

Fellowship in Medical and Surgical Retina

The KGMU Subspecialty Curriculum provides aspects of modern curriculum design that complement the Residency Curriculum, which is a stratified content outline of cognitive and technical skills.

The comprehensive definition of a curriculum includes a content outline, the resources required to adequately provide training, suggested numbers of procedures, teaching methods, and trainee and program evaluations. We believe the incorporation of these crucial components produces a valuable resource.

This fellowship programme is based on ICO (International Council of Ophthalmology) fellowship programme

Abbreviations:

[M]: Must have/required

[S]: Should have

ELIGIBILITY : M.S, or DNB (Ophthalmology)

I. INTRODUCTION

A. Definition and Scope of Retina Fellowship

Retina subspecialists manage the entire spectrum of the retinal diseases in relation to underlying systemic, traumatic and ocular conditions. This may require collaboration with other medical and ophthalmic specialty areas. Fellowship training is focused on additional in-depth understanding and management of retinal diseases beyond that obtained in residency training. This training is for a continuous minimum period of 1 year and includes focused training in developing and maintaining knowledge, skills, scholarship, and professionalism.

B. Duration and Scope of Education

1. The fellow must be able to fully comply with the clinical requirements of the program and have completed an appropriate residency program for that subspecialty fellowship. [M]
2. A minimum of 12 months of clinical training is required.
3. Prior to entry into the program, each fellow will be given an orientation period for familiarization with the institute, the clinic, and the basic examination skills. [M]

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II. FACILITIES AND RESOURCES

A. Clinic

The outpatient area of each participating institution must have a minimum number of fully equipped examination lanes for each fellow in the clinic. There will be access to current diagnostic equipment. [M]

B. Operating Facilities

There must be adequate operating facilities, including an operating microscope to perform and teach surgeries. [M]

C. Inpatient Facilities

There will be inpatient facilities with access to sufficient space and beds for good patient care. [M]

D. Library

Fellows will have ready access to a major medical library and facilities for electronic retrieval of information from medical databases. [M]

III. EDUCATIONAL PROGRAM

The program director is responsible for the structure and content of the educational program and will provide a statement of objectives, methods of implementation, and procedures for assessment of the program by the faculty and the fellows. [M]

A. Clinical Components

1. History Taking

The fellow must have in-depth knowledge to inquire about common and rare clinical conditions that may be associated with worsening disease, covering retinal and nonretinal causes of vision loss. [M]

2. Clinical Examination Skills

The fellowship must be organized to provide training that will equip the fellows to regularly perform evaluations and consultations, including history and examination, which involve the techniques of ophthalmology specific to glaucoma and related ocular and systemic conditions. [M]

3. Technical Clinical Examinations

The fellow should become proficient in the indications for and interpretation of results of specialized diagnostic testing appropriate to the subspecialty of retina, including but not limited to the following:

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- a. Tests of visual function on Snellen and LogMAR. [M]
- b. Tests of optic nerve and retinal layers, including examination of the optic nerve, familiarity with optical imaging techniques, such as optical coherence tomography (OCT), fundus fluorescein angiography (FFA), fundus photography. [M]
- c. Assessment of fundus by direct/indirect ophthalmoscopy. [M]
- d. Assessment of other risk factors, such as trauma, high myopia or family history of retinal diseases. [M]

4. Therapeutics

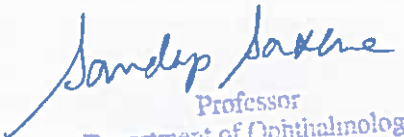
The fellow must become familiar with the indications for and limitations of pharmacological, laser, and surgical therapies that may be recommended for patients with retinal diseases and related conditions. [M]

5. Clinical Experience

The fellow should become proficient in the diagnosis and management of retinal diseases. This should be based on differential diagnostic skills development, knowledge of test indications and interpretations, in addition to individualized care based on indications and limitations of pharmacological, laser, and surgical therapies in any patient.

The fellow should be exposed to as broad a variety as possible of conditions falling within the scope of retinal diseases. Patients seen/procedures performed must cover:

- a. Subspecialty examinations (new and follow-up patient examinations) over 12 months; [M]
- b. Subspecialty new patient examinations over 12 months; [M]
- c. The following subspecialty diagnostic examinations will be performed on a sufficient number of patients to allow the fellow to achieve competence in the indications, interpretation, and limitations of these diagnostic modalities:
 - i. Computerized fundus examination, optic nerve and retinal layer imaging, optic disc photography, fluorescein angiography and other adjunctive studies. [M]
- d. Subspecialty surgical procedures performed: [M]


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Recommended Retinal Surgery Procedures for Fellows

It is recommended that fellows perform a sufficient number of retina procedures to achieve competence. Individual programs utilizing these guidelines should determine minimum numbers based on local need and available resources.

Class I (Fellow as Primary Surgeon) and Class II(Fellow as First Assistant)

Operative Procedures	Class I	Class II
I.Retinal Detachment Surgeries 1.Scleral Buckling 2.Band with Buckle with PPV with Tamponade(Oil/Gas) 3.Pars Plana Vitrectomy(PPV) 4.Cryo/Laser Retinopexy II.Macular Surgeries 1.ERM Removal,Macular Hole Surgery with ILM Peeling III.Panretinal photocoagulation IV.Anti-VEGF injections V.Miscellaneous 1.YAG capsulotomy and PI(Peripheral Iridectomy)		

A. Didactic Components


Fellows should participate in clinical conferences and didactic lectures in retina and related topics that are separate from patient-care activities within the parent institution, including presenting cases and lectures, and participating in grand rounds and other departmental conferences. Fellows are expected to participate in 30hours of such time per year. **[S]**

Fellows should have basic knowledge of statistics for interpretation of published literature and conducting their own research.**[S]**

Fellows will emphasize upon the principles of ethical and humane treatment of patients in accordance with the International Council of Ophthalmology Code of Ethics **[M]**

B. Supervision

Fellows will be appropriately supervised in patient care services by qualified faculty. The program director must ensure, direct, and document appropriate supervision of fellows. Attending physicians who supervise fellows must be


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available to the fellows and have sufficient experience with the severity and complexity of patient conditions. [M]

C. Duty Hours and Conditions of Work

Duty hours and night and weekend call for fellows must reflect the concept of responsibility for patients and provide for adequate patient care. Fellows must not be required to regularly perform excessively difficult or prolonged duties. [M]


D. Scholarly Activity

The fellowship will take place in a scholarly atmosphere where resources are available that allow the fellows to participate in scholarly activities, such as research. Fellows will participate in the development of new knowledge and evaluate research findings. The responsibility for establishing and maintaining an environment of inquiry and scholarship rests with the faculty. While not all members of the faculty must be investigators, the staff as a whole must demonstrate broad involvement in scholarly activity. Faculty activity should include:[M]

1. Active participation in clinical discussions, rounds, and conferences in a manner that promotes a spirit of inquiry and scholarship. Scholarship implies an in-depth understanding of basic mechanisms of normal and abnormal states and the application of current knowledge to practice. [M]
2. Participation in journal clubs and research conferences. [M]
3. Active participation in regional, national, or international professional and scientific societies, particularly through presentations at meetings and publications in peer-reviewed journals.[S]
4. Participation in research, particularly in projects that are funded following peer review and/or result in publications or presentations at regional, national, or international scientific meetings. [S]
5. Guidance and technical support (eg, research design, statistical analysis) for fellows involved in research. [M]
6. Provision of support for fellows participation in scholarly activities.
7. Adherence to the Declaration of Helsinki on the Rights of Research Human Subjects and to the Association for Research in Vision and Ophthalmology Guidelines for Use of Research Animals. [M]

E. Fellow Research Activities

Fellows should be exposed to opportunities to develop research skills by planning and executing at least 1 research project with set milestones. A specific block of time may be set aside for clinical or laboratory research, which may require that the fellowship be extended beyond 12 months.[S]


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V. EVALUATION

A. Program and Faculty Evaluation

The educational effectiveness of the fellowship program must be evaluated annually in a systematic manner. In particular, the quality of the curriculum and the extent to which the fellows have met the educational goals must be assessed. Teaching faculty must be evaluated on a regular basis. Faculty members who serve as clinician, scientist, and professional role models should be evaluated. Evaluation of faculty should include teaching ability, commitment, and clinical knowledge. There must be a formal mechanism by which fellows participate in this evaluation. Written evaluations by fellows, through mechanisms that promote candor and maintain confidentiality as much as possible, should be utilized in the evaluation of both the program and faculty. [M]


B. Fellow Evaluation

There must be regular evaluation of the fellow's knowledge, skills, and overall performance, including the development of professional attitudes consistent with being a physician. [M]

The program director, with the participation of members of the faculty, shall:

1. At least semi-annually evaluate the knowledge, skills, professional growth, and curriculum development for each fellow using appropriate criteria and procedures. [M]
2. Communicate each evaluation to the fellow in a timely manner. [M]
3. Advance fellows to positions of higher responsibility on the basis of evidence of their progressive development of knowledge, skills, and professionalism. [M]
4. Maintain a permanent record of evaluation for each fellow and have it accessible to the fellow and other authorized personnel. [M]
5. Keep tracking information of the former fellows' curriculum and career development and include this information in the record of each former fellow. [M]

- C. The program director will provide a written, final evaluation for each fellow who completes the program. The evaluation would include a review of the fellow's performance during the period of training and should verify that the fellow has demonstrated sufficient professional ability to practice competently and independently. This final evaluation would be part of the fellow's permanent record maintained by the institution. [M]


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