#### Abstracts

#### Wednesday, July 8, 2015

#### Infection Control in Ophthalmology

E Dean ORBIS

This course reviews infection control processes for the ophthalmic nurse and technician. Standard precautions, universal precautions, as well as cleaning and disinfection in the ophthalmic setting will be covered. Review of toxic anterior segment syndrome (TASS) and endophthalmitis symptomatology will also be included.

#### **Objectives:**

- Define universal precautions and standard precautions
- Describe instrument cleaning, disinfection and sterilization processes
- Compare and contrast TASS and endophthalmitis

# The Logistics of Quality Assessment and Performance Improvement

#### E Dean ORBIS

This course discusses factors that can be used to improve the quality of care in the ophthalmic setting. The course takes a multifactorial approach in assessing the needs of the ophthalmic practice including change implementation to improve healthcare quality.

#### **Objectives:**

- Describe the process of tracking quality indicators
- Discuss the components of a quality assessment and performance improvement study

#### **Ocular Pharmacology**

#### R Bhola

Practical approaches to instillation of ocular medication to improve compliance and reduced systemic toxicity are addressed. Side effects and drug interaction of ocular medication in regard to patient education are discussed.

#### **Visual Fields**

#### K Golnik

This course will describe different methods of assessing peripheral vision and illustrate the relevant anatomy of the visual pathways. The three anatomic correlates of visual field interpretation will be discussed. Numerous abnormal visual fields will be presented for participant identification. **Objectives:** 

At the completion of this presentation, the participant will be able to:

- List different methods of assessing peripheral vision
- Describe relevant anatomy leading to different patterns of visual field loss
- · Identify important patterns of visual filed loss

#### **Pertinent Pupillary Problems**

#### K Golnik

This case-based course will cover pupillary pathway anatomy, description and causes of relative afferent pupillary defects and differential diagnosis of anisocoria. **Objectives:** 

#### Objectives:

At the completion of this presentation, the participant will be able to:

- Describe the relevant pupillary pathway anatomy
- Identify a relative afferent pupillary defect
- List causes of anisocoria

#### **Ocular Motility**

#### K Golnik

This course will describe the ocular motility examination and illustrate the relevant anatomy of the ocular motor pathways. Abnormal ocular motility such as ocular motor cranial nerve palsies, myasthenia gravis and thyroid orbitopathy will be demonstrated with video examples.

#### **Objectives:**

At the completion of this presentation, the participant will be able to:

- Outline the basic ocular motility examination
- Describe relevant anatomy of ocular motility deficits
- Identify common patterns of abnormal ocular motility

#### Thursday, July 9, 2015

#### Surgical Assisting Lecture and Workshop

E Dean ORBIS

This course covers actions the surgical scrub nurse/technician can utilize to minimize infections, be more efficient and improve the quality of care in the ophthalmic surgical setting. Hands-on training will be provided to improve current practice.

#### **Objectives:**

- Identify one action to improve the efficiency of setting up the sterile environment
- Describe situations when a sterile field is no longer considered sterile

#### **IOL Calculations**

C Simms Kingston Ophthalmic Training Centre Hotel Dieu Hospital Kingston, Ontario, Canada

This course will cover the basics of intraocular lens (IOL) calculations including the required measurements (axial length, keratometry) and other factors required. The course will cover the most commonly used IOL formulae and which ones to use under different circumstances.

#### **B-scan Echography in Ocular Pathology**

M de La Torre Universidad Nacional Mayor de San Marcos Lima, Peru

B-scan echography is a simple, non-invasive and very important tool in the clinical assessment of various ocular and orbital diseases. With a general understanding of the indications and proper examination technique, one can obtain a vast amount of information not possible with clinical examination alone. We describe the principles, techniques, and indications for B-scan examination, as well as provide a general understanding of echographic characteristics of various ocular pathologies.

B-scan ultrasound is useful when direct visualization of intraocular structures is difficult or impossible due to opaque media (dense cataracts or vitreous opacities). Other situations that preclude normal examination are lid problems (*eg* severe oedema, partial or total tarsorrhaphy), keratoprosthesis, corneal scars or oedema, hyphema, hypopyon, miosis, pupillary membranes.

Diagnostic B-scan ultrasound can accurately image intraocular structures: vitreous, retina, choroid, and sclera. Also, ultrasound is used for diagnostic purposes even though pathology is clinically visible, such as differentiating intraocular tumours, serous *versus* haemorrhagic choroidal detachments, exudative *versus* rheghmatogenous retinal detachments or optic disc drusen *versus* papilledema.

We present common conditions such as vitreous degeneration and detachment, asteroid hyalosis, vitreous haemorrhage, tractional retinal detachment, peripheral retinal tear, persistent hyperplastic primary, retinopathy of prematurity, ocular trauma, intraocular foreign body, choroidal melanoma and retinoblastoma, macular conditions such as age-related macular degeneration (ARMD), neovascularization, macula oedema and others which can be accurately evaluated with this modality.

#### **Refractometry and Retinoscopy**

C Simms Kingston Ophthalmic Training Centre Hotel Dieu Hospital Kingston, Ontario, Canada

An important aspect of the ophthalmic examination is determining the refractive state of a patient's eye. Refractometry covers all aspect of the refraction process from retinoscopy to manifest refraction. **Objectives:** 

- Review of lenses and refractive errors
- Discuss the retinoscopy technique

- Identify with and against motion
- Discuss manifest refractometry

#### **Ocular Anatomy and Physiology**

#### S Amarakoon

The eye is a specialized organ that allows passage of light rays which are then converted to electrical impulses to create a visual image in the brain. Its anatomy can be divided into the anterior segment and posterior segment. The anterior segment includes the cornea, sclera, conjunctiva, iris, pupil and lens. The transparent nature of the cornea allows passage of light through to the clear lens which then transmits it to the posterior segment. The posterior segment is composed of the vitreous humor, choroid, retina and the optic nerve. The lights rays that are transmitted through the lens are then projected onto the retina. The retina converts these to electrical impulses which are then transmitted through the optic nerve onto the brain to create an image which is perceived by the observer.

#### Friday, July 10, 2015

#### **Ultrasound Workshop**

C Simms Kingston Ophthalmic Training Centre Hotel Dieu Hospital Kingston, Ontario, Canada

#### **Refractometry and Retinoscopy Workshop**

C Simms Kingston Ophthalmic Training Centre Hotel Dieu Hospital Kingston, Ontario, Canada

# Microbiology 2015 Course for Ophthalmic Assistants and Nurses

A Anduze Ophthalmic Consultants of St Croix US Virgin Islands

This course offers a general discussion of infectious organisms commonly found in an ophthalmic office setting; their identification, mechanism of action, universal and specific precautions in control of inoculation and spread. The three most effective methods of control are through sterilization, disinfection and antisepsis, and using heat and chemicals. The fact that our present uses of infection control may be causing organism resistance is highlighted. The danger of methicillin-resistant *Staphylococcus aureus* (MRSA) and other antibiotic resistant bacterial strains and the possibility of encounter with highly contagious viruses (Ebola) are discussed. Collection of specimens and cultures, indications for biopsy, and extreme cases of high-risk eyes are presented.

#### **Eye Diseases**

C Bourne University of South Florida Tampa, Florida, USA

**Objective:** To provide a comprehensive overview of the following diseases: glaucoma, keratoconus and age-related macular degeneration.

The focus will be on:

- An overview of the disease process
- Relevant history/chief complaint components
- Diagnostic evaluations
- Treatment options

#### **Systemic Diseases**

C Bourne University of South Florida Tampa, Florida, USA

**Objectives:** To understand how systemic diseases impact ocular health.

Part 1 and Part 2 of the lecture focusses on the following systems:

- Inflammatory and autoimmune disease
- Metabolic and endocrine disorders
- Vascular disease
- Infectious diseases
- Neoplastic disease
- Learn how to apply the review of systems questionnaire to the ophthalmic examination and patient care

#### **Conflict Resolution**

E Dean ORBIS

This course covers conflict situations that may occur in the ophthalmic practice. Strategies for successful resolution of conflicts will be discussed, including the use of leadership skills to assist staff in resolving conflicts.

#### **Objectives:**

- Define conflict
- Discuss strategies that can be used in the resolution of conflicts

#### Leadership and Professional Development

E Dean ORBIS

This course discusses leadership strategies that staff and managers can utilize in maximizing the ophthalmic practice. Methods to improve career development and growth in the field of ophthalmology will also be discussed. **Objectives:** 

- List one leadership style
- Discuss one action the nurse/technician can take to achieve career goals

Saturday, July 11, 2015 (for those not doing examinations)

#### **Ophthalmology is Risky Business**

E Dean ORBIS

This course will discuss real scenarios from ophthalmic practices that led to litigation, and actions each individual can implement to reduce risk. This course includes audience participation with scenarios that commonly arise in the field of ophthalmology and appropriate response of ophthalmic personnel.

#### **Objectives:**

- Define risk management as it relates to ophthalmology
- Explain the importance of managing risk in the ophthalmic practice

#### **Inventory Management of Surgical Supplies**

#### S Moonasar

Inventory management has always and continues to plague the healthcare system. It is one of the main factors that can cause a patient to be cancelled from a surgical procedure.

Effective inventory management is all about knowing what is on hand, where it is in use, and how much finished product results.

Inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. It is a process that involves controlling the transfer in of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy.

Forecasting or projections plays a crucial role in having the necessary stock on hand in your operating room/ office or hospital. Does seasonality affect your surgical roster and ultimately your ordering patterns? What are the factors that could contribute to lack of inventory in an operating theatre especially in ambulatory surgical centres? How efficient are your suppliers? Do you know their leadtime and delivery periods? How do you avoid just-in-me purchases? What are the costs associated when there is lack of inventory?

The people who work with your stock and use your inventory system are the most crucial element in establishing a good inventory management system.





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### 25 mm Stereo Base for Enhanced 3D Vision

- Apochromatic optics
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- Motorized X-Y coupling
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- 200 mm front lens (optional 175 mm)
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- Optional: TOCULAR compatible for alignment of toric IOLs

## HS Hi-R NEO 900A - for Advanced Training

Additionally equipped with a 0° assistant scope, the HS Hi-R NEO 900A is the perfect microscopefor education and training. The assistant scope with integrated magnification changer (5-step) and focus enables relaxed working.

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