

Rotation Date: \_\_\_\_\_

Point of Contact: \_\_\_\_\_

# Ophthalmology Elective

## I. GUIDELINES FOR STUDENTS

Welcome to the Ophthalmology Elective. This curriculum is designed to introduce you to the specialty of ophthalmology, which involves the recognition, diagnosis, and management of diseases of the eye and adnexa.

You are expected to be familiar with the screening eye examination, learn to perform a more comprehensive ocular examination, and become familiar with the common ophthalmic instruments. This handout will cover your responsibilities and duties as an ophthalmology student. If you have questions, please contact Pauline B. David at [pbdavid@uci.edu](mailto:pbdavid@uci.edu).

## II. ATTENDANCE

You are required to attend all clinics and lecture session during your rotation. Generally clinic is 8:00 AM to 5:00 PM Monday, Tuesday, Thursday, and Friday. Clinic is closed on Wednesdays due to resident subspecialty rotations and lectures. On Wednesday mornings, students may go to the ophthalmic multimedia teaching laboratory (UCIMC, 2<sup>nd</sup> Floor, Bldg. 22A) to work with CLEO and engage in self-directed learning exercises. This must be arranged in advance with Loretta Garcia at (714) 456-7515. Clinic locations are:

1. UCI Medical Center, Pavilion II, 2<sup>nd</sup> Floor, 101 The City Drive South, Orange, CA
2. Long Beach VA, Bldg. 7, 2<sup>nd</sup> Floor, 5901 East 7<sup>th</sup> Street, Long Beach, CA

Wednesday afternoon lectures normally start at 1:30pm, at UCIMC, 2<sup>nd</sup> Floor, Bldg 55, topics may be obtained from Pauline David at [pbdavid@uci.edu](mailto:pbdavid@uci.edu).

**LBVA Students:** If you are taking your elective at the Long Beach VA, the Federal Government requires that all students **must** have a TB test and physical within one year from the start of their elective. If you have not had a TB test and physical within one year from the start of your elective, it is the students' responsibility to make arrangements to have them done prior to their elective. In addition, the LBVA also requires that you must bring two forms of identification (please see attached document for a list of acceptable identification). You must contact Cassie Williams or Steve Lopin at the LBVA no less than **3 weeks** prior to the start of your elective in order to complete the necessary security clearance requirements. LBVA will need to know: your date of birth, social security number, home phone and home address. Email the information to: [julia.williams@va.gov](mailto:julia.williams@va.gov) or [steve.lopin@va.gov](mailto:steve.lopin@va.gov). If you need to reach him by phone, his number is 562-826-8000 x4464. When you arrive on your first day, **you must bring** your proof of TB test and physical and your two forms of identification. **Failure to do so will result in cancellation of your elective.**

**Requests for time off:** Students who are taking two week electives will **not** be approved to miss any days from your rotation due to the short duration of your elective. Students who are taking four week electives may be approved for a maximum of two days off for resident interviews, etc. You must submit your request in writing via email to Pauline David at [pbdavid@uci.edu](mailto:pbdavid@uci.edu). The request will then be forwarded to the director for review/approval. Your request must be submitted a minimum of 30 days prior to the start of your elective. Requests submitted less than 30 days in advance will not be considered.

### **III. ATTIRE**

You are obligated to wear a short, white coat with the appropriate identification badge while working in the eye clinics. No jeans. A tie should be worn where gender appropriate.

### **IV. KNOWLEDGE**

During this rotation, you will refine your techniques in the general eye examination as well as be exposed to the scope of ophthalmic practice. Among other things, by the end of this rotation, you should be able to measure and record visual acuities, dilate pupils for fundus examination, become cognizant of the pharmacologic effects of dilating drugs, and be able to confidently use a direct ophthalmoscope. Also, you should be able to avert an eyelid, diagnose a foreign body, gauge the depth of the anterior chamber with a pen light, and recognize and manage corneal epithelial defects. We would like you also to acquire general familiarity with the equipment used in ophthalmic examination, for example, slit lamp biomicroscope, applanation tonometry, and indirect ophthalmoscopy. We do not expect you to master these techniques. However, familiarity with the advantages and limitations of these instruments will be of benefit in your understanding of the practice of ophthalmology.

### **V. OBJECTIVES**

1. To provide to students who will practice in the diverse areas of medicine, especially primary care, a core of information which will allow them to diagnose and manage common ophthalmic problems, emphasizing appropriate referral and the avoidance of delays or omissions in proper eye care.
2. To teach the essentials of the routine ophthalmic history and physical examination.
3. To expose the student to the spectrum of systemic diseases with ocular manifestations and to scope and breadth of primary ocular disease.
4. To teach to the student the recognition and initial management of ocular injuries and emergencies.
5. To introduce the students to the profession of ophthalmology as a branch of the practice of medicine. To instill in the student an understanding of the scope of the practice of ophthalmology, both medical and surgical, so that he/she may discriminate the purpose and skills of medical care from the art of refraction performed by non-professionals.

### **VI. DIDACTIC TEACHING**

Your attendance at Wednesday afternoon lectures, Rounds, and departmental conferences is mandatory. You will be expected to sign the attendance sheet. For lectures and other meetings occurring during your rotation, please contact Pauline David at [pbdavid@uci.edu](mailto:pbdavid@uci.edu).

On Wednesday mornings when clinics are cancelled, the elective students – especially those in the UCI graduating class of 2012 – should spend time in the CLEO lab, both using CLEO and lectures and the posters and self-directed learning links on the computer in UCIMC Medical Education student lounge.

## **VII. EDUCATIONAL GOALS**

Upon completion of this rotation, the student should be able to:

1. Measure and record visual acuity
2. Examine pupillary reflexes and to identify and recognize the significance of an afferent pupillary defect.
3. Perform a basic ocular motility examination and detect strabismus.
4. Perform a visual field examination by confrontation and recognize the principal visual field defects and understand their localizing value.
5. Examine the eye and ocular adnexa by penlight and recognize cardinal signs of disease.
6. Perform routine direct ophthalmoscopy of the ocular fundus and be familiar with the common features and disorders of the retina and optic nerve.
7. Be familiar with:
  - A. Ocular manifestations of common systemic disease
  - B. Ocular sequelae of systemic medications.
8. Evaluate and manage patients with the following classes of disorders:
  - A. Loss-of vision
  - B. The red eye
  - C. Abnormal eye movements
  - D. Ocular trauma and emergencies
  - E. Indications and complications of ophthalmic medications
  - F. Abnormal ocular fundus
    - i. papilledema
    - ii. diabetic retinopathy
    - iii. glaucoma

## **VIII. MATERIALS AND REFERENCES**

A number of slide-tape presentations on various subjects are held on reserve at the Medical Center Library. You are expected to review these materials as a part of the Elective. Additionally, many tests on ophthalmology are available. Recommended tests are:

Ophthalmology for the Primary Care Physician

Ed. Palay, David A. & Krachmer, Jay H.,

Mosby, 1997.

Available at UCI Bookstore

Special orders from Amazon.com approximately \$60.00

“Devers Manual” Ophthalmology for the Health Care Professional

## **IX. CLINIC ASSIGNMENTS**

Each student will be assigned to an outpatient clinic for each day of the rotation to provide a broad exposure to the daily activities and the range of clinical problems in ophthalmology. Each student will be assigned to an ophthalmology resident who will be primarily responsible for the instruction of that student. Each medical student will be required to perform all tasks assigned by that resident during the working day. Specifically, the student will be expected to observe the residents examining patients. Additionally, each medical student is expected to completely work up and present to his resident or an attending faculty member three new patients during each week of the rotation.

Each new patient evaluation will include the following:

1. A complete ophthalmic history, including relevant past medical history, review of systems, family medical and ocular history, and current medications.
2. Visual acuity, including uncorrected visual acuity, corrected visual acuity, and near visual acuity. (NB: Students are not expected to refract new patients).
3. Pupil examination including size, shape, reaction to light, reaction at near, and testing for afferent pupillary defects.
4. Motility testing, including assessment of ductions, versions, vergences, and cover-uncover testing for phorias and tropias.
5. Visual field examination by confrontation, of each eye separately (NB: If an abnormality is suspected from confrontation testing, tangent screen is necessary and should be performed with the supervising resident).
6. External examination, including careful examination of the eyelids and ocular adnexa, regional lymph nodes, facial skin, and other relevant systemic abnormalities
7. Penlight examination of the eye and lid, including careful examination of eyelid margins, tear film, conjunctiva, cornea, anterior chamber, iris, and lens (NB: Students should NOT instill any drops into the patient's eyes before approval is obtained from his supervising resident. Students are NOT expected to check applanation tonometry).
8. Dilated direct ophthalmoscopy.

## **X. PATIENT LOG**

You will be required to keep a log of all patients that you see whether you see them for presentation to a preceptor or together with the attending residents and/or other medical students. The log should include the date the patient was seen and the diagnosis. For your convenience, a sample page is included with this material. This log should be turned in at the time of the final exam.

## **XI. SKILLS EVALUATION**

As a part of the evaluation of your clinical performance, you will be expected to demonstrate your examinations skills to the senior resident. The satisfactory demonstration of these skills is a necessary prerequisite to a passing grade. It will be your responsibility to arrange a time with the chief resident or his designee to review your examination skills.

## **XII. FINAL EXAMINATION**

At the conclusion of your elective, you will be given written examination consisting of 25 questions, based on the topics assigned to you under the educational goals checklist and on the textbook material. These questions cover material that we would expect a well-trained primary care physician to know. *You will be responsible for turning the examination in to your supervising resident.*

## **XIII. GRADING RUBRIC**

The elective uses the new standardized School of Medicine evaluation form (on next page). It is your responsibility to give the form to your resident at the completion of the elective, with your name, the site, and date filled in, to expedite a prompt submission of your grade. The resident will fax the completed form to Pauline David at (949) 824-4015.

To evaluate knowledge base, there is a 25 question examination. For other attributes, the top group are worth 10/10 and 5/5 points. Group 2 (above expected level) is 8/10 and 4/5. Group 3 (at expected level of training) is worth 7/8 and 3.5/5. Group 4 (adequate but below expected) is worth 6/10 and 3/5. Inadequate is 0/10 and 0/5. There is a weighted algorithm used to calculate points for grading.

90 points on the overall evaluation is required for an Honors grade. An overall score above 50% is required for a Pass.

## **XIV. COURSE EVALUATION**

The evaluation of this rotation is critical as it measures the ability of this curriculum to transfer the knowledge and skills necessary for competency in a primary care setting. Please take the time to complete the rating form (attached) on which you should record your assessment of the teaching abilities of your preceptors, and the quality of the content and format of the elective to help us better serve your needs.

## **XV. CONCLUSION**

We welcome you and look forward to sharing with you our knowledge of and enthusiasm for ophthalmology. The office of Coordinator for Medical Student Education is designed to assist medical students in acquiring a working knowledge of Ophthalmology. This involves not only the core selective; but coordinating electives both intra- and extramurally. My office also acts as liaison between medical students and the Director of Resident Training, so that we should be able to provide you with any information you may require both as to medical students education in ophthalmology as well as residency opportunities and residency training in ophthalmology. Please feel free to contact me at any time with any questions you might have, and if we can be of any assistance in securing an elective or educational experience for you, we are at your disposal.

## Student Evaluation for Fourth Year Clinical Rotations ▪ University of California, Irvine, School of Medicine

STUDENT'S NAME: \_\_\_\_\_ NAME OF ROTATION: 650 – Clinical Ophthalmology DATES OF ROTATION: \_\_\_\_\_

EVALUATOR'S NAME: \_\_\_\_\_ LOCATION OF ROTATION: \_\_\_\_\_

<b>Please be sure to check the appropriate box for each item below, and please do not leave any items blank. Your detailed narrative comments will greatly help the evaluation process.</b>	<b>Problematic:</b> not at expected level of proficiency in this area	<b>Adequate</b> but below expected proficiency level	<b>At expected</b> ("average" UCI student at this level of training)	<b>Above expected</b> for level of training	<b>Clearly outstanding</b> (top 5-10% of all students)
<b>Knowledge</b> – knowledge base of relevant basic and clinical science areas					
<b>Patient Care</b> – observed history and physical examination skills					
<b>Patient Care</b> – ability to present a patient case with appropriate coherence, organization and length					
<b>Patient Care</b> – ability to create an appropriate and prioritized differential diagnosis					
<b>Patient Care</b> – ability to devise a rational plan appropriate to the differential diagnosis					
<b>Practice-Based Learning</b> – motivation for learning and enthusiasm for teaching others					
<b>Practice-Based Learning</b> – informatics and critical appraisal skills					
<b>Practice-Based Learning</b> – self-directed learning skills and likelihood of becoming an effective lifelong learner					
<b>Interpersonal &amp; Communication Skills</b> – therapeutically and ethically sound patient relationships					
<b>Interpersonal &amp; Communication Skills</b> – use of open-ended and facilitative interviewing techniques					
<b>Professionalism</b> – integrity, accountability and teamwork					
<b>Professionalism</b> – humanistic qualities and respect for diversity					
<b>Professionalism</b> – sensitivity and responsiveness to patients' culture, age, gender, and disabilities					
<b>Systems-Based Practice</b> – understanding of health systems, population health and socioeconomic implications of care					

\*Must provide formative comments for any adequate or problematic ratings

**Final Grade (circle one):**            **INCOMPLETE**            **FAIL**            **PASS**            **HONORS**

**Summative Comments** - may appear in the Dean's letter - include student's interactions with patients, presentations, clinical skills: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Formative Comments** – will not appear in Dean's letter - what feedback would help this student to become a better physician? : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Evaluator's Signature:** \_\_\_\_\_ **Evaluator's level: Faculty** \_\_\_\_\_ **Resident** \_\_\_\_\_

**Exam Grade** \_\_\_\_\_ **Overall Grade** \_\_\_\_\_

**Final Grade (circle one):**            **INCOMPLETE**            **FAIL**            **PASS**            **HONORS**

## ELECTIVE QUESTIONNAIRE

The course director would like to know how you feel about your training. Please respond to all items on this form and submit it to Dr. Lippa at the end of the session. The information you provide on this form will not be used by your preceptors to evaluate you, and it does *\*not\** affect your grade.

DATE: \_\_\_\_\_ SITE: UCI LBVAH

YOUR NAME (Print): \_\_\_\_\_  
(Last) (First)

PRECEPTOR NAME: Dr. \_\_\_\_\_  
(Last Name)

HOW WOULD YOU RATE TEACHING BY YOUR ATTENDINGS

EXCELLENT  GOOD TO FAIR  POOR  NO CONTACT

WERE ANY ATTENDINGS PARTICULARLY OUTSTANDING? \_\_\_\_\_

HOW WOULD YOU RATE TEACHING BY YOUR RESIDENTS

EXCELLENT  GOOD TO FAIR  POOR  NO CONTACT

WERE ANY RESIDENTS PARTICULARLY OUTSTANDING? \_\_\_\_\_

BY THE END OF THE SESSION WITH YOUR PRECEPTOR, WERE YOU CONFIDENT THAT YOU COULD PERFORM EACH EYE EXAM SKILL LISTED BELOW? (Check "yes" or "no" for each skill)

<i>EYE EXAM SKILL</i>	<i>YES</i>	<i>NO</i>
MEASURE VISUAL ACUITY	<input type="checkbox"/>	<input type="checkbox"/>
ASSESS PUPILS	<input type="checkbox"/>	<input type="checkbox"/>
ASSESS EXTRAOCULAR MUSCLE MOVEMENTS	<input type="checkbox"/>	<input type="checkbox"/>
PERFORM CONFRONTATION VISUAL FIELDS	<input type="checkbox"/>	<input type="checkbox"/>
ASSESS ANTERIOR SEGMENT (CONJ, CORNEA, ANTERIOR CHAMBER, IRIS)	<input type="checkbox"/>	<input type="checkbox"/>
VIEW DISC	<input type="checkbox"/>	<input type="checkbox"/>
VIEW MACULA	<input type="checkbox"/>	<input type="checkbox"/>
VIEW VESSELS	<input type="checkbox"/>	<input type="checkbox"/>
VIEW RETINA	<input type="checkbox"/>	<input type="checkbox"/>

OVERALL, HOW CONFIDENT ARE YOU NOW IN YOUR OWN ABILITY TO PERFORM AN EYE EXAM? (Check one)

VERY CONFIDENT  SOMEWHAT CONFIDENT  NOT VERY CONFIDENT

HOW MUCH INTEREST DO YOU HAVE IN TAKING A REFRESHER SKILLS IN THE FUTURE? (CHECK ONE)

VERY INTERESTED  SOMEWHAT INTERESTED  NONE AT ALL

DO YOU NOW OWN YOUR OWN OPHTHALMOSCOPE? (Check one)  YES  NO

IS THERE ANYTHING YOU SUGGEST TO IMPROVE THE ELECTIVE EXPERIENCE?

