What is the ICO?

- Represents and serves professional associations for ophthalmologists throughout the world.
- "World Alliance for Sight": Working towards enhancing ophthalmic education and eye care.
- Swiss Not for Profit Organisation
- International Standard of education in Ophthalmology
Harmonizing Global Ophthalmology

Membership
- 103 National Societies
- 44 International Subspecialty Societies

Collaborating Organizations
- WHO
- IAPB
- AOI
- INGOs

Supranational Organizations
- Asia Pacific (APAO)
- European (SOE)
- Middle East African (MEACO)
- Pan-American (PAAO)

Commitments of the ICO

- Enhancing Eye Care
- Refocusing Education
- Advancing Leadership
• World Ophthalmology Congress® of the ICO
  WOC2018 – Barcelona, Spain
  WOC2020 – Cape Town, South Africa
  WOC2022 – Will be held in Asia-Pacific
  • Hundreds of cutting-edge sessions led by renowned experts
  • Network with more than 10,000 attendees from over 120 countries
  • Discount registration for ICO Member societies

ICO Programs - Education

ICO Fellowships
  • Over 900 awarded since 2001
  • For young ophthalmologists to gain greater knowledge and improve their practical skills to better serve eye care programs in their home nations
  • Applicants from ICO Member society countries are awarded additional points on their application
  • Fellowship Alumni Group formed in 2015
Magrabi-ICO Cameroon Eye Institute

- Yaoundé, Cameroon
- Construction is now complete and became fully operational in 2017
- Regional Training Center under construction to educate the next generation of ophthalmic leaders in Francophone Africa

Education – Teaching the Teachers

- International Curricula
- Courses for residency program directors
- World Ophthalmic Education Colloquium
- OSCAR and other assessment tools
- Conferences for ophthalmic educators
- Center for Ophthalmic Educators & NEW Ophthalmic Educators Group (OEG)
ICO Programs – Eye Care

- ICO working with WHO on:
  - Implementation of Global Action Plan
  - Definition of future disease classification, ICD-11
  - Essential Medicines Lists
- Partnering in Eye Care Initiatives:
  - Diabetic Eye Care
  - Glaucoma Eye Care
  - Advocacy
  - Clinical Guidelines & Standards
- Data on number of ophthalmologists worldwide

ICO Programs - Leadership

- CME/CPD
- Support for ICO Member societies
- WORLD Roundtable
  - Brings together society leaders to exchange information and ideas to improve the effectiveness of their organizations and programs
- ICO Committees
- Publish ICO Insight and Ophthalmic Educators Letter
ICO Examinations

ICO Examinations

- The only worldwide medical specialty examinations
- Over 53,000 exams administered since 1995 in over 80 countries
- Candidates from ICO Member societies receive:
  - Free Foundation Assessment
  - Discount on Exam registration fees

Peter Watson 1931 - 2017
### ICO Examinations and Assessments

<table>
<thead>
<tr>
<th>Examination/Assessment</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Science</td>
<td>1994</td>
</tr>
<tr>
<td>Theoretical Optics &amp; Refraction</td>
<td>1994</td>
</tr>
<tr>
<td>Clinical Sciences</td>
<td>1997</td>
</tr>
<tr>
<td>Advanced</td>
<td>2010</td>
</tr>
<tr>
<td>Foundation Assessments</td>
<td>2013</td>
</tr>
<tr>
<td>Sub-specialty Examinations</td>
<td>2016</td>
</tr>
</tbody>
</table>

- **137 Examination Centres**
- **80 Countries**

![Graph showing examination trends]

- Basic Sciences
- Optics & Refraction
- Clinical Sciences
- Advanced
Egypt

2018 moved from Magrabi Hospital to the Egyptian Ophthalmological Society

- Dalal Shawky
- Mervat Mourad

- I centre – Cairo

- 640 candidates booked for April exams (509 last year)

ICO Residency Curriculum

- Offers an international consensus on what residents in ophthalmology should be taught.
- Provides a standardised content outline for ophthalmic training.
- Used in widely different regions regardless of nationality, culture, medical maturity or socioeconomic status.

- ICO question writers use the ICO Residency Curriculum.
- Free to download from ICO website.

www.icoph.org/refocusin_education/curricula.html
### ICO Sub-specialty curricula

- Cornea and External Eye Diseases
- Glaucoma
- Neuro-ophthalmology
- Oculoplastic Surgery
  
  **All written**

- Paediatric Ophthalmology and Strabismus
- Ocular Oncology
- Vitreoretinal Surgery
  
  **In process**

### Standard Setting

**ICO Examinations and Assessments**

- **Educationalist**
  - Foundation Assessment, John Faulkes
  - Standard Examinations, Raymond Tongue
  - Advanced Examination, Tony Green

- **ICO Examinations Team**
  - Director of Examinations
  - International Examinations Executive Committee
  - International Standard Setting Committee
  - International Question writers
Criterion Referenced
ICO Examinations and Assessments

An examination/assessment where an individual's performance is compared to a specific learning objective or performance.

Criterion-referenced exams/assessments tells us how well the candidates are performing on specific goals or standards.

In criterion-referenced exams/assessments, it is possible that none, or all, of the examinees will reach a particular goal or performance (standard).

<table>
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<tr>
<th>ICO Examinations and Assessments</th>
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<tr>
<td><strong>Foundation Assessment</strong></td>
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<td><strong>Standard Examinations</strong></td>
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<tr>
<td>1. Basic Science</td>
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<td>2. Optics and Refraction</td>
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<td>3. Clinical Sciences</td>
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<td><strong>Advanced Examination</strong></td>
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<td><strong>Sub-speciality Examinations</strong></td>
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Fee structure
ICO Examinations and Assessments

• Set in Swiss Francs
• 3-4 Tiers for each examination and assessment
• Gross National Income per Capita (GNIpC)

• Group bookings
• Introductory discounts
• Bursary applications

• Online credit/debit card payments
• Directly into ICO account

Why should I take the ICO examinations?

• International recognition  - (Not a licence to practise!)
• Compare your own standards
• Highest standards of other comparable exams
• Advanced exam  - FICO
• Reciprocity with RCSG/RCSE
• Fellowship points
Examination Points

Fellowships

- Foundation Assessment: Up to 5
- Standard Examination, Optics & Refraction: 3
- Standard Examination, Basic Science: 4
- Standard Examination, Clinical Sciences: 5
- Merit, Basic Science, O&R, Clinical Sciences: 2
- Distinction, Basic Science, O&R, Clinical Sciences: 3
- FICO Advanced Examination: 7
- Sub-specialty Examination: 7

ICO Examinations – All MCQs

A multiple choice item consists of a problem, known as the stem, and a list of suggested solutions, known as options. The options consist of one correct or best alternative, which is the answer, and 3 incorrect or less likely options, known as distractors.

One stem – Statement or statements plus diagram, picture or video (FFA)
One correct/best option
Four incorrect or less likely options
Basic Science question

Regarding the blood retinal barrier, which ONE of the following statements is MOST likely to be TRUE?

a. Retinal vascular endothelium passively transports fluid from the extra cellular space of the retina.
b. The basement membrane of the retinal capillaries contributes to the outer barrier.
c. The inner blood-retina barrier is fenestrated.
d. The outer blood retina barrier is formed by the RPE cells and their tight junctions.
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Optics and Refraction

- 40 Questions
- Single Best Answer
- Four options
- 1 hour paper
Optics and Refraction question

The Figure below represents a confocal scanning laser ophthalmoscope. Which ONE of the following statements is the MOST likely to be TRUE?

a. A pinhole placed in the plane P3 decreases the axial resolution of the system.

b. Element A is a Dove prism.

c. Planes P1, P3 and the retina are conjugated.

d. The detector is usually a CCD camera.
The photograph illustrates a patient with acute anisocoria and ptosis; instillation of 5% topical cocaine fails to dilate the left eye, but installation of hydroyamphetamine hydrobromide results in dilation. The MOST appropriate area to evaluate on MRI scanning is the:

a. Brainstem.
b. Cavernous sinus.
c. Chest.
d. Orbit.
Clinical Sciences question

The photograph illustrates a patient with acute anisocoria and ptosis; instillation of 5% topical cocaine fails to dilate the left eye, but instillation of hydoxyamphetamine hydrobromide results in dilation. The MOST appropriate area to evaluate on MRI scanning is the:

a. Brainstem.
b. Cavernous sinus.
c. Chest.
d. Orbit.

Languages Examinations, Standard

Basic Science, Optics & Refraction and Clinical Sciences

Chinese, English, French, Portuguese and Spanish
In the clinical history below, some words or parts of sentences A, B, C & D are missing. In the table below, match the missing words or sentences with the most appropriate (likely to be correct) word, phrase or short sentence in the columns 1, 2 or 3 below. It is recommended that you read the whole question before answering.

This ___A___ year old patient presented ___B___. Ultrasound revealed a smooth, dome-shaped mass with high internal reflectivity. Fluorescein angiography revealed ___C___. Optimal treatment is ___D___.

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The 46 year old Asian women in the Figure below lives in a rural village. She has had a sore irritable eye for many months and relatives have tried to remove a lash with forceps bought at a local market. Regarding this lady, which ONE of the following statements is MOST LIKELY to be TRUE?

a. A single dose of azithromycin should be given after any surgery.
b. She needs no medical follow-up for the possibility of recurrence.
c. She should best continue with lash removal alone.
d. The most likely diagnosis is active trachoma.
Advanced Examination

Once candidates have passed the ICO Advanced Examination and a local face-to-face examination or have a licence to practise independently from their MoH, they are able to use the post-nominal FICO

Foundation Assessment (FA)

• Introduced June 2013

• Online Assessment

• Open Access

• Preparation for ICO Standard Examinations and others

A unique learning and assessment tool for ophthalmologists at the start of their career
Free tool for Examinations – Society Members

- Foundation Assessment (Basic Science)
  50 SBA Questions
- Foundation Assessment (O&R)
  20 SBA Questions
- Foundation Assessment (Clinical Sciences)
  50 SBA Questions

20 minutes per Question
Confidence Indicator

Individual application directly via website to ICO – charged at 50 Swiss Francs

Foundation Assessment

Can be taken: -
- In conjunction with ICO Examinations
- Only online

Essentials
- Blueprinted to ICO Curriculum
- Open access
- No monitoring
- Security features
- Instant results on completion
- Downloadable Certificate
The Confidence Indicator

For each question, the candidate has to decide how sure they are that their answer is correct.

- **Very certain**
  
  Correct = +3  
  Incorrect = -3

- **Reasonably certain**
  
  Correct = +2  
  Incorrect = -2

- **Not certain**
  
  Correct = +1  
  Incorrect = 0
The Confidence Indicator does NOT impact on candidates final score.

Candidates will receive feedback on each question, along with the correct answer.

Successful candidates will be issued grades A*-D

Candidates will be able to download a certificate
ICO App

Download it now on App Store or Google Play

icoexams
ICO App

General Medicine related to Optics

Community Medicine & Public Health

International Medical Ethics and Good Practice

Epidemiology and Statistics

Genetics and clinical aspects of genetics, phenotypes

 ICO App

ICO App
This 40-year-old Asian woman in the Figure lives in a rural village. She has had a pain, irritable eye for many months and relatives have tried to coerce tears with betamethasone (eye drops) bought at the local market. Concerning this body, which one of the following statements is most likely to be correct?

- She needs no medical follow-up for the avoidable recurrence.
- A single dose of antimicrobial should be given after a definitive eyelid operation.
- She should be continued with both removal drains.

The most likely diagnosis is active trachoma.

The picture shows thickening and entropion of both eyelids, most likely due to chronic (not active) trachoma. The best management is surgical to prevent recurrence, iridation, and corneal scarring. A single dose of antimicrobial is effective after the procedure to prevent recurrence. The patient would ideally need follow-up.
The future

- Subspecialty examinations
- On-line only examinations

Subspecialty Examinations

Subspecialty exams run in 2017 (India)
- Cornea and anterior segment
- Uveitis
- Paediatric ophthalmology
- Glaucoma
- Medical Retina
- Neuro-ophthalmology (Egypt and India)

2018 Oculoplastics in addition

Eligibility
- 3-4 year general ophthalmology training
- ICO Clinical Sciences examination
- One year training in subspecialty in a university/academic setting

60 MCQs
90 minutes
On-line Examinations

The goal is to have all ICO examinations on-line within 10 years

- Single venue
  - Invigilator/Coordinator
- At home
  - Security
  - Virtual proctor

ICO Fellowships
Team
ICO, Fellowships

Cordula Obermeyer,
Fellowship Executive

Bertholde Seitz,
Director of Fellowship

ICO Fellowships Program

• Program started in 2001
• Initiated by Balder Gloor, MD, Switzerland
• > 920 Three Months Fellows
• 30 One Year Fellows (since 2010)
• 111 Training Centers around the world
• 19 subspecialities
ICO Fellowship-Opportunities

ICO 3-months Fellowship 60-80 awards/year max. US$ 6000

ICO ECF6-m. FS in Retinoblastoma 6 awards/year max. US$ 8000

ICO RRF Helmerich FS 2 awards/year
ICO Fred Hollows Foundation FS 1 award/year US$ 25000

Subspecialties offered (2001 – 2016)
### Requirements/Eligibility

**Fellowships**

- Residency training must be completed
- Specialist exam in ophthalmology must be passed
- Applicants must be under 40 years of age
- Applicants must return home after the training, and apply the knowledge gained.

- Applications who have passed the ICO examinations will receive special consideration

- Applicants from countries with ophthalmologic societies that are Members of the ICO will receive special consideration.

### Selection Criteria

**Fellowships**

- Application performance.
- Candidates qualification, research and teaching activity.
- International work experience, charity work.
- Relevance to the candidate’s home institution and country.
- Balanced geographical representation.
Examination Points

Fellowships

- Foundation Formative Assessment grades D to A*: 1-5
- Standard Examination, Optics & Refraction: 3
- Standard Examination, Basic Science: 4
- Standard Examination, Clinical Sciences: 5
- Merit, Basic Science or Clinical Sciences: 2
- Distinction, Basic Science or Clinical Sciences: 3
- FICO Advanced Examination: 7

42% of points can be achieved by passing the ICO Examinations

920 Fellows came from 83 countries
### 111 ICO Training Centers

- **Europe:** 53
- **Canada/US:** 15
- **South-America:** 3
- **India/Nepal/Pak.:** 15
- **Middle-East/Africa:** 7
- **Asia:** 17
- **Australia:** 1

### Possible Benefits for Hosts and their team

- Cultural exchange
- Improving teaching skills
- Improving language skills
- Making friends
- Networking
Fellowships

Independence Day in India

......performing surgery
Planned new cooperations with

National Eye Institute, Bethesda, USA ➔ ophthalmo-genetic ➔ 4 weeks ➔ add-on to RBL

Allergan Pharma, USA ➔ research ➔ 12 months

World Glaucoma Association, NL ➔ travel grant WGAC ➔ clinical attachment

Activities 2016: ICO Fellowship Reunion at WOC in Guadalajara, Mexico
More information on...

www.icoph.org/fellows
and
fellowship@icoph.org
Thank you for listening