



ESASO Fellowship Programme

Advanced education
developing world-class
ophthalmologists



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ESASO

a Vision of Collaboration

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Welcome

Dear Applicant

The ESASO Fellowship Programme offers young, talented and ambitious ophthalmologists the opportunity to acquire the expertise and surgical skills necessary to develop an international career.

Since 2008, we at ESASO have been committed to developing a world-class educational programme in ophthalmology.

The fellowship provides an invaluable opportunity to gain hands-on training from globally renowned practitioners of cataract surgery, cornea and refractive surgery,

glaucoma, and medical and surgical retina. It is a chance to learn from the best in order to develop the expertise and network of international contacts necessary to become a “complete ophthalmologist”.

ESASO firmly believes that the quality of the learning environment is crucial to the overall value of a fellowship. For this reason, ESASO has partnered with some of the foremost teaching hospitals and university departments throughout the world. We continually monitor the quality of the programme and always strive to develop new connections with leading ophthalmic institutions globally.

We expect graduates of the fellowship to give back to the profession of ophthalmology by delivering the best efforts in clinical practice but also through education and research after completion of the training.

We look forward to receiving your application and to working with future leaders in the field of ophthalmology.

Yours sincerely

Stanley Chang
Chairman of Ophthalmology
Columbia University, New York

Giuseppe Guarnaccia
Global Executive Director
ESASO, Lugano



Mission

ESASO aims to improve the clinical and surgical practice of specialists in ophthalmology by helping them to develop and enhance their professional skills. Our objective is to provide ophthalmologists with high-calibre postgraduate education and hands-on training from an internationally renowned faculty.



ESASO Fellowships are truly unique as curricula are planned in consultation with highly reputed and accredited academic and clinical bodies from around the world. Each ESASO Fellowship is offered annually, lasts 12 months and includes instructor-led and research based objectives.



Organisation

ESASO offers Ophthalmologists the chance to acquire skills in a specific ophthalmic subspeciality during a one-year Fellowship.

The ESASO Fellowship is spent in one of the highly specialised teaching hospitals or university departments that have developed a specific training programme as part of their partnership agreement with ESASO.

The ESASO Fellowship is an advanced subspeciality training programme in which highly motivated and talented ophthalmologists gain a thorough understanding of a specific topic and acquire practical expertise in the associated clinical and surgical procedures. Fellows are expected to master all the skills required to practise their specialisation autonomously, employing the specific techniques learnt during the Fellowship.

The ESASO Fellowship Committee includes honorary members and members of the faculty of the institutions that offer Fellowship.

ESASO Fellowship Committee

Stanley Chang, USA, Chair

Rupert Bourne, UK, Member

Borja Corcóstegui, Spain, Member

Giuseppe Guarnaccia, Switzerland, Member

Anselm Jünemann, Germany, Member

Anat Loewenstein, Israel, Member

Ramon Medel, Spain, Member

Ursula Schmidt-Erfurth, Austria, Member

Christoph Scholda, Austria, Member

Sobha Sivaprasad, UK, Member

Leonidas Zografos, Switzerland, Member

Maurizio Battaglia Parodi, Italy, Secretary



ESASO Fellowship Programmes

- 1) Anterior Segment Surgery
- 2) Glaucoma
- 3) Oculoplastic
- 4) Medical Retina
- 5) Research
- 6) Surgical Retina
- 7) Training Programme for Clinical Development

1) ANTERIOR SEGMENT SURGERY FELLOWSHIP

Objective

To acquire demonstrable and certified expertise in the assessment and contemporary management of (adult) cataract and disorders of corneal and to develop an understanding of the principles of refractive surgery.

Essential clinical experience

- a) To have attended a minimum of **200 corneal disease clinics**.
- b) to have actively participated in, or assisted at, a minimum of **30 corneal transplant operations**.
- c) to have actively participated in the management of the **complications of corneal transplantation**, including rejection and refractive problems.
- d) to have actively participated in, or assisted at, a minimum of **25 PRK**
- e) to have actively participated in, or assisted at, a minimum of **25 LASIK**
- f) to have undertaken a minimum of **100 complete surgical cataract surgeries as Specialist Registrar**.

Mandatory competence

In addition to those areas specified in Basic Specialist Training, competence in the following is specifically required:

- a) Clinical evaluation of the patient undergoing corneal transplantation leading to the development, after discussion with the patient, of a suitable management plan.
- b) Management and primary repair of penetrating eye injury, including those affecting the anterior segment.
- c) Management of contact lens related disorders
- d) Management of infective keratitis, including biopsy/sampling (for cytology, histology, microbiology) and the development of an appropriate antimicrobial strategy, and in particular the management of herpetic keratitis.
- e) Acute management of severe chemical burns involving the anterior segment
- f) Management of inflammatory diseases of the cornea, especially regarding corneal melt.
- g) Management of corneal dystrophies and of keratoconus
- h) Surgical management of the refractive disorders
- i) Management of unexpected refractive outcomes of refractive surgery
- l) To draw up a management plan leading to a target post op refraction after discussion with the patient; this should include at least a theoretical knowledge of astigmatic management during cataract surgery.
- m) Biometry (keratometry & axial length determination) to indicate IOL power leading to target post op refraction.
- n) Routine phacoemulsification, to include capsulorhexis and placement of PC IOL (including foldable lenses), using a variety of contemporary forms of anaesthesia.
- o) Management of difficult cataract cases. This should include cases with hard nuclei (by phacoemulsification and/or ECCE), small pupils, previous vitrectomy and/or trauma, high myopia, pseudoexfoliation, and mature and hypermature lenses.
- p) Management of intraoperative complications (including vitreous loss by anterior vitrectomy and wound leak by suturing).
- q) Implantation of other IOL types (e.g. AC in complicated cases, secondary AC and PC IOLs).

- r) Management of post op complications, including raised pressure, endophthalmitis, macular oedema and posterior capsular opacification (by laser capsulotomy).
- s) Management of cataract in the presence of glaucoma (e.g. phacotrabeculectomy).
- t) Management of cataract in the presence of retinal disease (e.g. ARMD; and especially in the presence of diabetic retinopathy).
- u) Management of adverse refractive outcomes of cataract surgery

Desirable clinical experience

- a) Combined corneal transplantation, cataract extraction and lens implantation.
- b) Management of acute corneal perforation by transplantation or tissue glues.
- c) Fitting of contact lenses.
- d) Endothelial specular microscopy.
- e) Corneal pachymetry, topography and aberrometry.
- f) Management of the complications of severe chemical injuries to the anterior segment.
- g) Limbal cell transplantation and conjunctival autografting.
- h) Amniotic membrane grafting.
- i) Intracorneal rings; phakic IOLs.
- l) Techniques and organisation of eye-banking.
- m) Management of the dislocated crystalline lens.
- n) Sclerally sutured IOLs and IOL exchange.
- o) Piggy-back IOLs.
- p) Anterior segment revision (including use of anterior vitrector).
- q) Multifocal IOLs
- r) Toric IOLs
- s) Intracapsular cataract surgery.

Research

A specific research programme will be discussed and developed with the selected candidate.

2) GLAUCOMA FELLOWSHIP

Objective

To acquire demonstrable and certified expertise in the assessment and contemporary management of ocular hypertension and primary and secondary glaucoma in adults.

Essential clinical experience

- a) To have attended a minimum of **200 glaucoma clinics**.
- b) To have undertaken a minimum of **100 procedures (surgical or laser) for glaucoma**.

Mandatory competence

In addition to those areas specified in Basic Specialist Training, competence in the following is specifically required:

- a) The clinical evaluation of the retinal nerve fibre layer by slit lamp biomicroscopy.
- b) The appropriate selection and interpretation of visual fields.
- c) The drawing up of an individual management plan leading to a target IOP.
- d) Pharmacological treatment of IOP.
- e) Trabeculectomy, bleb management and laser suture lysis.
- f) Management of the complications of trabeculectomy, including flat anterior chamber.
- g) Management of glaucoma in the presence of cataract.
- h) Cycloablation (including cyclodiode laser) for refractory glaucoma.
- i) Laser trabeculoplasty and selective laser trabeculoplasty
- j) Management of acute angle closure glaucoma, including medical and laser treatment.

Desirable clinical experience

- a) Management of malignant glaucoma.
- b) Use of antimetabolites in trabeculectomy.
- c) Use of drainage tubes/stents in complex glaucoma surgery.
- d) Non-penetrating glaucoma surgery.



Research

A specific research programme will be discussed and developed with the selected candidate.

3) MEDICAL RETINA FELLOWSHIP

Objective

To acquire demonstrable and certified expertise in the diagnosis and management of the medical disorders of the retina.

Essential clinical experience

- a) To have undertaken under supervision a minimum of **50 laser treatments for retinal diseases**
- b) To have performed under supervision a minimum of **150 OCT examinations**
- c) To have performed, under supervision a minimum of **30 fluorescein/indocyanine green angiography**
- d) To have undertaken under supervision a minimum of **20 microperimetry**
- e) To have undertaken under supervision a minimum of **20 ultrasound examinations**
- f) To have performed or able to interpret electroretinography

Mandatory competence

In addition to those areas specified in Basic Specialist Training, competence in the following is specifically required:

- a) Clinical diagnosis:
 - i. age-related macular degeneration
 - ii. diabetic retinopathy
 - iii. retinal vein occlusions
 - iv. degenerative myopia
 - v. chorioretinal dystrophies
 - vi. chorioretinal inflammatory disorders
 - vii. other retinal vascular disorders
 - viii. other retinal degenerative disorders
 - ix. Choroidal and retinal tumors and masquerading disorders



- b) Instrumental diagnosis of chorioretinal disorders
- c) Treatment of chorioretinal disorders

Desirable clinical experience

To have a sound working knowledge, by exposure to:

- a) Management of all age-related macular degeneration forms
- b) Management of diabetic retinopathy forms
- c) Management of degenerative and hereditary chorioretinal disorders

Research

A specific research programme will be discussed and developed with the selected candidate.

4) OCULOPLASTIC FELLOWSHIP

Objective

To acquire demonstrable and certified expertise in the diagnosis and management of lachrymal pathway, orbit and eyelid disorders.

Essential clinical experience

- a) To have attended a minimum of **200 oculoplastic clinics**.
- b) To assist to a minimum of **200 oculoplastic surgical procedures**
- c) To present at least **one talk in both SECPOO** (Sociedad Española de cirugía plástica oftálmica y orbitaria) and **ESOPRS** (European Society of Ophthalmic plastic and reconstructive surgery) annual meetings.
- d) To write and publish at least **1 article in the field**.

Mandatory competence

In addition to those areas specified in Basic Specialist Training, competence in the following is specifically required:

- a) Clinical evaluation of non-surgical aesthetic patients.
- b) Clinical evaluation and medical management of oculoplastic emergency patients.
- c) Clinical interpretation of orbital CT scans MRI and other radiological test in oculoplastics.

Desirable clinical experience

- **Orbitofacial Trauma:**
 - Management of the trauma of the ocular adnexa: General principles, repair of palpebral, canthal or lachrymal defects.
 - Periorbital and orbital fractures: Imaging, diagnostics and treatment.
- **Eyelid Malposition:**
 - Diagnosis and management of: entropion, ectropion, trichiasis, distiquiasis, lagophthalmos and retraction, etc.
 - Study and surgery of the brow ptosis and dermatocalasia.
 - Management of the eyelid ptosis: classification and pre-operative evaluation, principles and techniques of surgical correction.
 - Management and surgery for eyelid retraction in patients with Graves's disease and other causes of eyelid retraction.
 - Study and current techniques for the treatment of the Blepharospasm and related conditions.
 - Diagnosis and management of facial palsy: differential diagnoses, clinical examination, etc.
- **Eyelid reconstruction:**
 - Surgical reconstruction of lower eyelid, upper eyelid and canthal defects.
 - Eyelid and ocular surface reconstruction after chemical burns and cicatricial diseases.
- **Orbital surgery:**
 - Assessment and spectrum of orbital diseases, surgical study of orbit.
 - Enucleation, evisceration and study of the orbital implants.
 - Exanteration: indications, surgical techniques, postoperative care, etc.
 - Management of the anophthalmic socket, including enophthalmos and socket contraction.
 - Care and handling of ocular prostheses.
- **Lachrymal system:**
 - Evaluation of clinical diagnosis, lachrymal system and lachrymal problems in pediatric imaging: diagnosis, treatment, etc.
 - Surgery of the lachrymal system: techniques of dacryocystorhinostomy, treatment of abnormal canaliculi, congenital obstruction of the duct lachrymo-nasal surgery.
- **Oncology:**
 - Diagnosis and management of eyelid and orbital tumors. Treatment alternatives to Periocular neoplasms, chemotherapy, cryotherapy, etc.



Research

A specific research programme will be discussed and developed with the selected candidate.

5) RESEARCH FELLOWHIP

A specific research programme will be discussed and developed with the selected candidate.

6) SURGICAL RETINA FELLOWHIP

Objective

To acquire demonstrable and certified expertise in the assessment and contemporary management of the surgical disorders of the retina.

Essential clinical experience

- a) To have undertaken a minimum of **100 posterior segment laser treatments**
- b) Actively to have participated in, or assisted at: a minimum of **_150_ retinal operations** in which the fellow is primary or assistant surgeon. These procedures should include scleral buckling, 20G vitrectomy and small incision vitrectomy.
- c) To have performed, under supervision, a minimum of **100 B scan ultrasound and OCT**

Mandatory competence

In addition to those areas specified in Basic Specialist Training, competence in the following is specifically required:

- a) Clinical evaluation of rhegmatogenous retinal detachment leading to the development, in discussion with the patient, of a suitable management plan.
- b) Clinical evaluation of macular pucker leading to the development, in discussion with the patient, of a suitable management plan.
- c) Clinical evaluation of macular oedema leading to the development, in discussion with the patient, of a suitable management plan.
- d) Clinical evaluation of suspected intraocular tumour, leading to the development of a suitable management plan.



- e) Management of endophthalmitis by intraocular fluid biopsy, planning an appropriate pharmacological therapeutic strategy, and the administration of intraocular drug therapy
- f) Management of retinal breaks by laser photocoagulation and cryotherapy.

Desirable clinical experience

To have a sound working knowledge, by exposure to:

- a) Management of IOFB and dropped nucleus.
- b) Management of PVR
- c) Management of traumatic retinal detachment
- d) Management of intraocular tumours, to include radiotherapy and local resection

Research

A specific research programme will be discussed and developed with the selected candidate.

7) TRAINING PROGRAMME FOR CLINICAL DEVELOPMENT 2 Years Fellowship

Objectives

- a) Identify & train the next generation of outstanding leaders in the ophthalmic device/pharmaceutical industry
- b) Cultivate a leadership team with global representation through special emphasis on emerging markets
- c) Enhance partnerships with academic institutions from which such leaders may be recruited

Curriculum: Product Development from Inception to Completion

Selection of Target Diseases

- a) Identification of unmet needs
- b) Identification of unpenetrated markets

Preclinical Models

- a) Development
- b) Data assessment

Product Design/Manufacture

- a) Devices
- b) Drugs
- c) Biologicals/cells/genes

Clinical Trials

- a) Project team assembly
- b) Trial design: phase I vs. II vs. III
- c) Site recruitment & management
- d) Clinical regulatory interactions
- e) Data analysis, review, reporting
- f) Post-market clinical trials/surveillance
- g) Data publication
- h) External consultant interactions (including DSMC, Trial PI, etc.)

Regulatory Issues

- a) General: devices, drugs, biologicals, cells, genes
- b) Regional

Commercial Issues

- a) Medical affairs, key opinion leader engagement
- b) Pricing
- c) Delivery/packaging
- d) Product differentiation

Market Surveillance

Identification & evaluation of external preclinical & clinical stage programmes for partnering

Programme Structure

- a) Two-year Fellowship:
 - Year 1: curriculum training
 - Year 2: initiate & complete clinical research project
- b) Partner with degree-awarding academic institution: one of the candidate's mentors is based at this institution and one fellow is accepted per year



ESASO Fellowships enable young ophthalmologists who have participated to acquire expertise and hands-on experience in a particular subspecialty.



Centres Involved in ESASO Fellowship Programme

The international centres collaborating with ESASO in the Fellowship Programme include:

Key Focus	Tutor	Institutions
1-YEAR FELLOWSHIP		
Anterior Segment Surgery	José L. Güell, Spain	Instituto de Microcirurgia Ocular (IMO), Barcelona, Spain
Glaucoma	Rupert Bourne, UK	Anglia Ruskin University, Cambridge, UK
Oculoplastic	Ramon Medel, Spain	Instituto de Microcirurgia Ocular (IMO), Barcelona, Spain
Medical Retina	Sobha Sivaprasad, UK	Moorfields Eye Hospital, London, UK
Medical Retina Surgical Retina	Anat Loewenstein, Israel	Tel Aviv Medical Center & Sackler Faculty of Medicine, Tel Aviv University, Israel
Research	Stanley Chang, USA	Columbia University Medical Center, New York, USA
Surgical Retina	Borja Corcóstegui, Spain	Instituto de Microcirurgia Ocular (IMO), Barcelona, Spain
Surgical Retina	Anselm Jünemann, Germany	Universitätsmedizin Rostock, Rostock, Germany
Surgical Retina	Ursula Schmidt-Erfurth, Austria Christoph Scholda, Austria	Allgemeines Krankenhaus Universitätskliniken, Vienna, Austria
Surgical Retina	Anat Loewenstein, Israel	Tel Aviv Medical Center & Sackler Faculty of Medicine, Tel Aviv University, Israel
2-YEAR FELLOWSHIP		
Training Programme for Clinical Development	Marco Zarbin, USA	Rutgers University, New Jersey Medical School, Newark-New Jersey, USA

A specific Tutor will be assigned to each Fellow. The Tutor and his team will support the Fellow during the all period, please take note that the Fellow doesn't spent his Fellowship continuously with the Tutor. He will work with all the team (he spends approximately 20% of the week with his own Tutor, it depends on Institution).



Duration

Each **ESASO Fellowship lasts 12 months** and includes a specific programme covering educational and research objectives.

Normally Fellowships start in October/November of current year, However, individual arrangements with the Institutions can be possible.

Training Programme for Clinical Development lasts 24 months. The course curriculum and practical experience offered is essential for those who wish to become experts in the ophthalmic device and pharmaceutical industries.

Year 1: curriculum training.

Year 2: initiate & complete clinical research project.



Application Process

The admissions process requires a complete application form to be sent to the ESASO Head Office in Lugano.

Generally, all applicants are required to have completed their residency training in ophthalmology.

Applications should be submitted by email and must include the following:

- the Fellowship Application Form,
- the curriculum vitae,
- three letters of recommendation from persons familiar with the applicant's clinical competence,
- copy of degree in medicine
- copy of specialization in ophthalmology
- copy of the passport or ID Card
- certificates of attendance of ESASO Modules

Only complete applications can be considered.

Each application is reviewed by the Fellowships Committee, if all the requirements have been satisfied, ESASO will confirm the invitation to the interview: selected applicants will then be invited for an interview to Lugano, Switzerland (Friday 26 June 2015).

Applicants who do not qualify will be informed by email.

All applicants should apply directly via e-mail by Friday 12 June 2015.



Selection process

The final selection will take into account various attributes of the applicant. The ESASO Fellowship Committee will assign a score on the basis of:

- performance in previously attended ESASO modules (if any)
- DiSSO – Diploma of Specialist Superior in Ophthalmology – after 5 ESASO Modules (if any)
- Curriculum Vitae
- letters of recommendation
- career goals
- applicants personality and social skills
- knowledge of languages: English mandatory, and the language spoken at the fellowship centre
- results of the interview.

Previous participation in ESASO modules, although desired, is not a mandatory requirement for acceptance.

Interview

The interview will last about 15 minutes.

Topics to be discussed:

- past experiences (based on the CV)
- surgical and medical experiences
- what are your motivations?
- what do you expect will change in your career?
- level of languages (English and local language)

Ranking

The ESASO Fellowship Committee will assign a score to each applicant participating in the interview and will issue a classification list of candidates.

The Fellowship will be assigned to the applicant with the best score.



The candidate will receive a letter of confirmation and will have 10 days to accept or decline the offer. If he declines, the candidate with the next highest score will be contacted and so on.

Fellow's responsibilities:

- the Fellow must have valid international health insurance (illness)
- the Fellow must have valid international occupational hazard insurance (it depends on the international centres)
- the Fellow must sign a declaration exonerating ESASO of all liability
- the Fellow must sign a letter of acceptance of the Fellowship and all the commitments

Working hours (daily schedule):

The timetable, daily schedule and holidays are arranged with the Fellowship supervisor.

Costs:

All costs (travel arrangements, accommodation, transportation, etc.) shall be at the fellow's expense.

Accommodation:

The Fellow is expected to arrange his own accommodation (if requested, ESASO head office can help the Fellow find a suitable accommodation)

Visa:

The Fellow should make his own visa application. The Institution can provide a letter of invitation to accompany the application and ESASO can assist the Fellow if required.

Assessment process: performance assessment during Fellowship training

Performance assessments are an integral part of the Fellowship training programme and are a strict requirement. The Tutor evaluates each Fellow's performance regularly, and the Fellows in turn provide their own assessments of faculty members and of the Fellowship as a whole.



Assessment of the Fellow

Intermediate Assessment

At 12-week intervals during the Fellowship, each Tutor involved in training the Fellow must carry out a performance assessment of the Fellow using an assessment form. This assessment should include a critical appraisal of the various aspects of Fellow's performance, including surgical competence, patient pre-/post care, professionalism, communications, scholarly achievement, etc. The results of the evaluation will be used to help the Fellow improve his continuous performance. The Tutor will send to ESASO the completed questionnaire.



The Fellow will be informed by ESASO when the assessments have been completed and is asked to review them. After he has done so, the Tutor will meet the Fellow to discuss the overall assessment and, if needed, plan adjustments to the curriculum, etc. If performance evaluations are not satisfactory, the director may, in consultation with the ESASO Fellowship Committee, terminate the Fellow's involvement in the training programme.

Final Assessment

The Tutor must provide a final assessment for each Fellow completing the programme and an appraisal of the Fellow's overall performance, it should also include a statement asserting whether the Fellow has acquired sufficient professional skill to practise in the subspeciality in which he has been trained. The final assessment is part of the Fellow's permanent record and is held by ESASO and, if appropriate, by the training institution.

Fellow's Evaluation of the Fellowship Programme

Fellows must complete a written assessment of the Fellowship at month-6 and month-12, using the appropriate assessment form. These evaluations are extremely important and are essential to the completion of the Fellowship. Fellow will send to ESASO the completed questionnaire.

The ESASO Fellowship Committee is informed by ESASO every 6 months of the progress. It reviews these evaluations and makes adjustments and recommendations to the Fellow or to the staff of the training programme based on their conclusions.

Economic Support

ESASO provides educational grants of EUR 40,000 for the annual ESASO Fellowships, depending on the local funding available to the international centre. The educational grants are paid directly to the Fellow in two instalments, half during the first six months and half on completion of the Fellowship.



Lugano, 16.03.2015