

650A Introduction to Ophthalmology

I. GUIDELINES FOR STUDENTS

Welcome to the 650A Ophthalmology Elective. This elective is offered to all 3rd and 4th year medical students. This two- or four-week clerkship is offered at the UCI Medical Center and VA Long Beach.

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 Doris J. Romo at djromo@uci.edu.

II. ATTENDANCE

You are required to attend all clinics and lecture sessions during your rotation. Generally, clinic is 8:00 AM to 6:00 PM Monday, Tuesday, Thursday, and Friday. Clinic is closed on Wednesdays due to resident subspecialty rotations and lectures. On Wednesday mornings, medical students may self-study, follow their supervising resident, or shadow a faculty member in his private clinic (please contact the attending ahead of time to arrange).

Clinic locations are:

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

Wednesday afternoon lectures normally start at 1:30pm, at Gavin Herbert Eye Institute, 3rd Floor, Cavanaugh Conference Room A. Topics may be obtained from Doris J. Romo at djromo@uci.edu.

LBVA Students:

Please contact Lenisha Moon, lenisha.moon@va.gov, at least 2 weeks prior to the start of your rotation to assure your VA ID's, TMS training and IT access is all up to date. If they are not, you will be directed to Faye Johnson, Faye.Johnson2@va.gov. **Failure to do so will result in cancellation of your elective.**

The VA Education office is responsible for the processing of medical students. They are the point of contact for all UCI students who rotate through the VA. VA Education Offices are located in Building 165.

Faye Johnson, BSM
Director, GME
Education (011-ED)

5901 E. 7th Street
Long Beach, CA 90822
Faye.Johnson2@va.gov

Requests for time off: Students who are taking two week electives will **not** be approved to miss any days due to the short duration of the elective (some exceptions may apply). Students who are taking four week electives may be approved for a maximum of two (2) days off for resident interviews, etc. You must submit your request in writing via email to Doris Romo at djromo@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 (some exceptions may apply).

III. **ATTIRE**

Students are required to wear a short, white coat with the appropriate identification badge while working in the eye clinic. Students are also required to wear close-toed shoes and business attire.

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 evert 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 to also acquire general familiarity with the equipment used in ophthalmic examination, for example, slit lamp biomicroscopy, 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 the 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.

VI. DIDACTIC TEACHING

Your attendance at Wednesday afternoon lectures, Grand 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 Doris J. Romo at djromo@uci.edu.

VII. EDUCATIONAL GOALS

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

1. Measure and record visual acuity
2. Examine pupillary reflexes; 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, 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

The **Manual for Eye Examination and Diagnosis** is available at the eye clinic for your review.

Many books and online materials are also available.

We recommend:

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

OphthoBook written by Timothy Root, MD

www.OphthoBook.com.

6 eye modules on Medskl.com:

[acute visual loss](#), [chronic visual loss](#), [amblyopia](#), [red eye](#), [diplopia](#) and [strabismus](#).

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 attending faculty member at least three (3) new patients.

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 defect
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
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 the supervising resident or attending). Students are NOT expected to check the intraocular pressure, but are welcome to do so if interested
8. Dilated direct ophthalmoscopy

X. PATIENT LOG

For future reference, you can keep a log of the patients you see during your rotation. For your convenience, a sample page is included with this material. This log is for personal use only and **does not need** to be turned in at the end of the rotation.

XI. SKILLS EVALUATION

As a part of the evaluation of your clinical performance, you will be expected to demonstrate your examinations skills to your supervising resident. Each medical student is expected to completely work up and present to his resident at least three (3) new patients. The satisfactory demonstration of these skills is a 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 GRADE

The satisfactory demonstration of your clinical skills to your supervising resident is a prerequisite to a **passing grade**. Students on a 4-week rotation are eligible for an **honors grade**. Students seeking an honors grade are required to write a case report, a review article, or an EyeWiki submission with a resident or faculty adviser on a topic of their choosing. The students can alternatively present a case at our monthly Ophthalmology Grand Rounds (needs pre-approval by the Faculty in charge of the next Ophthalmology Grand Rounds).

The written paper (or PowerPoint presentation) must be submitted to the elective coordinator no later than 1 week following the end of clerkship to be eligible for an honors grade.

Due to the short duration of this elective, students on a 2-week rotation are not eligible for an honors grade.

Of note, there is no longer a written examination at the end of this elective.

XIII. GRADING RUBRIC

The elective uses a modified version of the UCI standardized School of Medicine evaluation form (attached, page 5). It is your responsibility to give the form to your supervising resident at the completion of the elective, with your name, the elective site, and date filled in, to expedite a prompt submission of your grade. Students seeking an honors grade should mention it on the evaluation form – if their paper/PowerPoint presentation is not received within 1 week after the end of the elective, the student will only qualify for a passing grade.

The evaluation form will be reviewed and signed by the Director of Medical Education in Ophthalmology before being sent to the student and cc to the SOM Registrar.

The satisfactory demonstration of your clinical skills to your supervising resident is a prerequisite to a passing grade.

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 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. This 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 student education in ophthalmology as well as residency opportunities and residency training in ophthalmology. Please feel free to contact us at any time.

Doris Romo (jjromo@uci.edu)

Chantal Boisvert, MD (cboisver@uci.edu)

Student Evaluation for 3rd and 4th Year Clinical Rotations ▪ University of California, Irvine, School of Medicine

STUDENT'S NAME: _____ NAME OF ROTATION: **650A – Introduction to Ophthalmology**

DATES OF ROTATION: _____ SITE: UCIMC LBVA
 DURATION: 2-week 4-week (I want to submit a paper to qualify for honors)

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.	Problematic: not at expected level of proficiency in this area	Adequate but below expected proficiency level	At expected ("average" UCI student at this level of training)	Above expected for level of training	Clearly outstanding (top 5-10% of all students)
Knowledge – knowledge base of relevant basic and clinical science areas					
Patient Care – observed history and physical examination skills (on ≥3 patients) – REQUIRED					
Patient Care – ability to present a patient case with appropriate coherence, organization and length					
Patient Care – ability to create an appropriate and prioritized differential diagnosis					
Patient Care – ability to devise a rational plan appropriate to the differential diagnosis					
Practice-Based Learning – motivation for learning and enthusiasm for teaching others					
Practice-Based Learning – informatics and critical appraisal skills					
Practice-Based Learning – self-directed learning skills and likelihood of becoming an effective lifelong learner					
Interpersonal & Communication Skills – therapeutically and ethically sound patient relationships					
Interpersonal & Communication Skills – use of open-ended and facilitative interviewing techniques					
Professionalism – integrity, accountability and teamwork					
Professionalism – humanistic qualities and respect for diversity					
Professionalism – sensitivity and responsiveness to patients' culture, age, gender, and disabilities					
Systems-Based Practice – understanding of health systems, population health and socioeconomic implications of care					

*Must provide formative comments for any adequate or problematic ratings

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? _____

Supervising Resident's Signature: _____ **Date:** _____

Final Grade (circle one): **INCOMPLETE** **FAIL** **PASS** **HONORS** (4-week rotation with paper submission)

Director of Medical Education's Signature: _____ **Date:** _____

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 to Doris Romo at the end of the session. The information you provide on this form will not be used by your preceptors to evaluate you, and will not affect your grade.

SITE: UCIMC LBVA
 DURATION: 2-week 4-week

SUPERVISING RESIDENT(S): _____

1) HOW WOULD YOU RATE TEACHING BY YOUR RESIDENTS?
 EXCELLENT GOOD TO FAIR POOR NO CONTACT

WERE ANY RESIDENTS PARTICULARLY OUTSTANDING?

2) HOW WOULD YOU RATE TEACHING BY YOUR ATTENDINGS?
 EXCELLENT GOOD TO FAIR POOR NO CONTACT

WERE ANY ATTENDINGS PARTICULARLY OUTSTANDING?

3) BY THE END OF THE CLERKSHIP, 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/Eye Alignment	<input type="checkbox"/>	<input type="checkbox"/>
Perform Confrontation Visual Fields	<input type="checkbox"/>	<input type="checkbox"/>
Assess Anterior Segment of the Eye (Conjunctiva, Cornea, Anterior Chamber, Iris)	<input type="checkbox"/>	<input type="checkbox"/>
Use the Direct Ophthalmoscope to view the optic nerve	<input type="checkbox"/>	<input type="checkbox"/>

4) OVERALL, HOW CONFIDENT ARE YOU NOW IN YOUR OWN ABILITY TO PERFORM AN EYE EXAM?
 (Check one)
 VERY CONFIDENT SOMEWHAT CONFIDENT NOT VERY CONFIDENT

5) DO YOU HAVE ANY SUGGESTION TO IMPROVE THE ELECTIVE EXPERIENCE?

Thank you!
 Chantal Boisvert, MD

