

Iraq Board of Medical Specialization

Ophthalmology Educational and Training Program

Version 2025

Contents

SECTION A: OBJECTIVES

- 1. EDUCATIONAL OBJECTIVES**
- 2. GENERAL OBJECTIVES**
- 3. OBJECTIVES BY YEAR (PGY1-PGY2-PGY3-PGY4-PGY5)**

SECTION B: SUB-SPECIALTY GOALS AND OBJECTIVES

- 1. CORNEA AND EXTERNAL DISEASE**
- 2. REFRACTIVE SURGERIES**
- 3. GLAUCOMA**
- 4. LENS AND CATARACT**
- 5. NEURO-OPHTHALMOLOGY**
- 6. OCULOPLASTICS & ORBITAL SURGERY**
- 7. OPTICS & CONTACT LENSES**
- 8. REFRACTION**
- 9. OPHTHALMIC PATHOLOGY & INTRAOCULAR TUMORS**
- 10. PEDIATRIC OPHTHALMOLOGY & ADULT STRABISMUS**
- 11. VITREORETINAL DISEASES**
- 12. UVEITIS**
- 13. LOW VISION REHABILITATION**

EDUCATIONAL OBJECTIVES

The principal objective of the program is to train excellent clinical ophthalmologists.

The residency training program over a five-year period is organized to provide a stable, well-coordinated, and progressive educational experience in the entire spectrum of ophthalmic diseases and ocular surgery, so that residents may develop diagnostic, therapeutic, and manual skills, as well as sound judgment in the application of such skills. Each resident has major technical and patient care responsibilities to provide an adequate base for a comprehensive ophthalmic practice that includes optics, visual physiology, corrections of refractive errors, retina, vitreous, and uvea; neuro-ophthalmology; pediatric ophthalmology and strabismus; external disease and cornea; glaucoma, cataract, oculoplastic surgery, and orbital diseases; and ophthalmic pathology.

At the end of their training, each resident obtains competence in the following six areas:

1. **Patient care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
 2. **Medical knowledge** about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patient care.
 3. **Practice-based learning and improvement** that involves the investigation and evaluation of care for their patients, the appraisal and assimilation of scientific evidence and improvements in patient care.
 4. **Interpersonal and communication skills** that result in the effective exchange of information and collaboration with patients, their families and other health professionals.
 5. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to patients of diverse backgrounds.
 6. **Systems-based practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.
- Resident learning and development are provided through a combination of lectures, supervised patient care, graduated hands-on procedural and surgical experience, research and independent study.
 - The goal of the curriculum is to train ophthalmologists who can provide ethical comprehensive ophthalmologic care and to help interested residents prepare for additional fellowship training.

General Objectives:

1. To provide supervised direct patient care experience which allows the resident to:

- a. Master ophthalmologic examination skills,
- b. Formulate and work up differential diagnoses,
- c. Manage clinical problems of increasing complexity,
- d. Develop and exercise clinical and ethical decision-making abilities,
- e. Develop patient communication techniques, and
- f. Work effectively as a member of the medical care team.

2. To provide graduated supervised procedural and surgical experience including:

- a. Modern cataract and other anterior segment techniques,
- b. Anterior and posterior segment laser surgery, and
- c. Exposure to all areas of subspecialty surgery.

3. To develop a broad fund of basic science and clinical knowledge through lecture, reading, and interactive conference and review sessions.

4. To provide residents with exposure to research, to teach them to knowledgeably assess research results and to motivate residents to pursue research projects.

5. To develop teaching skills as part of education.

6. To prepare for Iraq Board of Ophthalmology exams.

Objectives by Year

PGY-1 Students in the Iraqi Board of Ophthalmology

1. To develop a core knowledge base through use of American Academy of Ophthalmology Basic and Clinical Science Course, and attendance at clinical conferences.
2. To learn basic anterior and posterior segment examination skills.
3. To learn and acquire skills in diagnostic ophthalmology, including tonometry, slit lamp examinations, indirect ophthalmoscopy, refraction, etc.
4. To be able to manage uncomplicated general ophthalmologic disorders, including refractive errors, external inflammations, minor trauma, uncomplicated uveitis and glaucoma.
5. To acquire ophthalmic examination techniques and management of basic problems in the subspecialty areas of glaucoma, cornea, ophthalmic plastics, retina and neuro- ophthalmology.
6. To develop capabilities to manage most ophthalmic emergencies via emergency room coverage.
7. To learn elementary refraction and contact lens fitting techniques.
8. To perform minor surgical procedures (i.e. chalazion excision, etc.).
9. To develop an understanding of special diagnostic techniques – ultrasound, fluorescein angiography, electroretinography, visual field testing, etc.
10. To provide opportunities for teaching medical students in the clinic.

PGY-2 Students in the Iraqi Board of Ophthalmology

1. To participate in an increasing clinical decision making in management of general clinic and emergency patients.
2. To extend and expand diagnostic skills and management techniques in more complicated ophthalmologic disorders.
3. To acquire and develop skills and techniques for providing consultation to other medical services.
4. To learn and acquire skills in subspecialties of ophthalmology – glaucoma, neuro-ophthalmology, oculoplastics, etc.
5. To perform simple surgical procedures such as pterygium excision, tarsorrhaphy and lacrimal probing.
6. To train in techniques of anterior and posterior segment laser surgery.
7. To develop an understanding of the indications for and uses of low vision aids.
8. To develop interpretative skills in assessing diagnostic tests such as fluorescein angiograms, radiologic images, etc.
9. To provide ophthalmic consultations in a general medical hospital and emergency room.
10. To perform extraocular surgery, principally strabismus surgery and laser procedures, including panretinal photocoagulation, laser iridotomies, argon laser trabeculoplasty, and YAG capsulotomy.
11. To assist in supervision and teaching of PGY-1 ophthalmology residents.

PGY-3 Students in the Iraqi Board of Ophthalmology

1. To extend and expand diagnostic skills and management techniques in more complicated ophthalmologic disorders.
2. To participate in an increasing clinical decision making in management of general clinic and emergency patients.
3. To run semi independently general ophthalmology clinics with supervision from senior staff .
- 4.To develop competency in medical and surgical management of ocular trauma
- 5.To develop interpretative skills in fluorescein angiography and ultrasound examination.
6. To have complete understanding of intraocular surgery such as Cataract and glaucoma surgery and perform some steps under supervision .
7. To provide ophthalmic consultations in a general medical hospital and emergency room.
8. To assist in supervision and teaching of PGY-2 ophthalmology residents.

PGY-4 Students in the Iraqi Board of Ophthalmology

1. To master the art of diagnosis and treatment of complicated eye diseases.
2. To develop competency in intraocular surgery (cataract surgery, glaucoma surgery, retinal detachment procedures, major ocular trauma, etc.) and in complicated ophthalmic plastic procedures such as orbital fracture and tumor resection.
3. To be able to manage intraoperative complications of surgery.
4. To develop skills and acquire experience in preoperative evaluation and postoperative management.
5. To develop competency in medical and surgical management of ocular trauma
6. To develop interpretative skills in fluorescein angiography and ultrasound examination.
7. To acquire skills of current modern practice management techniques.
9. To assist in the teaching and supervision of PGY-1, PGY2 and PGY-3 ophthalmology residents.

PGY-5 Students in the Iraqi Board of Ophthalmology

As PGY-5 residents in the Iraqi Board of Ophthalmology approach the final year of their training, they are expected to demonstrate a higher level of clinical excellence, leadership, and professional development in various aspects of ophthalmology. The following outlines the expected performance criteria for PGY-5 residents:

1. Expertise in Complex Diagnoses and Treatments

- Achieve mastery in diagnosing and managing a wide array of complex eye diseases, including rare and atypical presentations.
- Formulate comprehensive treatment plans that integrate surgical and medical management tailored to individual patient needs.

2. Surgical Mastery and Independence

- Execute advanced intraocular surgical procedures (such as complex cataract surgeries, glaucoma surgeries, retinal surgeries, and ocular trauma repair) with a high degree of technical skill and minimal complications.
- Demonstrate the ability to perform intricate ophthalmic plastic surgeries, including orbital fracture repairs and tumor resections, with confidence.

3. Management of Intraoperative Complications

- Show proficiency in identifying and managing intraoperative complications effectively, ensuring patient safety and optimal outcomes.
- Develop a systematic approach to troubleshooting and mitigating risks during surgical procedures.

4. Comprehensive Preoperative and Postoperative Care

- Conduct thorough preoperative evaluations and implement effective postoperative management strategies, ensuring continuity of care and addressing potential complications.
- Provide education and support to patients and their families regarding postoperative care and recovery.

5. Advanced Ocular Trauma Care

- Demonstrate exceptional skills in the assessment and management of ocular trauma cases, utilizing both surgical and non-surgical interventions.
- Collaborate with multidisciplinary teams to develop protocols for trauma care and improve patient outcomes.

6. Diagnostic Imaging Interpretation

- Exhibit expertise in interpreting advanced diagnostic imaging modalities, including OCT, fluorescein angiography, and ultrasound, to inform clinical decision-making.
- Utilize imaging results to refine diagnostic accuracy and guide treatment options.

7. Leadership and Teaching Responsibilities

- Take on significant leadership roles in the residency program, mentoring and supervising PGY-1, PGY-2, PGY3 and PGY-4 residents in clinical settings and surgical procedures.
- Contribute to the educational curriculum by delivering lectures, facilitating workshops, and leading case discussions.

8. Research and Quality Improvement

- Engage actively in research projects, aiming to contribute original findings to the field of ophthalmology, and participate in presenting these findings at conferences.
- Participate in quality improvement initiatives aimed at enhancing patient care and the residency program's effectiveness.

9. Professional Development and Networking

- Attend national and international conferences to stay abreast of the latest advancements in ophthalmology and network with peers and leaders in the field.
- Pursue opportunities for further specialization or fellowship training based on individual interests and career goals.

10. Preparation for Board Certification and Future Practice

- Prepare comprehensively for the Iraqi Board of Ophthalmology certification exams, demonstrating a thorough understanding of clinical knowledge and surgical skills.
- Develop a professional identity as an ophthalmologist, preparing for entry into independent practice or advanced training in subspecialties.

This expected performance outline for PGY-5 residents emphasizes the culmination of their training, highlighting their readiness to transition into independent practice, contribute to the field of ophthalmology, and take an active role in patient care, education, and research.