

# **Neurology Electives Catalog**

**Residency Training Program  
Department of Neurology  
David Geffen School of Medicine at UCLA**

*Revised April 2015  
by Josh Kamins and Peter Nguyen*

*Update History:  
Jason Tarpley and Katie Mayo 2013-4  
Tritia Yamasaki and Mike Su 4/2012*

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*Comments: Organize your rotations early. Rather than doing a whole month of one subspecialty, you can design your own subspecialty clinic rotations in your 3<sup>rd</sup> and 4<sup>th</sup> years to help you maximize your exposure to all different neurological subspecialties. Subspecialty rotations that you should probably do individually include movement disorder, neurobehavior, neuromuscular, neuropathology, and possibly neuroradiology, because these rotations will fill up your weekly schedule. Nevertheless, even these may potentially be modifiable to optimize your educational time if you coordinate in advance with the attendings. The remaining subspecialties are more likely to be organized as a subspecialty clinic rotation.*

# **Epilepsy/Video-EEG Monitoring Mini-Fellowship Elective**

*(Updated by J. Stern 5/2012)*

1. Description: 4-6-week elective rotation for neurology residents during the second or third year of residency. Participating residents are expected to have completed the EEG and epilepsy rotation.

## 2. Educational goals of the rotation:

- a. Gain EEG interpretation skills for seizures, interictal epileptiform activity, normal variants, and artifacts.
- b. Increase familiarity with behavioral manifestations of seizures and paroxysmal non-epileptic activity.
- c. Understand process of evaluation for epilepsy surgery, including the incorporation of multiple diagnostic modalities in the identification of the epileptogenic zone.
- d. Participate in intra-operative electrophysiologic mapping of epileptic regions and normal function.

## 3. Schedule of Activities

08:00 – 10:00	Rounding on VEM unit with attending
10:00 – 12:00	Patient care responsibilities
10:00 – 10:30	Individual teaching with senior fellow (Mondays)
13:00 – 17:00	Epilepsy clinic (Mondays)
12:00 – 14:00	Clinical neurophysiology lecture series (Tuesdays)
13:30 – 16:00	Epilepsy surgery case conference (Wednesdays)
10:00 – 10:30	Individual teaching with attending (Thursdays)
10:00 – 12:00	Epilepsy clinic (Fridays)
14:00 – 15:00	Epilepsy tutorial (Fridays)
Various times	EEG reading with attending (Daily)

## 4. Patient Care Responsibilities

Rotating residents will have primary responsibility for their patients on the VEM unit. This includes patient admission, reviewing daily video-EEG recordings, determining plan based on recording results, patient discharge, and presentation of results in epilepsy surgery conference. The epilepsy attending will supervise these activities, which will be equivalent to those performed by the epilepsy fellows. Monitoring reports for the medical record will be produced jointly, which also is equivalent to the epilepsy fellow responsibility. There will be no call or weekend responsibilities. Admission volume will be 1 – 2 patients weekly. The mini-fellowship will address competencies in all 6 areas.

## 5. Core Curriculum

1. Principles of EEG
2. Indications for EEG and video-EEG monitoring
3. Classification of seizures
4. Localizing features of ictal behavior
5. Common EEG artifacts

6. EEG normal variants
7. Epileptiform EEG abnormalities
8. Scalp EEG features of seizures
9. Intracranial EEG of seizures
10. Intracranial evoked potentials
11. Cortical electrical stimulation for functional mapping
12. Indications for epilepsy surgery
13. Outcomes from epilepsy surgery

#### 6. Recommended Reading

Atlas of EEG Patterns- Stern and Engel

Johns Hopkins Atlas of Digital EEG- Krauss and Fisher

Atlas of Video-EEG Monitoring- Sirven and Stern

Intraoperative Monitoring of Neural Function- Nuwer

Overview of Evaluation and Treatment Guidelines for Epilepsy. Stern, Curr Treat Options Neurol 2009;11:273-284.

AAN Practice Parameter: Temporal Lobe and Localized Neocortical Resections for Epilepsy, 2003.

Scalp EEG in the Epilepsy Surgery Evaluation. Bower and Stern. In: Treatment of Epilepsy, 3<sup>rd</sup> Ed.

Epilepsy Surgery in Adults. Upchurch and Stern. In: MedLink Neurology.

Epilepsy Surgery in Children. Hauptmann, Chandra, and Mathern. In: MedLink Neurology.

*Updated J. Stern 9-28-10*

*Comments: This elective is best scheduled as a more in-depth, practical follow up to the EEG reading rotation. Clinic staff will schedule patients for you to see in Monday and Friday clinics, so make sure to give them advance notice that you are doing the elective.*

# Headache/Interventional Pain/Oralfacial Pain

Updated by Mollie Johnston (5/2012), Joshua Kamins (May 2015)

\*This elective can be combined or separated into its parts, and is flexible so that your education is optimized.

Goals of elective: Back pain, headache, head and neck pain are the most common reasons to see a general neurologist. The goal of the rotation is to introduce neurology residents to interventional pain procedures, complicated headache patients, and oral facial pain to better prepare you for the majority of patients you will encounter after residency. Residents will have the opportunity to assist in interventional procedures including trigger point injections, botox, occipital nerve blocks, fluoroscopically guided procedures (epidurals and a multitude of nerve blocks), and live intraoperative ultrasound-guided and EMG-guided procedures. Appropriate headache management with prophylactics and abortive medications will be overviewed. In addition, time can be spent at the UCLA School of Dentistry Department of Oralfacial Pain learning about TMJ disorders, trigeminal neuralgia, and intraoral pain conditions.

Faculty Mentor(s): Mollie Johnston, M.D., Andrew Charles, M.D., Sheldon Jordan, M.D., Marisa Chang, M.D.

Contact Person(s): Any of the above faculty mentors you plan to work with.

Location: RRUMC/UCLA, CAST (Center for Ambulatory Surgical Treatment) on Glencoe, Neurological Associates of WLA (NAOWLA) Dr Jordan and Dr Chang's private practice

Weekly schedule of activities, conferences, clinics, didactics, etc:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	8am Headache clinic w/ Dr. Charles & Johnston (300 Med Plaza)	7am to 1pm Clinic procedures with Dr. Johnston.	UCLA Residency Didactics. <i>Note:</i> 7-9am you may do procedures with Drs. Jordan/Johnston	8am Headache clinic w/ Dr. Johnston (300 Med Plaza)	7:00am Oralfacial Pain Clinic at UCLA Dental School
PM	Headache clinic w/ Dr Johnston	UCLA procedures in 300 Med Plaza	Interventional procedures with Dr Johnston @ CAST		

Comment:

*This is really a unique experience since we really get limited pain management training beyond headache yet get endless pain referrals from other specialties and will see mostly headache and back pain in the 'real world'. The attendings are knowledgeable and enthusiastic about teaching. Take the unique opportunity to learn and participate in procedures for pain treatment. You will be exposed to the future of interventional pain neurology as a subspecialty, including procedures in intraoperative live EMG and live ultrasound-guided, fluoroscopic, and unguided procedures, as well as have the opportunity to see fMRI and transcranial magnetic stimulation in clinical setting. By report of prior rotators, Dr. Jordan is worth spending time with as he is an excellent teacher/mentor and will also let you assist in the OR. More recently Dr. Johnston has taken over many of the UCLA procedures, so it is up to you to discuss with the various attendings who you would want to work with.*

Useful references (texts, review articles, websites):

Continuum: Neuropathic Pain

Image Guided Spine Intervention by Douglas Fenton

Motivational Interviewing

Stabbed in the Back

# HIV Neurology

*Updated by Yama Akbari (7/2009), Dr. Valdes-Sueiras (5/2012)*

Goals of Elective: To become familiar with the diagnosis and treatment of the myriad neurological complications of HIV infection. This elective also offers opportunities to become more proficient in lumbar punctures.

Locations: UCLA- 300 Medical Plaza Neurology Clinic, OVMC- clinic C

Faculty Mentor(s): Miguel Valdes-Sueiras, M.D.; Elyse Singer, M.D.

Clinic Schedule:

Monday: Independent Reading/AHF Hollywood Clinic with Dr. Valdes(varies)

Tuesday PM: UCLA clinic with Dr. Singer

Wednesday AM and PM: AHF Hollywood Clinic with Dr. Valdes, starting at 0900

Thursday AM: OVMC- research clinic with Dr. Valdes (LP's)

Thursday PM: OVMC ID clinic (area C) with Drs. Valdes and Singer

Contact Person(s):

Dr. Miguel Valdes-Sueiras, [mvsueiras@mednet.ucla.edu](mailto:mvsueiras@mednet.ucla.edu)

Dr. Elyse Singer, [esinger@ucla.edu](mailto:esinger@ucla.edu)

Suggested Readings:

Brew BJ, HIV Neurology, 2001, Oxford University Press (available at the UCLA Biomedical Library).

*Comment: This rotation is very good in helping you get familiar with dealing with the different neurological problems that HIV patients can present with, and helps you devise a systematic approach to diagnosis and treatment. It can be a bit observational at times, especially at the AHF clinics because we do not officially have privileges there. However, if you take some initiative, you can take charge of the interview and exam and Dr. Valdes will happily step back and take care of the paperwork. Can be paired with other electives. Previously residents rotated at the Hollywood Clinic with Dr. Valdes, but currently this is not active.*

# Movement Disorders

Updated by Pari Young / Yama Akbari (6/2009), Mark Stahl/Inna Kesselman 4/2011, Tritia Yamasaki (5/2012)

Goals of Elective: To become familiar with diagnosis and treatment of various movement disorders, with particular emphasis on management of Parkinson’s disease, essential tremor, multiple system Atrophy, Tourette, Huntington disease, and dystonia. In addition a working knowledge of the surgical options for difficult to control PD, as well as ET and dystonia, and the appropriate uses of botox should be gained.

Location(s): UCLA- 300 Medical Plaza Neurology Clinic, WLAVA Outpatient Neurology Clinic on Tuesday afternoon.

Faculty Mentor(s): Drs. Jeff Bronstein, Indu Subramanian, Susan Perlman, Yvette Bordelon, Carlos Portera-Cailliau, Allan Wu, Ed Farag.

Contact Person(s):

Dr. Jeff Bronstein ([jbronste@mednet.ucla.edu](mailto:jbronste@mednet.ucla.edu)) is the primary contact faculty member. Touch base with Henrietta ([hsalazar@mednet.ucla.edu](mailto:hsalazar@mednet.ucla.edu)) she usually coordinates everything with Drs. Bronstein, and Subramanian.

Clinic Schedule:

Monday	Tuesday	Wednesday	Thursday	Friday
UCLA Huntington clinic with Dr. Perlman and Dr. Bordelon	Self Study  12Noon Journal Club at VA	Grand rounds Didactics NOC	UCLA clinic with Dr.Subramanian	UCLA clinic with Dr. Bronstein and Dr. Bordelon
Self study	VA Movement Clinic	Self study	Self study	UCLA clinic with Dr. Wu (Botox)  4PM Movement Disorder conference

Suggested Readings:

Dr. Bronstein will give you a handout on PD which is pretty succinct and good to get the basics. Other resources include the Continuum devoted to Movement DO, as well as Movement Disorders by Fahn and Jancovic.

*Comment: The above schedule is the formal schedule given out by Henrietta, but you may arrange to work with different attendings of your choice on Thursday and Friday, just email them in advance. Most of the clinics are observational with the exception of the WLAVA clinic, where they will schedule patients for you (so make sure they have advance notice that you are coming). Neurootology could be combined with this elective on Wednesday afternoon and Dr. Perlman’s ataxia clinic be combined with this elective*



*on Tuesday AM. You can also see patients with Dr. Bordelon on Wednesday afternoon, where you have the chance to learn about DBS programming. Dr. Wu is great to rotate with as well, as he does EMG-guided botox. To get the most out of the experience it is worth trying to rotate with different attendings as they all have slightly different approaches. As a whole, the movement disorder group offers among the best teaching in the department. Friday conferences are especially interesting because they have a live patient presentation and a good discussion afterwards between the different movement disorder attendings. The 12 Noon WLAVA Conference on Tuesday is a phone conference presentation involving various movement disorder sites; ask the fellows ahead of time to find out if it is an interesting topic, as attendance seems to be optional.*

# Multiple Sclerosis

Goals and Objectives: To learn about MS diagnosis, following MS patients and management of MS complications, as well as to distinguish MS mimics and various demyelinating disorders.

Contacts: Dr. Giesser ([BGiesser@mednet.ucla.edu](mailto:BGiesser@mednet.ucla.edu)), and Dr. Momtazee ([CMomtazee@mednet.ucla.edu](mailto:CMomtazee@mednet.ucla.edu)).

Weekly Schedule: MS clinics are Monday PM, Wed PM and Thursday AM. Dr. Giesser will let you see her new patients.

*Comment: There may also be opportunities to see MS patients at Cedars. Please contact Dr. Nancy Sicotte (who recently moved from UCLA to Cedars) at [nsicotte@ucla.edu](mailto:nsicotte@ucla.edu) for information on current opportunities. Dr. Giesser has a list of suggested readings that she can provide to interested rotators.*

# Neurobehavior

Updated by Po-Heng Tsai / Yama Akbari (6/2009), Inna Keselman (4/2011), Tritia Yamasaki (5/2012)

Goals of elective: To improve diagnostic and management skills regarding dementias and other neurobehavioral disturbances.

Locations: WLAVA New Outpatient clinic and CHS 300 Medical Plaza B level

Faculty Mentor(s): Mario Mendez, MD, PhD; Edmond Teng, MD, PhD; Ron Saul, MD; Michael Mahler, MD.

Contact Person(s): Dr. Mario Mendez, [mmendez@ucla.edu](mailto:mmendez@ucla.edu)

Weekly schedule of activities, conferences, clinics, didactics:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	8:00 – 4:00 UCLA Behavioral Neurology & Neuropsychiatry Clinic – must be coordinated in advance (UCLA 300 Med Plaza, B200)  8:30 WLAVA Neuroradiology Rounds	9:00 - 11:00 Inpatient Consult Rounds (VA 500, 2N, Rm 2015)  Inpatient Consults	Neurology didactics at UCLA	8:00 - 9:00 Clinical Neurobehavior Seminar (VA 500, 3E, Rm 3229)  9:00 - 12:00 Neurobehavior Clinic (VA 500, 4W)	8:00 – 9:30 Cognitive Neurology Seminar (VA 206, Rm 13)  11:00 WLA VA Neurology Grand Rounds
PM	4:30 – 5:30 Behavioral Neurology & Neuropsychiatry Clinical Case Conference (UCLA 300 Med Plaza, Rm 3200 )	Inpatient Consults	Inpatient Consults	1:30 – 3:00 Inpatient Consult Rounds (VA 500, 2N, Rm 2015)	12:30 – 4:00 Neurobehavior Clinic (VA 500, 4W)

Useful references (texts, review articles, websites):

- 1) Todd E. Feinberg and Martha J. Farah. [Behavioral Neurology and Neuropsychology](#) 2003
- 2) Cummings and Trimble, *Concise Guide to Neuropsychiatry and Behavioral Neurology*, 2002
- 3) Knopman et al., Essentials of the Proper Diagnoses of Mild Cognitive Impairment, Dementia, and Major Subtypes of Dementia, *Mayo Clinic Proceedings*, 2003, 78(10):1290-1310.

- 4) American Academy of Neurology Continuum on Dementia, *Volume 13, number 2, April 2007*
- 5) *AAN Dementia continuum*

*Comment: Although you get some exposure to neurobehavior as part of the PGY-3 and PGY-4 rotation at WLAVA, doing this elective will give you an opportunity to do more initial workups and see more neurobehavior patients. The schedule for this rotation sometimes changes and the fellows are good sources of information for an up-to-the-minute daily schedule. If you do the rotation in July, the ADRC meetings aren't up and running at that time. Note also, that the number of inpatient consults can run light, as psychiatry residents also rotate through neurobehavior, and you divide the workload. Bring reading material as they expect you to hang out in an office at WLAVA for incoming consults. You will also be asked to do a short presentation of a neuropsychiatric test of your choice one Tuesday AM. Try to attend the Wednesday FTD clinic with Dr. Mendez; although you will likely be shadowing the neurobehavior fellow, the cases are interesting and Dr. Mendez is an excellent teacher.*

# Neurogenetics

*Submitted by Brent Fogel, M.D., Ph.D. (4/2010), Updated by Inna Keselman (4/2011)*

## Goals of Elective:

Gain experience evaluating, differentiating, and diagnosing various hereditary ataxias (both autosomal dominant and autosomal recessive). Detailed exposure to the diagnosis and management of patients with Huntington’s Disease. Additional clinics may be arranged for more detailed exposure to patients with neuromuscular disease, mitochondrial disease, inborn errors of metabolism, or other disorders. Emphasis is placed on physical examination skills, differential diagnosis, distinguishing inherited from acquired conditions, understanding disease progression, and multimodal disease management options (including diagnostic evaluations; pharmacologic treatments; genetic counseling; physical, occupational, speech and other rehabilitation therapies; need for additional clinical specialty evaluations; etc.). Interested residents may also inquire about participation in research activities conducted by various faculty mentors to gain exposure to genetic/molecular neuroscience research and/or clinically-based research.

## Location(s):

UCLA 300 Medical Plaza Neurology Clinic  
Other UCLA Clinics and/or Laboratories

## Faculty Mentor(s) :

Susan Perlman M.D. (Hereditary Ataxias and Huntington’s Disease)  
Yvette Bordelon M.D. (Huntington’s Disease and other Movement Disorders)  
Brent Fogel M.D. Ph.D. (Hereditary Ataxias, Hereditary Spastic Paraplegias, and Leukodystrophies)  
Other Faculty (variable, based on resident interests and scheduling availability)

## Contact Person(s):

Susan Perlman M.D. (sperlman@mednet.ucla.edu)  
Brent Fogel M.D., Ph.D. (bfogel@ucla.edu) (for research opportunities and/or specific clinical interests)

## Sample Clinic Schedule (can be tailored to individual interests):

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Huntington’s Disease Clinic	Reading, Research, or other Clinic	Grand Rounds and didactics	Ataxia Clinic	Ataxia Clinic
PM	Ataxia Clinic	Friedreich Ataxia Clinic	Reading, Research, or other Clinic	Reading, Research or other Clinic	Reading, Research, or other Clinic

Additional pediatric genetics, neuromuscular, movement disorders, and other clinics may also be available based on the individual resident’s interests.

### Suggested Reading and Other Resources:

#### Books

Genetics of Movement Disorders; ed. Stefan M. Pulst M.D. 2003.

Neurogenetics (Contemporary Neurology Series #57); ed. Stefan M. Pulst M.D. 2000.

#### Journal Articles

Brusse E, Maat-Kievit JA, van Swieten JC. (2007) Diagnosis and management of early- and late-onset cerebellar ataxia. *Clin Genet* **71**: 12–24.

Fogel BL, Perlman S. (2007) Clinical features and molecular genetics of autosomal recessive cerebellar ataxias. *Lancet Neurol* **6(3)**: 245-57.

Fogel BL, Perlman S. (2006) An approach to the patient with late-onset cerebellar ataxia. *Nat Clin Pract Neurol* **2(11)**: 629-35.

Pandolfo M. (2009) Friedreich ataxia: the clinical picture. *J Neurol* **256** Suppl 1:3-8.

Pandolfo M, Pastore A. (2009) The pathogenesis of Friedreich ataxia and the structure and function of frataxin. *J Neurol* **256** Suppl 1:9-17.

Perlman S. (2004) Symptomatic and Disease-Modifying Therapy for the Progressive Ataxias. *The Neurologist* **10**: 275-289.

Phillips W, Shannon KM, Barker RA. (2008) The current clinical management of Huntington's disease. *Mov Disord* **23(11)**: 491-504.

Schols L *et al.* (2004) Autosomal dominant cerebellar ataxias: clinical features, genetics, and pathogenesis. *Lancet Neurol* **3**: 291-304.

Soong BW, Paulson HL. (2007) Spinocerebellar ataxias: an update. *Curr Opin Neurol* **20(4)**: 438-446.

#### Online Resources

NCBI - Online Mendelian Inheritance in Man at

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=OMIM>

Washington University Neuromuscular Disease Center at

<http://www.neuro.wustl.edu/neuromuscular/>

GeneTests: Medical Genetics Information Resource at <http://www.genetests.org/>

The National Ataxia Foundation at <http://www.ataxia.org/>

*Comment: There is a lot of exposure to important neurological conditions available on this rotation that are not often seen in general clinic or the inpatient setting, such as SCAs, Huntington's, Friedrich's ataxia, and others. Email Dr. Fogel in advance as he will help set up your schedule, which you can tailor somewhat to your own interests. Dr. Perlman is a great teacher and has a good collection of review articles and references which she can email you on your first day. You will see patients on your own and staff them with the attendings. On the first of the month there is also a Neurogenetics conference in C-128 from 1-2pm. Craniofacial clinic is worth attending maybe once, to see a variety of craniofacial abnormalities, treatment issues, and a multidisciplinary approach, but repeat clinics are less high yield. A good combination might include neuro-otology clinic with Dr. Baloh on Wednesday afternoons.*

# Neuromuscular

Updated by Dr. Perry Shieh / Yama Akbari (7/2009), Mark Stahl/Joanna Dearlove (4/2011)

## Goals of Elective:

1. To master an understanding of the basic electronics, biomedical instrumentation, and membrane physiology necessary for accurate recording of electrical events in the EMG laboratory.
2. To acquire a basic knowledge of the anatomy and physiology of peripheral nerve and muscle. This will require an understanding of the microscopic anatomy of the motor unit as well as the gross anatomy of all components of the peripheral nervous system relevant to clinical electrodiagnosis: dermatomes, myotomes, anatomy of individual nerves of the upper and lower extremities.
3. To have a hands-on experience with the standard procedures used in electrodiagnostic medicine: motor and sensory conduction studies, late responses, repetitive nerve stimulation, and the needle electromyographic examination.
4. To develop basic understanding of the principles of consultation and the clinical applications in electrodiagnostic medicine. Patient centered teaching during the clinical encounters in the EMG lab will focus on: which tests to perform, clinical correlation during the procedure, diagnostic interpretation, and report generation.

## Location(s):

1. RRUCLA Medical Center – EMG lab, MDA clinic: Shieh, Graves, and Pleninger)
2. Olive View Medical Center – MDA Clinic on Friday AM, EMG/NCS on Friday PM.
3. West LA VA- EMG/NCS on Tues PM

Faculty Mentor(s)/Contact Person(s): At UCLA: Dr. Perry Shieh

([PShieh@mednet.ucla.edu](mailto:PShieh@mednet.ucla.edu)), Dr. Pleninger ([ppleninger@mednet.ucla.edu](mailto:ppleninger@mednet.ucla.edu)), and Dr. Graves ([mgraves@mednet.ucla.edu](mailto:mgraves@mednet.ucla.edu) x57266). At Olive View: Mishra (818-891-7711)

You need to contact these people individually but all are very willing and eager to teach and let you tag along.

Neuromuscular schedule at UCLA:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	NM Didactics with Dr. Shieh	UCLA MDA Clinic	UCLA Residency Didactics	EMG/NCS with Dr. Shieh At WLA VA	OV MDA Clinic Muscle / Nerve biopsies are often done Fri AM at UCLA
Noon	Neuromuscular Conference	Neurophysiology Conference			

PM	EMG/NCS with Dr. Shieh	EMG/NCS with Dr. Shieh/Graves at WLA VA	EMG/NCS with Dr. Shieh	EMG/NCS with Drs. Shieh/ Graves At UCLA	OV EMG with Dr. Cardenas
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Mon PM can also be spent with Mishra's Neuromuscular clinic at WLA VA.

Every other Wednesday is Peds Neuromuscular Clinic, which is a multidisciplinary clinic (patients are seen by neuro, cards, PT, pulm, etc all on the same day. It is not unusual for it go past 8pm).

Fri PM can also be spent with Dr. Shieh / fellows clinic at UCLA.

Suggested reading:

EMG Pearls (Paperback) by [Steven Greenberg](#) (Author), [Anthony Amato](#) (Author)

*Essentials of Electrodiagnostic Medicine*- William Campbell, there should be a copy in the Rose room. This is a good primer for those of you who want to know the nitty gritty E&M theory and governing rules that EMG and NCS are based upon. If you've forgotten what capacitance and resistance are, this is a good primer.

*Peripheral Neurology: Case Studies in Electrodiagnosis*- Jay A. Liveson, copy in Roseroom or with Dr. Pleninger. This is a great real world case based book.

First Aid for the Neurology Boards has good tables of muscle innervations.

The other books on this list are recommended by Dr. Pleninger and Dr. Shieh.

- 1) *Electromyography and Neuromuscular Disorders: Clinical-Electrophysiologic Correlations*, Textbook with CD-ROM (Hardcover) by [David C. Preston](#) (Author), [Barbara Shapiro](#) (Author)
- 2) *Electrodiagnosis in Diseases of Nerve and Muscle*; 3rd Edition; Kimura, J., 2001.
- 3) *Peripheral Neurology: Case Studies*; 3rd Edition; Liveson, J.A., 2000.
- 4) *Clinical Electromyography: Nerve Conduction Studies*; 2nd Edition; Oh, S.J., 1993.
- 5) *Electrodiagnosis in Clinical Neurology*; 4th Edition; Aminoff, M.J., 1999.
- 6) *Clinical Electromyography*; 2nd Edition; Brown, W.F., Bolton, C.F., 1993.
- 7) *Electrodiagnostic Medicine*; Dumitru, D., 1995.
- 8) *Principles of Neural Science*; 4th Edition; Kandel, E.R., Schwartz, J.H., Jessell, T. M., 2000.
- 9) *Anatomic Localization for Needle Electromyography*; 2nd Edition; Geiringer, S.R., 1999.
- 10) *Focal Peripheral Neuropathies*; 3rd Edition; Stewart, J.D., 1999
- 11) *Myology: Basic and Clinical*; 2nd Edition; Engel, A.G., Franzini-Armstrong, C., 1994.



*Comments: This rotation should certainly be four weeks, as the anatomy is quite detailed and you're learning procedures. If you want to become proficient at performing EMGs, be sure to let Dr. Shieh know and there will be many opportunities. On the contrary, if you are not interested in learning how to actually do EMG/NCS, Dr. Shieh is flexible and you aren't required to do them. When at UCLA clinic with Dr. Shieh, try to do as many follow ups as possible (since the new patients so often have normal studies); can also ask fellows if they have interesting cases. The peds NM clinic is a good experience-- 2x/month, Wed PM. The Olive View muscular dystrophy clinic is also great and would recommend doing that weekly. Overall, one of the busier electives but a great learning experience, especially since many of us are uncomfortable with the topic Avoid: EMGs with Dr. Mishra have not been as helpful a learning experience for some residents, since we already do some in the PGY-2 Sepulveda rotation. Myasthenia clinic may also be less high-yield. VA EMGs may not be very interesting and there is a high no show rate.*

# Neuro-Oncology

Updated by David Piccioni / Yama Akbari (7/2009), Mark Stahl 4/2011

## Goals of elective:

Learn about neuro-oncology. Hang out with the Neuro-onc team at UCLA (Attendings: Dr. Cloughesy, Dr. Lai, Dr. Nghiemphu; Fellow David Piccioni, MD/PhD (and new incoming fellows), and; along with Mady, Nanette, Carrie, Dan, Lu, Leo, etc.) The focus at UCLA is on primary brain tumors, particularly glioblastoma.

Elective residents get to see patients (new and f/u) by themselves once Dr. Cloughesy feels residents have a handle on things. Overall, it is still a closely supervised clinical experience (which is good).

Locations: Location: UCLA 200 Med Plaza. 1st floor onc clinic (to the R down the hall as you come in main door) and work your way into the back

## Faculty Mentor(s):

Tim Cloughesy, MD - [tcloughesy@mednet.ucla.edu](mailto:tcloughesy@mednet.ucla.edu)  
 Albert Lai, MD, PhD - [albertlai@mednet.ucla.edu](mailto:albertlai@mednet.ucla.edu)  
 Leia Nghiemphu, MD - [PNghiemphu@mednet.ucla.edu](mailto:PNghiemphu@mednet.ucla.edu)

## Contact Person(s):

Tim Cloughesy

## Weekly schedule of activities, conferences, clinics, didactics, etc:

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	Neuro-onc clinic starting at 9:30AM in Med Plaza 200	9am: Fellow & Resident Didactic Lect  11am: Neuro-onc Dept meeting in Stouffer	UCLA Residency Didactics  11am: Resident Tumor board, in Rad Onc Suite in Med Plaza 200 basement	Self study or research	Self study or research
PM	Neuro-onc clinic continues until 5:30-7:30PM		Neuro-onc clinic	Self study or research	Self study or research

- sporadic study patients on other days (usually seen by Carrie Graham, NP)
- Tumor board is worth going to at least once, even though it means skipping some regular didactics (this is encouraged).
- Sporadic meetings with the whole neuro-onc group (including the research side).

The clinic schedule is not that taxing (though Monday clinics are loong - bring food and drink), so in the past, it sounds like people have either tried to do a research project during this elective (Drs. Cloughesy and Lai are extremely willing to help you find something worth doing), or used the free time to go to other subspecialty clinics (e.g. you may be able to attend Dr. Perlman's neurogenetics/ataxia clinics on Thurs/Fri). Overall though, the schedule is quite flexible, and of your choosing.

Useful references (texts, review articles, websites):

- Go to the Biomed library section for Neuro-oncology. There are tons of textbooks out there for basic background stuff. A highly readable intro primer is "Intracranial Tumors: Diagnosis and Treatment" by Lisa DeAngelis et al. A new edition is supposed to come out soon.

- <http://www.curatiocme.com/sno2006web>

This is a CME program from the SNO 2006 meeting - basically a collection of powerpoint presentations with audio from some of the leading people in the field. A great summary of research on the treatment of gliomas. (Sponsored by Schering Plough.)

- Ask the Fellows or Faculty for good articles to read

Comment:

*Good rotation if you're interested in neuro-oncology. Fairly unstructured, which gives you time to read about the subject material, and think more from a scientific approach than we generally get to do as clinicians. The main focus of this rotation are 2 clinics. Dr. Cloughesy is a great mentor, and it's amazing how smoothly the whole department runs. A "great opportunity to brush up on neuro- imaging) as much of the clinic time is spent reviewing scans.*

# Neuro-Ophthalmology

Updated by Peiyee Lee (3/2007), Mark Stahl (4/2011)

Goals of elective: To learn about eye movement disorders and differentiate ocular vs. optic nerve problems. Learn how to properly perform fundoscopic evaluation.

Locations: Jules Stein Eye Institute 2<sup>nd</sup> floor

Faculty Mentor(s)/Contact Person(s):

Dr. Anthony Arnold ([arnold@jsei.ucla.edu](mailto:arnold@jsei.ucla.edu), or call his office and leave a message with his secretary Janet (310-8254344). Janet will make sure Dr. Arnold gets the message). Dr. Arnold has special interest in the optic nerve; his clinic will allow you to see more ocular/optic nerve disorders.

Dr. Joseph Demer ([jld@ucla.edu](mailto:jld@ucla.edu)) has special interest in eye-movement disorders; he is another potential person to contact.

Dr. Bonelli ([Bonelli@jsei.ucla.edu](mailto:Bonelli@jsei.ucla.edu)) has a special interest in neuro-optho and is also reportedly very resident friendly

Weekly schedule of activities, conferences, clinics, didactics:

Schedule changes, so ask Dr. Arnold for update. For now, he has clinic on Monday and Tuesday.

Useful references (texts, review articles, websites):

Neuro-Ophthalmology Review Manual, Revised Edition (Paperback) by [Lanning B. Kline](#) (Author), [Frank J. Bajandas](#) (Author) (problem with this book is there is not enough pictures).

2006-2007 Basic and Clinical Science Course (BCSC) Section 5: Neuro-Ophthalmology  
Section editor: Lanning B. Kline, MD (Order through [www.aaopt.org](http://www.aaopt.org), the book is kind of pricey if you are not a member of AAO).

*Comments: This is a pure observational rotation. You will be shadowing the senior ophthalmology resident through the history and initial eval. When the ophthalmology resident presents the case and you can be involved in the discussion of the case. You will get plenty of chances to be familiar with the anatomy of the optic disc and also with evaluation of eye movements. This rotation may be best suited for 2wks, but by all accounts can be a very good experience. You may get to practice with the slit-lamp. Previous rotators have recommended working with Dr. Bonelli as she sees more interesting patients and is more engaging. This rotation should be done in conjunction with another.*

# Neuropathology

Updated by Yama Akbari / Dr. Harry Vinters (7/2009)

Goals of elective:

- A. Learn the fundamentals of neuropathology
  - 1. Gross pathology through brain cutting conference and reading/teaching specimens.
  - 2. Microscopic examination through surgical and consultation signout, study sets, conference presentations.
- B. Learn the fundamentals of skeletal muscle/peripheral nerve pathology
  - 1. Microscopic examination
    - a. Enzyme histochemistry
    - b. Plastic sections/E.M.
- C. Optional: Prepare a case or small clinicopathologic series for publication.

Locations: CHS

Faculty Mentor(s): Dr. Harry V. Vinters, CHS Rm 18-171, #310-825-6191

Other active faculty: Dr. William H. Yong, Dr. Negar Khanlou, Dr. Paul S. Mischel, Dr. M. Anthony Verity (Emeritus)

Contact Person(s): Neuropathology fellow, CHS Rm 18-126, #310-825-5044; or Dr. Harry Vinters, CHS Rm 18-170. [Administrative assistant Ms. Tina Thomas]

Weekly schedule of activities, conferences, clinics, didactics, etc:

Daily PM: Neuropathology signout in Surgical Pathology residents room or in room 18-126. This usually takes place at 1:00pm, but it varies according to the workload, talk to neuropath fellow for details.

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	8:00 AM: Autopsy conference in Autopsy Room (13-165)  Noon: Neuromuscular conference (NRB 1 <sup>st</sup> floor conf room)	9:00 AM: Brain Cutting Conference in Autopsy Room (13-165)  Noon: Pathology/Pharmacology Research conference (73-105; light lunch)	8:15 AM: Pathology Grand Rounds - Of limited interest.  9AM Neurology Grand round and didactics  11AM Brain Tumor Board in 200 Medical Plaza		Autopsy microscopic and consult case signout in Neuropathology Fellows Room (18-126)

PM	1PM daily signout  4:00 PM: Alzheimer Disease Res Conf in Oldendorf Rm (periodically present clinical portion of dementiaCPCs)	1PM daily signout/surgicals & consult cases, either in 18-126 or in the Surgical Pathology area	1PM daily signout	1PM daily signout	Self-study; prepare seminar on a topic of trainee/student's choice—that should have a neuropathology component.
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Also, every other Wednesday, you can go with Dr. Verity to the LA County Coroner's office for gross and microscopic neuropath on coroner's cases.  
Thursday: no conferences scheduled.

Neuropathology Surgical Frozen sections occur at various times during the day in the surgical pathology residents area and the rotator is encouraged to attend these (leave pager number with neuropathologist on call).

There are also several sets of teaching slides with legends that can be reviewed independently during time not otherwise allocated above.

Useful references (texts, review articles, websites):

1. Gray F, Poirier J, DeGioralami U. Escourolle and Poirier's Manual of Basic Neuropathology. 4th Edition. Elsevier, 2004. - Dr. Vinters has a copy of this texts which he was willing to loan. It is not too technical and is written in a straightforward manner.
2. Ellison D, Love S, Chimelli L, Harding BN, Lowe J, Vinters HV (eds). Neuropathology, 2nd edition, Mosby, 2004.
3. Louis DN, Ohgaki H, Wiestler OD, Cavenee WK(eds) WHO Classification of Tumours of the Central Nervous System, WHO Press, Geneva, 2007.
4. Carpenter SG, Karpanti G. Pathology of Skeletal Muscle, 2nd ed, Oxford University Press, 2001
5. Vinters HV, Mischel PS, Farrell MA. Diagnostic Neuropathology, Vol. 1, Marcel Dekkar,1998
6. Washington University Neuropathology Webpage:

<http://www.neuro.wustl.edu/neuromuscular/pathol/index.htm>

*Comment: A rotation that is well suited for the self-motivated. I had the opportunity to work with Dr. Vinters, whom was always willing to answer questions. The bulk to the rotation is centered around surgical pathology signout where the rotator sits at a multiheaded scope and reviews the cases that the path resident read. Usually, the neuropathology fellow will sign out cases just before or after the path resident. If they are not too busy, you will sit with them prior to sign out and review cases more in depth.*

# Neuroradiology

Updated by Yama Akbari / Dr. Noriko Salomon (7/2009), Mark Stahl (4/2011)

Goals of elective: To improve interpretation skills of MRI/CT/Angio of the nervous system, and to learn the appropriate imaging tests to order.

Faculty Mentor(s): Dr. Noriko Salomon at RRUMC/UCLA; Drs. Suzie El-Saden and Gasser Hathout at WLA VA.

Contact Person(s): Dr. Noriko Salomon ([NSalomon@mednet.ucla.edu](mailto:NSalomon@mednet.ucla.edu)) at RRUMC. Drs. Suzie El-Saden ([SELS@mednet.ucla.edu](mailto:SELS@mednet.ucla.edu)) and Gasser Hathout ([ghathout@ucla.edu](mailto:ghathout@ucla.edu)) at WLAVA.

Location: RRUMC/UCLA; WLAVA

Weekly schedule of activities, conferences, clinics, didactics, etc:

At RRUMC: Contact Donald Woods at the neuroradiology office for updated schedule ([DJWoods@mednet.ucla.edu](mailto:DJWoods@mednet.ucla.edu)). Show up at 8AM in the RRUMC Neuroradiology reading room for overnight study read out. You can pretty much readout with any attending at the reading room as long as you have emailed them and coordinated things in advance. See the following page for detailed schedule at RRUMC.

At WLA show up at 8-8:30AM at the outpatient neuroradiology reading room (next to the parking lot) on Tue and Friday. On Monday and Thursday show up at the inpatient neuroradiology reading room in the basement for radiology rounds. You will read out the overnight neuroradiology studies with Dr. El-Saden and Dr. Hathout. Around 10 or 11 AM there might be 30min to 1hr teaching session. Dr. Hathout and Dr. El-Saden may also give noon conferences to the radiology residents. You are encouraged to attend these sessions.

Useful references (texts, review articles, websites):

Grossman and Yousem, *Neuroradiology: the requisites*, Mosby, 2003.

Noriko's website: <http://www.radnet.ucla.edu/sections/DINR/index.htm>

UCSD Neuroradiology teaching files: <http://spinwarp.ucsd.edu/NeuroWeb/TF.html>

*Comment: You will get some exposure to neuroradiology during your PGY-3 rotation at WLAVA, but it is a much more fragmented experience. If you want to dedicate a little more time to neuroradiology, this elective is quite educational and you will feel a lot more comfortable with MRI and CT. There is a summer noon lecture series run by neuroradiology attendings that prior residents have found very helpful. It typically goes from around July 8<sup>th</sup> to 29<sup>th</sup>. Ask for an updated didactic schedule*





# Neurorehabilitation

*Updated by David Alexander MD (5/2012), Peter Nguyen (4/2015)*

Goals of elective: Learn the fundamentals of neurorehabilitation and the medical/neurological care of the neurologically impaired patient. You will learn to obtain a focused rehabilitation history and physical examination on functional limitations and needs and potential. Post stroke rehabilitation will be a big part of the rotation, but you will also have the unique opportunity to care for patients with traumatic brain injury and spinal cord injury as well as neuromuscular disease, Parkinson's disease, and multiple sclerosis following the acute inpatient setting.

Location: 1W Neurorehabilitation Unit (UCLA)

Faculty Mentors:

David N. Alexander, M.D.; Tom Carmichael, M.D., Ph.D.; Andy Dorsch, M.D., Bruce Dobkin, M.D.

Weekly schedule of activities, conferences, clinics, didactics, etc:

Daily rounds begin around 9 am on M, Th and Friday and 1pm on Wednesdays. Multidisciplinary rounds with RN, PT, OT, ST, SW, and neuropsychology take place on Tuesday afternoons at 1pm. In addition, triage/intake rounds at RRUCLAMC with brief visits and reviews of rehabilitation consults will occur after morning rounds. The afternoons are generally free for independent reading. Admissions to the unit typically occur in the late morning/early afternoon period. The resident is encouraged to attend the Neural Repair Seminar on Fridays at 12pm in the Gonda 1<sup>st</sup> floor conference room. Review of clinical trials in rehabilitation including LEAPS, EXCITE, FLAME, and other relevant trials including PROGRESS.

Introductory Reading:

“Neurologic Rehabilitation” Chapter 182 by Laura Lennihan and David N Alexander, for Merritt's Neurology, 12th ed., pages 1110-1115, 2010

Useful References:

The Clinical Science of Neurologic Rehabilitation by Bruce Dobkin

Veteran's Administration/Department of Defense Clinical Practice Guideline Management of Stroke Rehabilitation, published October 2010

Textbook of Neural Repair and Rehabilitation Vols 1, 2

Comments: *During this rotation, you will gain an appreciation of the recovery process from stroke and other neurological disorders. This rotation also provides one of the few opportunities during our residency to care for patients with traumatic brain injury and traumatic spinal cord injury. When you are doing this rotation, you will observe and learn about what the physical therapist, occupational therapist and the speech therapist actually do, and learn how rehab helps patient recover from their neurologic illnesses. Interested residents can also use this time to visit the various neurorehab labs around UCLA to learn about ongoing research in stroke and spinal cord injury.*

*Generally, a light rotation. Rounds are very laid back. You can expect to do some H&Ps, admission orders, discharge summaries, and inpatient consults to evaluate if patients are appropriate for acute rehab. You will manage quite a few general medical issues, and may call medicine or other subspecialty consults. You will get to see a large variety of patients, including spinal cord, post neurosurgical / post NeuroICU patients. It is also nice to see patients actually improve. You will usually be done by 3-4p after all notes and consults are completed. This is an excellent elective to do early in PGY2 because you will get a lot of referrals from the inpatient neurology teams and get to review their acute hospital course. There is one clinic day out of the week that is mostly observational with one of the rehab attendings. The attendings are a great educational resource and love to teach general neurology. There may be opportunities in the future to work with Dr. Alexander at the new rehab hospital in century city*

# Sleep Medicine Elective

*Updated by Dr. Alon Avidan (5/1/2012)*

The UCLA Sleep Disorders Center is a multidisciplinary medical referral facility for the diagnosis and treatment of a variety of sleep disorders ranging from sleep disordered breathing to narcolepsy, circadian rhythm sleep disorders, restless leg syndrome and parasomnias. The sleep program at UCLA has established a productive, well-functioning clinical program, capable of assessment of a range of sleep disorders and providing interventions to assist those conditions. The UCLA Sleep Disorders Laboratory (currently housed in the Center for the Health Sciences) is fully accredited by the American Academy of Sleep Medicine. It contains 11 private bedrooms equipped with modern equipment for digital polysomnography (a sleep study). About 1200 nocturnal studies are performed each year. The Sleep Disorders Clinic, which meets weekly in the Neurology Department outpatient area, addresses and provides support for determining the nature and treatment of disordered sleep.

## **Goals and Objectives:**

1. Acquire the basic skills needed to score sleep studies independently.
2. Learn interpretation of recording of patients with sleep apnea, narcolepsy and motor disorders of sleep including the parasomnias.
3. Become familiar with the diagnostic tools utilized in the sleep laboratory including polysomnography, multiple sleep latency testing and sleep logs.
4. Recognize the clinical features of sleep disorders such as sleep apnea, insomnia, parasomnias, narcolepsy, circadian rhythm sleep disturbances, restless legs syndrome and periodic leg movement disorder of sleep
5. Gain experience in the diagnosis and management of a wide range of sleep disturbances as outlines in #4.

Locations: Neurology Ambulatory Clinic (300 Medical Plaza) and UCLA Santa Monica Hospital

## **Contact person:**

Alon Y. Avidan MD, MPH  
Associate Professor of Neurology  
Director, UCLA Sleep Disorders Center  
Phone: 310-825-0703  
Fax: 310-825-6956  
Email: [avidan@mednet.ucla.edu](mailto:avidan@mednet.ucla.edu)

Faculty Mentor(s):

Alon Avidan, M.D., M.P.H. (Avidan@mednet.ucla.edu)

Frisca Yan-Go, M.D. ([FYanGo@mednet.ucla.edu](mailto:FYanGo@mednet.ucla.edu))

***Representative Weekly Schedule***

Mon	Tue	Wed	Thursday	Fri
9 AM-12 PM Sleep Clinic- Avidan	9 AM-12 PM Resident Continuity/Sleep Clinic- Dr. Avidan	9AM-1pm UCLA Residency Didactic Lectures	9 AM-5 PM Sleep Polysomnogram Review Didactic Session. Drs. Avidan & Yan-Go	9 AM-5 PM Sleep Polysomnogram Review Didactic Session.
1 PM-5 PM Sleep Clinic- Avidan	1PM-5 PM Sleep Clinic-Yan- Go	1PM-5 PM Sleep Clinic- Yan-Go		Dr. Yan-Go

**Readings**

1. Perlis, M.L., M. Aloia, and B.R. Kuhn, *Behavioral treatments for sleep disorders : a comprehensive primer of behavioral sleep medicine interventions*. 1st ed. Practical resources for the mental health professional 2011, Amsterdam ; Boston: Academic. xxii, 389 p.
2. Kryger, M.H., T. Roth, and W.C. Dement, *Principles and practice of sleep medicine*. 5th ed 2011, Philadelphia, PA: Saunders/Elsevier. p.
3. Krahn, L.E., M.H. Silber, and T.I. Morgenthaler, *Atlas of sleep medicine* 2011, New York: Informa Healthcare. 149 p.
4. Kothare, S.V. and S. Kotagal, *Sleep in childhood neurological disorders* 2011, New York: Demos Medical. xv, 439 p.
5. Winkelman, J.W. and D.T. Plante, *Foundations of psychiatric sleep medicine* 2010, Cambridge ; New York: Cambridge University Press. xiv, 415 p.
6. Kryger, M.H., *Atlas of clinical sleep medicine* 2010, Philadelphia: Saunders/Elsevier. xx, 380 p.
7. Overeem, S. and P. Reading, *Sleep disorders in neurology : a practical approach* 2009, Chichester, West Sussex ; Hoboken, NJ: Wiley-Blackwell. p.
8. Culebras, A., *Sleep disorders and neurologic diseases*. 2nd ed 2007, New York: Informa Healthcare. xiv, 432 p.
9. American Academy of Sleep Medicine., *The international classification of sleep disorders : diagnostic and coding manual*. 2nd ed 2005, Westchester, Ill.: American Academy of Sleep Medicine. xviii, 297 p.
10. Aldrich, M.S., *Sleep medicine*. Contemporary neurology series 1999, New York: Oxford University Press. xxiii, 382 p.

11. Avidan, A.Y. and P.C. Zee, *Handbook of sleep medicine*. 2nd ed 2011, Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins. p.
12. Silber, M.H., L.E. Krahn, and T.I. Morgenthaler, *Sleep medicine in clinical practice*. 2nd ed 2010, New York: Informa Healthcare. xiv, 332 p.

**Comment:** *This is the only chance to get any exposure to sleep medicine. It can be done as 1 month rotation, although some residents feel that 2 weeks is sufficient. Dr. Yan-Go's clinic may be purely observational, but Dr. Avidan will let you see his new patients. Their approaches to patient care are very different. Observing Dr. Yan-Go, you will learn how to educate patients on their sleep problems. Dr. Avidan will teach you the essentials on taking a good sleep history and involve you and making diagnosis and treatment plans.*

# Independent Reading / Research

*Updated by Yama Akbari (7/2009), Peter Nguyen (4/2015)*

Goals of elective: Improve your neurological knowledge base, start/continue an independent research project

Locations: wherever you like- home, beach, library.

Faculty Mentor(s)/Contact Person(s): Any UCLA Neurology attending

Weekly schedule of activities, conferences, clinics, didactics, etc: Mostly determined by the resident except for Wednesday AM is Neurology Grand Rounds and didactics.

*Note: Currently, the maximum time allowed for this elective is 1 block (approximately 4-6 weeks depending on the class and year) during the whole 3 year residency. Any additional blocks for this elective need to be authorized by the residency director. To pursue this elective, you must seek a faculty mentor at least 1 month prior to the start of the elective and design a reading agenda with specific educational goals for the elective. You may be required to meet with your faculty mentor approximately one time per week to follow-up on your reading agenda, ask questions, and modify any further reading that you may pursue over the next week. In other words, this is not meant to be a vacation elective but rather a very independent and flexible educational elective!*

*One may however devote longer periods of elective time to continue independent research projects outside of a structured R25. This may be a good opportunity to start a project that may extend into your fellowship training at UCLA. Scheduling would be flexible and require you to identify a research mentor/supervisor. During this block one can also shadow in other specialty clinics or attend other departmental didactics.*

## More Electives to consider:

**Sport-TBI** with Dr. Giza ([cgiza@mednet.ucla.edu](mailto:cgiza@mednet.ucla.edu)) and Dr. Choe. TBI clinic happens 2-3 times per week. They generally see sport related concussions or other traumatic brain injury. Mostly pediatric patients at this point, but an increasing number of adult patients are being seen. You will help manage their post concussive symptoms such as headache and behavior as well as advise on return to play recommendations for athletes. There is also journal club once a month at BJs and lab meeting every Tuesday afternoon from 2-3pm.

**Neuro-otology** with Dr. Baloh ([rwbaloh@ucla.edu](mailto:rwbaloh@ucla.edu)). Neuro-otology usually has a weekly conference/journal club/patient presentation (with neuro-genetics) on a Monday 2-3PM in the Oldendorf conference room usually the first 15-20 minutes there will be a live patient interview, followed by discussion of the disease processes. The live patient portion of the conference is worthwhile attending. Clinics are on Monday AM and Wed PM and are mostly observational, but Dr. Baloh is a great teacher.

**Private Practice** with Dr. Andrew Woo ([ahwoo@ucla.edu](mailto:ahwoo@ucla.edu), 310-829-2126x4). *By all accounts a worthwhile experience.*

**Neurohospitalist** with Dr. Doojin Kim ([DKim@mednet.ucla.edu](mailto:DKim@mednet.ucla.edu)) at Santa Monica UCLA hospital

**Neuro-interventional radiology** with Dr. Reza Jehan ([RJahan@mednet.ucla.edu](mailto:RJahan@mednet.ucla.edu)). Coordinate through Tracy Aden, the dept coordinator. See and discuss aneurysm coiling, angiography, interventional stroke procedures.

### **Away Rotation at Department of Movement Disorders, Chulalongkorn Hospital, Bangkok, Thailand**

Dr. Richard Bhidayasiri ([rbh@ucla.edu](mailto:rbh@ucla.edu)) heads the Movement Disorders Department at Chulalongkorn Hospital in Bangkok, Thailand. He did his residency and fellowship at UCLA and is originally from Bangkok. He has two fellows per year and runs an inpatient consultation service, general Movement disorder clinic, and specialty Botox clinic. There are several conferences and teaching sessions each day in addition to the clinical work. You may even be invited to give some lectures or lead conferences. You may also round in the morning with the general neurology residents. You may stay at the international dormitory on campus which is in central Bangkok. You may even be invited to give some lectures or lead conferences. Katie Mayo ([mmayo@mednet.ucla.edu](mailto:mmayo@mednet.ucla.edu)) has done this elective and is happy to talk to you about it if you are considering it.

**Special Away Rotation at Queen Square, London:** This rotation was available until 2008 and was reportedly a great rotation. However, various issues arose with coverage or subsidization of the cost of tuition (previously covered by UCLA), housing, and other expenses. The previous Electives Catalog (pre-2009) has a detailed description by the last resident who did this elective, Sarah Kremen (now an attending in neurobehavior at WLA VA), as well as the actual application form. The resident prior to Sarah Kremen who pursued this elective, Steven Sykes, did it 1 or 2 years prior to her. Read Dr. Kremen's detailed description in the prior edition of the Electives Catalog, then if you have additional questions, you can contact her for further discussion at [skremen@ucla.edu](mailto:skremen@ucla.edu). The prior contact person in the UK for this rotation was Jean Reynolds, [j.reynolds@ion.ucl.ac.uk](mailto:j.reynolds@ion.ucl.ac.uk). You should coordinate this elective closely with Dr. Avidan as well as the contact person in the UK as you will need 2-3 letters of recommendation and arrangements to be made well in advance, but obviously was feasible in prior years.

A note about away rotations- set them up months in advance. You may need to start planning as far as 6 months in advance, especially if you are doing an "audition" away elective. Cedars Sinai is 15 min drive away and has some good opportunities as well, for example, if you want a more hands on neuro ICU experience or you can work with Dr. Sicotte (Multiple Sclerosis).

**Away rotations at other universities:** You can do any type of rotation as long as you find an accepting faculty supervisor. Doing a visiting elective requires a mutual contract agreement between UCLA and the other university site (check to see if we have an existing one). If a contract does not exist, you will have to obtain the necessary contract documents (may vary by site) and submit it for review. Contracts may last several years so check to see if one needs to be renewed. Will require a lot of planning, so give yourself a few months to get the necessary documents (i.e. letter of good standing, immunization record, proof of HIPAA training, proof of liability insurance, etc)