - Initial myocardial contrast echocardiography experiments (VAMC)
1994 - First use of the mutant gene-based therapy (apo A-I Milano) to fight atherosclerosis (CSMC)
1995 - Cedars developed nuclear software used world-wide for quantification of myocardial ischemia (CSMC)
2000 - Development of an LDL-based vaccine for atherosclerosis with human trials expected in 2011 (CSMC)
2005 - Development of an LDL-based vaccine for atherosclerosis with human trials expected in 2011 (CSMC)
2010 - Cedars began the CADUCEUS trial involving post-MI intracoronary stem cell injections (CSMC)

Landmark clinical trials: CSMC - AZACS, COURAGE, PARTNER, PROTECT-AF, EVEREST-II
VAMC - SCD-HeFT, V-HeFT, AFFIRM, ACUITY, RE-LY, ROCKET-AF

129 fellow authored publications since 2009. (select publications listed below)


the HIGHLIGHTS

Interventional Cardiology/Electrophysiology
- National leader in percutaneous valvular structural intervention:
  - TAVR (Transcatheter Aortic Valve Replacement)
  - MitraClip mitral valve repair device
  - WATCHMAN left atrial appendage occlusion device
- Completed enrollment in the first human study to use cardiac derived stem cells in post-MI patients
- Leaders in cardiac ablation procedures, device implantation and cardiac resynchronization therapy

Heart Failure/Transplant
- Most adult cardiac transplantations in the world in 2011 (83 heart, 2 heart-lung)
- First dedicated heart failure unit in California
- National leaders in comprehensive post-cardiac transplant care

Noninvasive Imaging
- World leader in development of nuclear cardiac imaging technology
- Cutting-edge innovation in cardiac MRI and noninvasive image quantitation
- Advanced 3D imaging for transesophageal echocardiogram studies
- Intra-procedural assessment of valvular and structural disease, including percutaneous mitral valve repair and aortic valve replacement, septal ablation, ASD/VSD closure and pacemaker optimization
the CITY

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Phone: (310) 478-3711