



Glaucoma Curriculum with Evaluation Throughout the EGS Education Continuum

1. Glaucoma fellowship pre - and post-evaluations

Name

2. Applications for sitting the EBO/EGS subspecialty exam

- Mandatory knowledge (M), Recommended knowledge (R)

Date of Evaluation

3. Next Generation Partnership (NGP)

Embryology, anatomy, physiology

- Anterior chamber angle (M)
- Ciliary body (M)
- Aqueous humor (M)
- Optic disc and nerve fiber layer (M)
- Retina (M)
- Cornea (M)
- Lens, zonules, hyaloid, vitreous (M)

1	2	3	4	5	N/A	Comment

Theoretical knowledge

- Epidemiology (M)
- Pathophysiology (M)
- Diagnostics (M)
- Therapy: medical, laser, surgery (M)
- Complications of treatment (M)
- Follow-up (M)
- Critical evaluation of literature¹ (M)

1	2	3	4	5	N/A	Comment

¹Evidence Based Medicine, including health economics



Classification of the Glaucoma and list of pathologies	1	2	3	4	5	N/A	Comment
Ocular hypertension/Primary open angle suspect (M)							
Primary open-angle glaucoma (M)							
Primary juvenile glaucoma (M)							
Primary congenital glaucoma (M)							
Secondary open-angle glaucoma ¹ (M)							
Primary angle closure ² (M)							
Iris plateau configuration and syndrome/glaucoma (M)							
Secondary angle closure/glaucoma ³ (M)							
Malignant glaucoma (M)							
Developmental glaucomas with associated anomalies ⁴ (M)							
ICE syndromes ⁵ (M)							

¹ Pigmentary, pseudoexfoliative, lens induced, corticoid induced, hemorrhage induced, uveitic, increased episcleral venous pressure

² Patient at risk, primary angle closure suspects, primary angle closure, angle closure glaucoma

³ Neovascular, lens/IOL induced, uveitic, traumatic)

⁴ Axenfeld-Rieger syndrome, Aniridia, Peter's Anomaly

⁵ Chandler Syndrome, Essential / Progressive Iris Atrophy, Iris Nevus / Cogan Reese Syndrome)



IOP measurements¹

	1	2	3	4	5	N/A	Comment
Goldmann applanation tonometry (M)							
Dynamic contour tonometry (Pascal) (R)							
Air-puff (R)							
Ocular Response Analyser (R)							
Tono-pen (R)							
Rebound tonometry (R)							

Pachymetry¹(M)

	1	2	3	4	5	N/A	Comment

¹Clinical knowledge (Theoretical knowledge of all items is mandatory)

Gonioscopy

	1	2	3	4	5	N/A	Comment
Indirect gonioscopy (Goldmann 3-2-1 mirror lenses) (M)							
Direct gonioscopy (Koeeppe lense etc) (M)							
Dynamic gonioscopy (Zeiss, Posner, Sussmann lens) (M)							

Tests of visual function

	1	2	3	4	5	N/A	Comment
Standard automated perimetry (SAP) Humphrey or Octopus ² (M)							
Goldmann perimetry (R)							
FDT (R)							

²Detailed knowledge of analyzing Humphrey and Octopus visual field results



Clinical examination of ONH and RNFL¹	1	2	3	4	5	N/A	Comment
Disc and RNFL photography (M)							
Heidelberg Retina Tomograph (HRT) ² (M)							
Optical Coherence Tomography ² (M)							
GdX nerve Fiber Analyzer ² (M)							

¹ ONH = Optic nerve head, RNFL = retinal nerve fiber layer.

² Note: Clinical /practical knowledge of at least one of the instruments (OCT, HRT, GDx) is considered necessary for the fellowship training in glaucoma.

Anterior segment imaging	1	2	3	4	5	N/A	Comment
Anterior segment OCT (R)							
UBM (R)							

Electrophysiology (R)	1	2	3	4	5	N/A	Comment

Medical treatment of glaucoma (M)³	1	2	3	4	5	N/A	Comment
Modality and form of administration (M)							
Mechanism of action (M)							
Indications (M)							
Limitations (M)							
Quality of life (M)							
Side effects (M)							
Cost containment (M)							
Neuroprotection (M)							
New modalities of administration (M)							
New molecules in the pipeline(M)							

³ Extensive and detailed knowledge in all available classes of medications mandatory



Laser procedures as first surgeon	1	2	3	4	5	N/A	Comment
Trabeculoplasty (Argon and SLT) (M)							
Yag iridotomy (M)							
Peripheral iridoplasty (M)							
Laser suture lysis (M)							
YAGcapsulotomy (M)							

Incisional surgery experience	1	2	3	4	5	N/A	Comment
Cataract surgery (R)							
Complex cataract surgery (R)							
Trabeculectomy (R)							
Use of antimetabolites and anti-VEG (R)							
Aqueous shunts (non-valved and valved) (R)							
Non-penetrating procedures (R)							
MIGS (Optional)							
Combined procedures (R)							
Cyclodestructive procedures (R)							
New devices/ surgical methods (Optional)							

*The EBO-EGS exam will not certify the candidate's surgical skills or ability. To be eligible, surgical experience is necessary: indication, technic, postoperative care and management of complications will be integrate part of the knowledge tested during the exam.

Management of surgical complications	1	2	3	4	5	N/A	Comment
Needling of failing/encysted filtering blebs (M)							
Repair of leaking blebs (M)							
Management/reformation of shallow anterior chamber (M)							
Management of hypotony and choroid detachment (M)							
Re-operation following failure of glaucoma surgery (R)							



Childhood glaucoma

- Examination under anesthesia for congenital glaucoma (R)
- Goniotomy (R)
- Trabeculotomy (R)
- Trabeculectomy (R)

1	2	3	4	5	N/A	Comment

Clinical exposure sufficient to gain experience and be able to run independently a glaucoma clinic, medical and surgical management (M)

1	2	3	4	5	N/A	Comment

Knowledge on how to organize, run and continuously improve a successful and sustainable (cost-effective) care service for glaucoma patients (M)

1	2	3	4	5	N/A	Comment

Experience and knowledge on critical evaluation of literature (M)

1	2	3	4	5	N/A	Comment

Participation in basic and/or clinical research (M)

1	2	3	4	5	N/A	Comment

Participation in local, regional, national, international professional and scientific meetings (M)

1	2	3	4	5	N/A	Comment



Active presentations at meetings (R)

1	2	3	4	5	N/A	Comment

Publication(s) in peer-reviewed journals (R)

1	2	3	4	5	N/A	Comment

Experience with the text-books

EGS Guidelines 4th Edition 2014
www.eugs.org (M)

Relevant national evidence-based
guidelines (M)

Shields Textbook of Glaucoma 6th Edition R.
Rand Allingham, Karim F Damji, Sharon F
Freedman. Lippincott Williams & Wilkins
2011 (M)

Glaucoma, A color Manual of Diagnosis and
Treatment Jack Kanski, J McAlliester, John F.
Salmon. Butterworth-Heinemann 1996 (M)

The Glaucoma Book; a practical, evidence
based approach to patient care. Paul N.
Schacknow, John R Samplers. Springer
science and Business media. LLC 2010 (M)

The Glaucomas Robert Ritch, M.Bruce
Shields, Theodore Krupin. Mosby 1996 (M)

Glaucoma, 2nd ed, Tarek Shaarawy, Marc
Sherwood, Roger Hitchings, Jontahan
Crowston. 2014. Saunders Ltd (M)

1	2	3	4	5	N/A	Comment



Evidence Based Medicine. Straus SE, Glasziou P, Richardson WS, Haynes RB, How to Practice and Teach it. Churchill Livingstone Elsevier 2011

Glaucoma. American Academy of Ophthalmology. www.aaopt.org/pdf/Glaucoma

Detailed knowledge and interpretation of the following randomized controlled clinical trials (All Mandatory)

	1	2	3	4	5	N/A	Comment
CNTGS (M)							
EMGT(M)							
OHTS (M)							
EGPS (M)							
CIGTS (M)							
AGIS (M)							
UKGTS (M)							
EAGLE (M)							
Other relevant studies							

Systematic Reviews (Strongly recommended)

	1	2	3	4	5	N/A	Comment
Cochrane Collaboration (list read reviews)							
Health Technology Assessments (list read reviews)							
Other systematic reviews (list read reviews)							