

Neuroradiology Rotations and Call

Rotation Overview

Residents are expected to gain increased proficiency of interpretation of CT and MRI of the brain, spine, head/neck, and cerebrovascular system with increased independence across the four years of training.

For contrast coverage rotations (Hillcrest, URLJ, ROPCC), residents are expected to maintain ART/ACLS credentials, know where CT and MRI scanners are located, verify badge access and contrast reaction kit locations prior to shifts.

Hillcrest IP/ED includes introduction to traumatic injuries, ED and IP evaluation, critical results and stroke codes. This includes HC and East Campus IP/ED CT worklists, with OP and MRI exposure.

Reading room is Hillcrest 1-804 (619-471-9451), along the back office hallway. Access is opposite the inpatient CT scanner or next to Body reading room/mailboxes (code 135).

JMC IP/ED increases exposure to imaging of Neurosurgical and Neurocritical care patients, consolidation of knowledge, and exposure to multi-site call coverage. Residents are required to have at least 3 weeks of Hillcrest prior to this rotation.

Please note this is a shifted week, starting the 1st Sunday on service 7am-5pm* and Mon-Thurs 8am – 5pm, with the weekend shifted to Fri-Sat, incorporating the experience of weekend coverage into the schedule. Sundays are at Hillcrest, and include contrast coverage. When residents are unable to work on Sundays during their rotation, they need to coordinate with the Chief Residents and Residency Program Director in advance of their scheduled block, and will then be expected on service at JMC Monday-Friday. If Sunday or Monday are part of the holiday call pool, JMC resident is expected on clinical service on Fri.

Main reading room JMC 1-837 (858-249-6146; code is room reversed). Continue along the hallway past the IR suite to the north (towards ED ambulance bay). Turn left at the last hallway prior to exiting JMC. The reading room is the 2nd door on the right.

VA CT/MRI provides structured exposure to MRI, in addition to outpatient and inpatient CT imaging cases.

From main hallway, go past the cafeteria, and take the elevator downstairs. The reading rooms (rooms 110 and 111) are behind the MRI reception area (858-552-8585 ext 2850 or 2856). x2850 is generally answered from room 110 and x2856 from 111.

VA MRI is a hybrid rotation shared between Neuroradiology and MRI for senior residents.

Outpatient CT/MRI allows for increased exposure to areas of interest across brain, cerebrovascular, head/neck, and spine, and additional ability to tailor cases/teaching to specific areas of interest.

Reading room is Thornton 1-254 (858-657-1230; code is room reversed), in the Radiology Administrative area between the Chest Reading Room and Radiology reception. Readouts may be in person or via Zoom. Residents may be assigned ROPCC contrast coverage during this rotation.

URLJ/Teleradiology emphasizes outpatient spine MRI, providing outpatient imaging center experience with increased independence, including site contrast coverage. Readouts are via Zoom.

Located at 8929 University Center Lane, Suite 101 (858-657-5884). Lot parking is available on both sides of the building (entrance from University Center Lane, or from Camino Plaza Centro off Nobel Dr); permits are covered by the Department. Please leave parking spots near entrances for patients. Reading room is to the left of the main reception desk off the waiting room. There is a microwave, sink and fridge in the technologist work area.

Pediatric Neuroradiology is incorporated in the Rady CT/MRI rotation.

Weekend/Holiday Call 2nd – 4th year (PGY 3-5) residents participate in the call pool, including contrast coverage at Hillcrest on Saturdays and Holidays. Occasional Sunday call shifts will be in the pool pending JMC resident staffing.

Thursday Conferences

Residents on service are expected to attend virtual Thursday Conference 8-10am and will be scheduled to give 10 minute presentations while on service. Powerpoints should not contain PHI. Please use UCSD branded templates. Ms Audrey Keane sends conference announcements on Tuesday of each week. If you trade presentation days with another resident, please update her of the change. Proposed 2024-2025 schedule is listed at the end of this document. These presentations can be cited on your c.v. as UCSD Neuroradiology CME Case Conference: San Diego.

Learning Objectives / GME Milestones

Medical Knowledge

- Familiarity of brain, spine, head/neck, and cerebrovascular anatomy and landmarks on imaging.
- Knowledge of UCSD neurological imaging protocol options for symptom evaluation, operative guidance, and surveillance.
- Recognition of anatomic variants, common disease presentations, implanted devices and expected post-treatment changes.
- Understanding of artifacts and how to adapt protocols when necessary.

Patient Care

- Identification and accurate communication of critical results findings.
- Knowledge of contrast premedication protocols, contrast reaction response and appropriate documentation.
- Understanding MRI screening, contraindications to MRI, and limitations for conditional devices.
- Familiarity with appropriate use and indications for imaging.

Interpersonal and Communication Skills

- Generate accurate reports and discuss results concisely.
- Appropriate documentation of communications with referring providers.

System-based Practice

- Participate in education of medical students and rotating Neurosurgery, Neurology and Head/Neck Surgery resident electives.
- Participate in CQI conference, Good Call, and communicating discrepancies between preliminary and final reads.

Practice-based Learning

- Present at Neuroradiology Conference.
- Ability to create and refine differential diagnoses through literature review.

Professionalism

- Independent preparation prior to and during service rotation to use time effectively.
- Foster collegial working relationship with Radiology technologists and staff, referring providers and trainees.
- Providing and responding to feedback in productive manner.
- Notifying Dr. Bykowski, Dr. Chen, Ms. Keane and residency leadership of any planned service absence due to vacation, conferences, in service or board exams at the time those activities/travel plans are being scheduled.

Neuroradiology Faculty

Clinical coverage schedules are posted on radres.ucsd.edu Schedules>Faculty schedules>Neuro

UCSD

Div Bolar, MD, PhD
Julie Bykowski, MD
Jennifer Chang, MD
Steve Dorros, MD
Niky Farid, MD

Jason Handwerker, MD
Dan Hawley, MD
Elizabeth Hawk, MD
Adam Robinson, MD
Scott Pannell, MD

VA

Erik Bergman, MD
Jim Chen, MD
Roland Lee, MD
Paul Manning, MD
Bruno Panzarini, MD

Reading and Resources

Please refer to the radres.ucsd.edu site for contrast guidelines, critical results and other policies prior to coming on service. The rotation experience and learning curve is improved by reading prior to the rotation, targeted literature searches and reading to supplement the clinical service.

Learning Neuroradiology and Learning Head/Neck Imaging (Tabby Kennedy)

<https://sites.google.com/a/wisc.edu/neuroradiology/home>

<https://www.learningheadandneck.com/>

Learn Neuroradiology (Brent Weinberg)

<https://learnneuroradiology.com/courses/>

RadioGraphics Core Exam Blueprints Articles

<https://pubs.rsna.org/page/radiographics/abr-core-exam-study-guide>

ASNR Core

<https://www.asnr.org/neurocurriculum-live/>

Radiographics core

<https://pubs.rsna.org/page/radiographics/abr-core-exam-study-guide>

Intro to MRI sequences (Radiopedia's Frank Gaillard, 13 minutes)

<https://www.youtube.com/watch?v=DYXEGY-X1n8>

MRI Safety (includes the searchable list for device make/model/compatibility)

<https://www.mrisafety.com/>

ACR Appropriateness Criteria

<https://www.acr.org/Clinical-Resources/ACR-Appropriateness-Criteria>

NCCN guidelines (free, however require you to create a log in/password)

https://www.nccn.org/guidelines/category_1

Choosing Wisely

<https://www.choosingwisely.org/clinician-lists/>

AJNR Case of the week

<http://www.ajnr.org/cow/by/year>

Neurographics

<https://www.ingentaconnect.com/content/asnr/ng;jsessionid=srzpvwiys0rs.x-ic-live-02>

Radiopedia

<https://radiopaedia.org/?lang=us>

Radiology Assistant

<https://radiologyassistant.nl/>

Neuroradiology U (emphasis on pediatric cases)

<https://www.neuroradiologyu.com/>

Additional Educational Opportunities

Radiology resident conferences are posted at radres.ucsd.edu under "Conferences"
Please reach out to faculty for tumor board and multidisciplinary conference schedules.

Please reach out to faculty regarding opportunities for educational exhibits, quality and research projects.

***2024-2025 Thursday Conference Schedule resident presentations**

When you have Neuroradiology-related exhibits/cases accepted for meetings, please let us know so we can arrange time for you to present at conference.

7/11/2024 Castro
7/18/2024 Saucedo
7/25/2024 Hosseiny & Anaam
8/1/2024 Keller
8/8/2024 Gichamo
8/15/2024 Haddad
8/22/2024 Barkovich
ASHNR exhibits - Gomez,
8/29/2024 Mirmomen, Meriwether
9/5/2024 Thomas
9/12/2024 Hightower
9/19/2024 Saleh
9/26/2024 Anaam & Becker (Nsurg)
10/3/2024 Chai
10/10/2024 Avery
10/17/2024 Thomas
10/24/2024 Windham Herman
10/31/2024 Barnard & Choudhary (Nsurg)
11/7/2024 Mussatto
11/14/2024 Alzate
11/21/2024 Kohanazad
11/28/2024 no conference
12/5/2024 Barnawi
12/12/2024 Robinson
12/19/2024 Mittelstein
12/26/2024 no conference
1/2/2025 no conference
1/9/2025 Mirmomen
1/16/2025 Rockwell
1/23/2025 Castro
1/30/2025 Trivedi
2/6/2025 Ghazi Sherbaf

2/13/2025 Wing
2/20/2025 Sy
2/27/2025 Monterroso
3/6/2025 TBD
3/13/2025 Mirmomen
3/20/2025 Almogati
3/27/2025 Louie
4/3/2025 Hosseiny
4/10/2025 Barahman
4/17/2025 Monterroso
4/24/2025 Louie
5/1/2025 Mittelstein
5/8/2025 Zabel
5/15/2025 Skaggs
5/22/2025 Wong
5/29/2025 Thomas
6/5/2025 Zabel
6/12/2025 Martins
6/19/2025 Koelhoffer
6/26/2025 Dao