

## Child Neurology Fourth-Year Selective

During this month, the student will become facile at the pediatric neurological examination and will be comfortable with basic concepts including anatomic localization of neurologic deficits and normal developmental milestones. The student will see a variety of neurologic problems, including epilepsy, headache, movement disorders such as cerebral palsy/spasticity and tic disorder, neuromuscular, neurometabolic and genetic diseases. The student will spend time in the child neurology clinics at Doernbecher Children's Hospital and Shriners Outpatient Center, as well as with the inpatient consult service at Doernbecher. Additional time may be spent on observation of occupational and physical therapy, interpretation of EEG and neuroimaging studies, and involvement with patients in the surgical epilepsy program who have been admitted for long-term EEG monitoring. Time will also be allowed for discussion and preparation of a project.

### Contact Information

1. **Andie Elliott or Amy Wright** (503-494-5856; CDRC Room 1260) should be contacted on the first day of the rotation to obtain reading materials.
2. Students should meet with **Amy Kao, MD** (pager 15832) briefly on the first day of the rotation. She serves as preceptor for preparation and progress of the month-long project, as well as general Child Neurology curriculum issues.
3. Students can contact **Sonia Bouchard** (503-221-3429), director of Rehab Services, Shriners Hospital, at the start of the month to schedule observation of occupational/physical therapy

### Schedule

1. The schedule attached is a rough schedule. The student will be e-mailed a more exact schedule for the upcoming week each Friday, outlining those clinics he or she is expected to attend.
2. Special conferences include:
  - a. **Pediatric Morning Report**—daily 830 am; neurology patients may be presented
  - b. **Pediatric Grand Rounds**—each Thursday at 8 am (September through June)
  - c. **Neurology Grand Rounds**—each Wednesday at 800 am (September through June)
  - d. **Pediatric Neuroscience Seminar**—each 2<sup>nd</sup> Wed 4:30 pm CDRC 3220

### References during rotation

1. Website on the neurologic examination up to age 2 ½:  
[http://medstat.med.utah.edu/pedineurologicexam/home\\_exam.html](http://medstat.med.utah.edu/pedineurologicexam/home_exam.html)
2. **“Pedi Neuro Board Review”** which can be found on the shared ‘I’ drive (I:\OHSU\SOM\PEDS\PedsNeuro).
3. <http://www.emory.edu/PEDS/NEURO/ntsconts.htm> for “cliff-notes” version of core topics
4. Lectures on **8 core neurology topics** should be given during each pediatric resident rotation. The residents should approach the respective attending physicians to confirm/arrange meeting times.
5. References
  - a. Fenichel, Gerald. Clinical pediatric neurology A signs and symptoms approach.
  - b. Swaiman, Kenneth. Pediatric neurology Principles and practice.
  - c. Zitelli, Basia. Atlas of Pediatric Diagnosis (Neurology Chapter).
  - d. Binder of core articles, algorithms, charts in residency office.

## Pediatric Selective Project Evaluation Form

### Evaluation

1. Clinical evaluation done by primary preceptor or designee (70% of grade)
2. Each student should do some type of “project” that would be agreed upon by the service and the student. Such a project could be a case report paper, a review paper, a presentation to a group, an advocacy project, and educational project (ie, educational poster to be used by the service for patients or caregivers). Each rotation should decide which types of projects would be appropriate for their students and guide them accordingly. The projects should be graded by the preceptor or group and turned in to the clerkship director at the end of the clerkship. (30% of grade)
  - a. Paper—turn in graded paper
  - b. Talk—send copy of PP slide and evaluation form
  - c. “Project”—send in summary of project (written by student) and written evaluation from preceptor
3. Final grades will be assigned by Dr. Ibsen

Name of student \_\_\_\_\_

Name of evaluator \_\_\_\_\_

Type of project (talk, project, paper) \_\_\_\_\_

Quality of research done for project \_\_\_\_\_

Relevance of project to subspecialty \_\_\_\_\_

Quality of project \_\_\_\_\_

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STAFF: Thomas K. Koch, M.D., Chief  
 Barry S. Russman, M.D.  
 Stephen A. Back, M.D., PhD.  
 Colin Roberts, M.D.  
 Amy Kao, M.D. (clerkship director)  
 Michael Narus, D.O. (visiting pediatric neurologist from Medford)

Below is a rough schedule. Students will receive a schedule each Friday via email with specific clinics for the upcoming week.

Please email Andie Elliott and Dr. Kao with schedule conflicts or call at (503) 494-5856

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30am Peds AM Report	8:30am Peds AM Report	8:00am Neurology Grand Rounds	8:00am Peds Grand Rounds	8:00am - 12:00pm <u>MDA Clinic @ Shriners (1<sup>st</sup> and 4<sup>th</sup> Friday) (BR)</u>
<u>9:00am - 12:00pm Neurology Clinic @DCH (CR/AK)</u>	<u>9:00am - 12:00pm Neurology Clinic @DCH (TK/BR)</u>	8:30 am Peds AM Report	9:00am - 12:00pm "Botox" Clinic @ Shriners (1 <sup>st</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> , 5 <sup>th</sup> Thursdays) (AK)	8:30 Peds AM Report
9:00am - 12:00pm Neurology Clinic @ Shriners (TK or SB)		9:00am - 12:00pm Tone Clinic @ Shriners (AK)	<u>9:00am - 12:00pm Neurology Clinic @DCH (TK/CR)</u>	9:00am-12:00pm "Botox" Clinic for HA/Tone Mgmt (3 <sup>rd</sup> Friday) (TK/AK)
9:30 - 12:00pm (3 <sup>rd</sup> Monday of month) Neurometabolic Clinic @ DCH (TK)		<u>9:00am - 12:00pm Neurology Clinic @ DCH (Tourette's TK, Epilepsy CR and/or General MN)</u>		
1:00 - 4:00pm (1 <sup>st</sup> Monday of month) Neurometabolic Clinic @ DCH (BR)			1:00pm - 4:00pm Spasticity Clinic @ Shriners (2 <sup>nd</sup> Thursdays) (AK/BR)	
<u>Approx 1:30pm Ward Rounds</u>	<u>Approx 1:30pm Ward Rounds</u>	<u>Approx 1:30pm Ward Rounds</u>	<u>Approx 1:30pm Ward Rounds</u>	<u>Approx 1:30pm Ward Rounds</u>
		<u>4:30-5:30 pm Peds Neurosci Seminar CDRC 3220 (2<sup>nd</sup> Wed)</u>		

(Items underlined take precedence)

## SUMMARY OF THE NEUROLOGIC EXAM

General: Head circumference (percentile for age)

Any dysmorphic features, anterior fontanelle, flattening of occiput  
Cardiac abnormalities, hepatosplenomegaly, cutaneous lesions

Mental Status: **Orientation:** e.g. normal infant, to place/time

**Attention and Concentration:** alert, lethargic, comatose; distractible,  
following commands well

**Language:** appropriate for age, aphasic

**Fund of Knowledge:** normal infant, able to do simple math or read

**Memory:** knows address, 3/3 items at 5 minutes

Cranial Nerves: II: funduscopic exam (go ahead and practice on everyone)

visual fields: visual fields full to confrontation

visual acuity: 20/20, blink reflex elicited

III, IV, VI: conjugate movements, no strabismus

EOMI (by tracking toy or by vestibuloocular/dolls eyes reflex)

ptosis on the left

V: sensation intact to light touch

corneal reflex present bilaterally

VII: facial droop (both upper and lower face weak = lower motor neuron;  
only lower face weak = upper motor neuron)

VIII: hearing intact to whisper

nystagmus with gaze to right

IX/X: palate elevates symmetrically

gag intact

XI/XII: sternocleidomastoid symmetric strength

tongue midline

Motor: **Bulk:** normal (observe with clothes off), atrophy

**Tone:** traction response normal, positive head lag  
slip-through on vertical suspension

lifts head and rump on horizontal suspension

appendicular tone increased in the right arm and leg

**Strength:** 0/5 to 5/5 (1/5 flicker, 3/5 to gravity, 5/5 full resistance)  
pronator drift

**Motor development?** (chin up when prone, sits without support)

Gait: bears weight bilaterally

normal toe, heel, tandem walking

romberg negative

wide-based

Coordination: no dysmetria on reaching for toys  
no dysmetria on finger-nose-finger or heel to shin testing  
rapid alternating movements: finger-tapping rhythmic  
titubation (truncal ataxia)

Reflexes: 0 (not elicited) to 4 (clonus)  
Moro: symmetric (to 3-5 mos)  
Tonic neck: normal, asymmetric or sustained (never fixed; to 6 months)  
Propping: present (6 to 7 mos; for sitting without support)  
Parachute: present (9 mos; for walking/falling)

Sensory: Cries with, localizes, purposefully withdrawals to painful stim in all 4 extrem

\*\* This was just a quick review; Remember to present positives and negatives which are **pertinent** to the question at hand \*\*

[add dictation instructions, give milestones cheat sheet, head circumference chart, and articles]