



# Vascular Resident Orientation *Loma Linda VA Health Care System*

UPDATED 04/03/2023

## Meet the VA Vascular team: Chief of Vascular Surgery

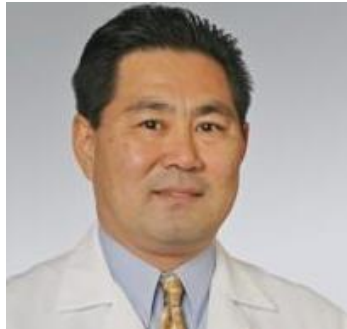
**Dr. Sharon Kiang, MD, RPVI, FSVS, FACS:** (301)  
613-9652

- ▶ Chair, Institutional Review Board (IRB) Committee
- ▶ Associate Professor, Department of Surgery, Division of Vascular Surgery
- ▶ Director of Research, Center of Excellence for Surgical Research, Loma Linda Surgery



# Meet the VA Vascular team: Attending Surgeons

- ▶ **Dr. Paul Aka**, MD: (909) 806-0842

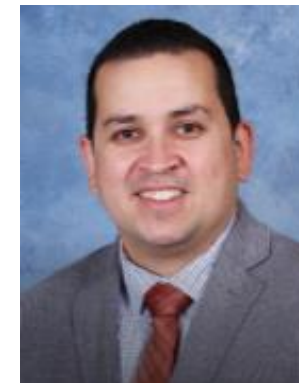


- ▶ **Dr. James Simpson**, MD: (951) 961-3022



- ▶ **Dr. Allen Murga**, MD, RPVI, FACS:  
(951) 323-5502

- ▶ Aortic Program Director, LLU Department of Surgery
- ▶ Program Director, LLU Department of Vascular Surgery
- ▶ Assistant Professor, LLU Department of Surgery



# Meet the VA Vascular team: Attending surgeons

▶ **Dr. Joe L. Pantoja**, MD, RPVI:

- ▶ (323) 206-8402
- ▶ Vascular Lab Director, VA Loma Linda
- ▶ Clinical Instructor, LLU Department of Surgery



▶ **Dr. Mary M. Lee**, DO, RPVI:

- ▶ (213) 220-5212
- ▶ Vascular Site Director, VA Loma Linda
- ▶ Assistant Professor, LLU Department of Surgery



# Meet the VA vascular team: Advanced Practice Practitioners

▶ **Tonya Hetrick**, RN, BSN  
Vascular Case Manager



▶ **Victoria Jezik**  
Vascular NP



# Goals

## Receive

structured  
clinical,  
academic, and  
systems- based  
education.

## Provide

excellent patient  
care to our  
veteran  
population.

## Enhance

your  
endovascular  
and open  
operative skills.

# 7 Competencies/ Metrics:

1. **Patient Care:** delivering safe and effective care in **all clinical settings** including inpatient, perioperative, operative and outpatient
2. **Practice- Based Learning and Improvement:** Applying **scientific data** and **best practices** to the care of the surgical patient
3. **Systems-Based Practice:** coordinating **multi-disciplinary care** of complex patients, accurately documenting clinical events, identifying resources through **social work**
4. **Awareness:** Recognizing limits of your own knowledge & skills, **seeking help**, self monitoring personal **health and wellness**, appropriately mitigating fatigue or stress
5. **Interpersonal & Communication Skills**
6. **Professionalism**
7. **Medical Knowledge**

# Interpersonal & Communication Skills:

- ▶ Coordinate recommendations from **consultants** (i.e. nephrology, podiatry, cardiology, etc), execute the plans in a timely manner
- ▶ Provide timely updates to **patients/families**
- ▶ Inform your **team members** (coresidents, NPs) when there is a change in the plan/ management of a patient
  - ▶ everyone should be on the same page and know the plan regardless of weekend call coverage, days off, etc
- ▶ Communicate with your **attendings** (follow up on the labs/imaging you've been waiting for and come up with a plan to present to them)



# Professionalism:

- ▶ Complete tasks in a **timely manner**: operative notes & stat consult notes completed within **24 hours**
- ▶ Be **punctual** to morning conferences with presentations loaded and ready to go
- ▶ Be **prepared** for educational conferences and cases (reading relevant chapters in textbook, atlas, etc)
- ▶ Take ownership and **responsibility** of the patients on service: diligently follow through with labs, imaging, recs; tie up loose ends
- ▶ When taking vacation, provide **ample notification (at least 4 wks)** and a reminder email/text to ensure a smooth transition in your absence (close the loop)
- ▶ **Respect** your co-residents, colleagues and attendings

# Medical Knowledge

- ▶ Pathophysiology and Natural history
- ▶ Physical Exam
- ▶ Diagnostic Workup/ Imaging
- ▶ Preoperative Evaluation
- ▶ Medical vs Surgical Management
- ▶ Postoperative care & complications
- ▶ Elective vs Emergent procedures

# Medical Knowledge PGY-2

Etiology, pathophysiology, anatomy, initial management

- ▶ **Atherosclerosis:** incidence in US Veteran population, risk factors and vascular beds
- ▶ **Diabetes Mellitus:** definition, complications (i.e. neuropathy), periop glucose control & insulin
- ▶ **Venous Disease:** Virchow's triad, DVT management, chronic venous insufficiency, hypercoagulable states
- ▶ **Aneurysm Disease:** natural history, etiology, common anatomic locations
- ▶ **Limb Salvage Surgery:** patient evaluation (pulse exam, ABIs, neuropathy, pedal sepsis)
- ▶ **Carotid Surgery:** symptomatic vs asymptomatic, interpret arch aortogram & carotid duplex
- ▶ **Claudication:** natural history, exercise ABIs, non-surgical management
- ▶ **Lower extremity amputations** & functional impact, surgical technique
- ▶ **Dialysis access:** upper extremity exam, venous and arterial anatomy, configurations
- ▶ **Mesenteric ischemia:** acute/chronic clinical presentation, interpret AP/lateral aortogram

# Medical Knowledge PGY-4

- ▶ **Venous Disease:** management of DVT, PE, hypercoagulable states, embolic vs thrombotic, thrombolytics, surgical therapy
- ▶ **Aneurysm Disease:** concomitant intraabd pathology (ex. colon CA), preservation of pelvic circulation, management of peripheral and visceral aneurysms
- ▶ **Limb Salvage Surgery:** indications, outcomes and complications of POBA, rational for postop vein graft surveillance
- ▶ **Carotid Surgery:** data and rationale for CEA vs CAS
- ▶ **Claudication:** non atherosclerotic causes (neurogenic, popliteal entrapment, adventitial cystic disease)
- ▶ **Dialysis access:** management of steal syndrome (ligation, DRIL)
- ▶ **+PGY-2 Medical Knowledge**

# Medical Knowledge: Imaging

## PGY2:

- ▶ Vascular labs: resting & exercise ABI, toe pressures, TBI, TCPO2s
- ▶ Mono, bi, triphasic waveforms on lower extremity arterial duplex and signals on doppler exam
- ▶ basic lower extremity angiogram

## PGY4:

- ▶ Carotid duplex and appropriate anatomy for TCAR on CTA
- ▶ preop CTA & planning for EVAR
- ▶ Abnormal lower extremity arterial duplex
- ▶ HD duplex and fistulogram, on table vein mapping

# Operative Knowledge: Endovascular

## PGY2: “Back table tech”

- ▶ Wire, catheter and sheath/dilator preparation (flushing with hep saline)
- ▶ Back -loading and walking devices off an 035 wire without losing wire access
- ▶ Practicing Radiation safety: As Low As Reasonably Achievable (ALARA) principle

## PGY4:

- ▶ US guided access (i.e. CFA, fistula)
- ▶ Selective catheterization of c/I CFA, diagnostic lower ext angiogram, safe sheath exchange
- ▶ Fistulagram (including techniques to visualize anastomosis)
- ▶ Prepping balloon insufflators
- ▶ Handling 014, 018 wires and devices
- ▶ basic principles and steps of EVAR

# OPERATIVE KNOWLEDGE

## PGY2

- ▶ non-tunneled dialysis catheter insertion, PD catheter removal with indirect supervision
- ▶ respect for tissue may not yet be consistent
- ▶ Ligation and division of vessels
- ▶ Multilayered closure of incisions
- ▶ Moves independently through some portions of **core operations** such as
  - ▶ BKA/AKA
  - ▶ AV fistula/graft insertion
  - ▶ varicose vein surgery
  - ▶ Leg fasciotomy

## PGY4

- ▶ proficiency in use of instruments, good tissue handling
  - ▶ Performs core operations fluidly with variant anatomy (skin to skin brachiocephalic AV fistula creation)
  - ▶ Requires *passive help* for advanced cases such as CEA, extra-anatomic bypass, SMA embolectomy, EVAR
  - ▶ Teaches core operations to those more junior
- Patient *positioning and exposure* for
- ▶ Carotid endarterectomy: shunts, patch angioplasty
  - ▶ Open aortic aneurysm repair (trans and retroperitoneal)
  - ▶ SMA embolectomy & bypass
  - ▶ Lower ext bypass: vein harvest, arterial exposures, tunneling

# ACADEMIC DUTIES

## PGY2

- ▶ Prepare templated ppt for weekly PAVE conference (every Tuesday 7AM via teams)
- ▶ Prepare short 15-20min presentation on assigned vascular topic in case of no inpatients to present at PAVE
- ▶ Prepare for each operative case (know your anatomy, operative steps, solutions to potential complications)

## PGY4

- ▶ Lead rounds with junior residents every AM
- ▶ Liaison between attendings and junior residents
- ▶ Update attendings throughout the day and set plans in motion
- ▶ Closed loop communication
- ▶ Prepare ppt for weekly case conference (every Monday 6:30AM via Zoom)
- ▶ Prepare VA Vascular M&M ppt (2<sup>nd</sup> Wednesday at LLU main campus)



# VA Vascular **WEEKLY SCHEDULE**

## **MONDAY**

- ▶ 6:30- 8AM: Case Conference and teaching rounds (\*ZOOM)
- ▶ 8:30-2PM: Clinic/Cases

## **TUESDAY**

- ▶ 7-8AM: PAVE conference (TEAMS)
- ▶ 8-8:30AM: PAVE rounds on inpatients
- ▶ 9-2PM: Clinic/Cases

\*ZOOM links provided in separate email at beginning of rotation.

## **WEDNESDAY**

- ▶ 7-8:30AM: LLU M&M/Grand Round (protected time for LLU residents)
- ▶ 9-11AM: Clinic/Cases

## **THURSDAY**

- ▶ 7-8AM VA Vascular Lecture Series (\*ZOOM)
- ▶ 8-2PM: Clinic/Cases

## **FRIDAY**

- ▶ Vein clinic and outpatient procedures

# Expectations for **Monday Case Conference**

Senior resident will present every operative case for the week in an organized **power point** format including the following details:

- ▶ Presenting symptoms, relevant PMH/SH, meds, smoking status, ambulatory/functional status
- ▶ **Physical exam**
- ▶ **Diagnostic workup** including the interpretation of vascular labs/duplex/CT/MRI imaging
- ▶ **indications** for surgical intervention
- ▶ **Treatment** options (endo, hybrid, open), operative steps, postop management, and complications

- ▶ KNOW YOUR PATIENT, COME PREPARED
- ▶ Review all CPRS & relevant JLV documentation (vascular clinic notes, operative reports, consultant notes)
- ▶ gain background knowledge by reading the relevant chapter in your primary source/textbook
- ▶ take initiative and have an informed discussion with the operating surgeon to answer questions you may have leading up to the Monday presentation.
- ▶ **Preparation** is key. Cases may be added on over the weekend so stay up to date.

# Expectations for **Tuesday PAVE Conference**

- ▶ **Prevention of Amputations in Veterans Everywhere (PAVE):** VHA directive to prevent or delay amputations in the Veteran populations due to neuropathic and vascular conditions
- ▶ Led by general surgery and/or podiatry resident via TEAMS
- ▶ Multidisciplinary conference with vascular surgery, podiatry, PM&R, prosthetics, pharmacy (occasional guests in endocrinology, infectious disease, medicine, etc)
- ▶ Must use specific PAVE powerpoint template (see below for directions to access in S drive)
- ▶ If there are no patient presentations, we still use the hour for education/didactics. Each resident is responsible for giving one PAVE lecture (topics assigned at the beginning of the month)

# Expectations for **Thursday Vascular Lecture Series**

- ▶ Led by attending surgeon via ZOOM (schedule provided in email)
- ▶ Mandatory for residents on VA vascular service, off service general surgery residents invited to attend
- ▶ Interactive Vascular Didactics session meant to help solidify high yield vascular surgery concepts
- ▶ **Journal Club** every 3<sup>rd</sup> Thursday for residents on service: two vascular case scenarios, 15-20 min each with time for discussion
- ▶ **Mock oral boards** every 4<sup>th</sup> Thursday: two articles presented by junior and senior resident

# Attending **Call Schedule and Rounds**

- ▶ You will receive a weekly email (see example) with a schedule specifying which attending is on call (same as SPOK schedule) and/or available in the day to round
- ▶ **Call attending:** staff NEW consults with this attending. If the call attending is busy in the OR, you can approach any available day attending
- ▶ Generally, patients who were previously operated on go back to the operating surgeon who has the right of first refusal.

- ▶ **Day Attending/ Rounds:** Residents are expected to round in the mornings and present an assessment and plan to a rounding attending **before 10AM** (i.e. by text, phone call, or after our morning virtual conference)
- ▶ Notes should be sent to the attending who *physically* rounds with you on the patient unless told otherwise
- ▶ Generally, if the operating surgeon of a post op inpatient is listed as one of the rounding attendings, approach him/her about that patient

## **VA week 11/28-12/4**

### **MONDAY 11/28**

Call: Lee (6AM-6AM)  
Rounds: Kiang or Lee  
*\*Pantoja off tour*

### **TUESDAY 11/29**

Call: Kiang (6AM-6PM)  
Day attending: Pantoja, Lee, Murga  
Rounds: Pantoja or Lee or Murga

### **WEDNESDAY: 11/30**

Call: Simpson (6AM-6AM)  
Day Attending: Simpson  
Rounds: Simpson  
*\*Kiang on research admin*  
*\*Pantoja/Lee academic day*

### **THURSDAY: 12/1**

Call: Pantoja (6AM-6AM)  
Day attending: Pantoja, Lee  
Rounds: Pantoja or Lee  
*\*Kiang on research admin*

### **FRIDAY: 12/2**

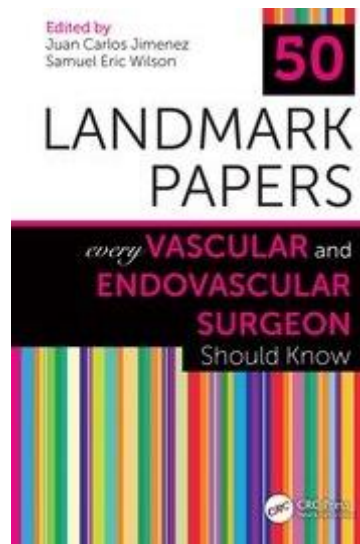
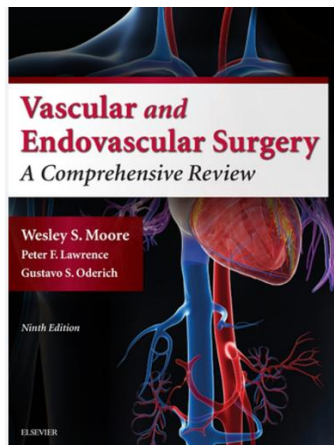
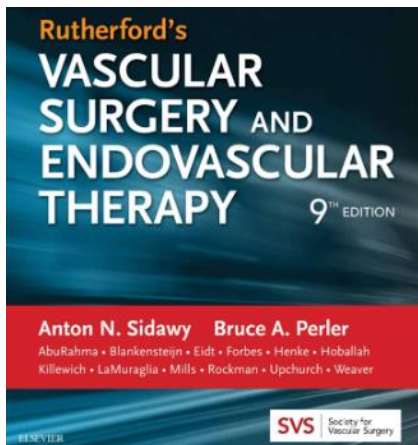
Call: Simpson (6AM-6AM)  
Day attending: Pantoja  
Rounds: Pantoja  
*\*Kiang on clinical admin*

### **Weekend: 12/3-12/4**

# How to Access Shared files:

- ▶ (S:)Services Drive >> Surgical>>Vascular
  - ▶ Sort by date modified >> “vascular inpatient list” with latest date
  - ▶ >>folder “PAVE 2023” >> “PAVE Template”

# Vascular Surgery Resources & Textbooks



- Endovascular Today: [US Device Guide - Endovascular Today \(evtoday.com\)](http://www.evtoday.com)
- SVS Clinical Practice Guidelines: <https://vascular.org/vascular-specialists/practice-and-quality/clinical-guidelines/clinical-guidelines-and-reporting>

