Scientific Agenda for ISCLR 2011 – Kyoto, Japan

Monday – Theme "How to increase number of wearers by tackling contact lens discontinuations and comfort during wear"

Session 1: Contact lens dropouts: Drivers and new ways to increase contact lens wear penetration (Fonn; Guillon) – 1h

SESSION NEEDS TO BE SET – MEMBER SPEAKERS NEED TO BE INCLUDED

Session 2: Ocular discomfort from contact lenses and dry-eye: What are the drivers – are they distinct conditions? (Tomlinson; TBA) – 1.5h

*Keynote: Kazuo Tsubota "*title to be confirmed" – 30 mins

Alan Tomlinson – 5 mins

Mark Willcox – 5 mins

Trefford Simpson – 5 mins

TBA

Member/student abstracts

Session 3: Impact of contact lens wear on corneal nerves – relation to comfort and tear production (Nate Efron/Trefford Simpson) – 1.5h

Keynote: Prof Carlos Belmonte – "current thinking about the physiological basis of corneal sensation" 30 mins

Nathan Efron – Current thinking about the anatomy of corneal nerves – 5 mins

Trefford Simpson – Do symptomatic and asymptomatic contact lens wearers adapt differently to suprathreshold stimuli? – 5 mins.

4 member/student abstracts to be selected

Discussion - 30 minutes

Session 4: Contact lens care solutions: balancing disinfection with comfort and ocular health (Stapleton; Jones) – 1.5h

Lyndon - Overview of current state of knowledge re contemporary solutions – 10 mins

Maud Gorbet - Impact of packaging solution on corneal epithelial cells in vitro - 5 mins

Rachel Peterson - Impact of solution on sloughed corneal epiithelial cells – 5 mins

Ulli Stahl- Modulation of comfort using hyper and hypo osmolar solutions in vivo – 5 mins

3 member/student abstracts to be selected

Tuesday – Theme "Attacking comfort and adverse events during lens wear"

Session 5: Cell biology of the cornea and conjunctiva, and the effects of lenses and solutions. (Cavanagh; Lavker) – 1.5h

Keynote: Shigeru Kinoshita 15 min

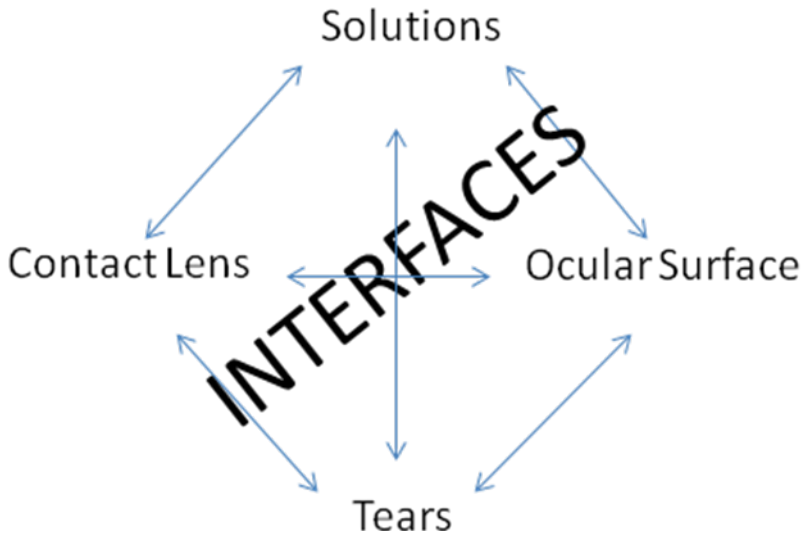
Lavker - 10 mins

Robertson - 5 mins

Imayasu (mucin story) - 5 mins.

2 student/ member abstracts to be selected

Session 6: Contact Lenses: The Biomaterial Interface – The Things Work (or What's really in contact with the ocular surface?) (Jacob; Tighe) – 1.5h



The first 45 minutes will be 4 to 5 targeted submissions which progress from lens bulk to lens surface to interface. SPEAKERS TO BE SELECTED AND ADVISED BY CHAIRS

Subset- 1. Bioactive polymers (they focus activity and allow natural processes to take place)

2. Wound healing (surfactant proteins/growth factors/MMP)

3. Posterior CL tear film (more mucin than lipid?)

4. Anterior CL tear film (no mucin?)

5. Learning from other biological sites with polar lipids (artilage/lung)

2-3 member/student abstracts to be included

Discussion panel: Arthur Back, Lynn Winterton, Stan Huth, John Lally, Stan Huth, Jay Kunzler

Session 7: Contact lens induced corneal and conjunctival inflammation and infection (Pearlman; Gilmore) – 1.5h

Keynote: Shigeru Kinoshita – 30mins

Suzi Fleiszig – or post doc – 5 mins

Mark Willcox – or post doc – 5 mins

Mike Gilmore – or post doc – 5 mins

Eric Pearlman – or post doc – 5 mins

Session 8: MK and DW: New developments in ways of combating microbial contamination of lenses, cases and solutions (McDermott; D Evans) – 1.5h

Keynote – Marvin Whitely (UT Austin) – Biofilms – 30 mins

Mike Gilmore's Group (teichoic acids) – 5mins

Simon Kilvington's Group (Acanth & new CL solutions) - 5mins

Loretta Szczotka-Flynn's Group (how big a problem is case contamination, risk factors for infection etc..) – 5mins

Hua Zhu antimicrobial surfaces – 5mins

Jerry Pier's Group (anything new from PA and lung field) – 5mins

Thursday – Theme "New concepts for contact lenses"

Session 9 & 10: Myopia control and contact lenses (Holden; Swarbrick) – 4h

Myopia, its Aetiology and Risk Factors and Novel Optical Treatments

Keynote - Dr Padmaja Sankaridurg - Myopia and its control with spectacles and contact lenses - 30 mins

Panel will include: Brien Holden, Arthur Ho, Earl Smith, Aldo Martinez, Xiang Chen (student), Kathleen Fedke (student),

ISCLR members who indicate their interest and who have latest research contributions to make.

2. Myopia and Orthokeratology

Helen Swarbrick - ROK study on OK and myopia control – 5 mins

Joe Barr - Update on SMART study 5 mins

Jacinto Santodomingo - MCOS results – update – 5 mins

Russell Lowe - Clinical results on myopia control with OK – 5 mins

Jose Gonzales-Meijome - Corneal topography/peripheral refraction: OK vs LASIK – 5 mins

Pat Caroline - OK corneal effects and peripheral refraction – 5 mins

John Mountford - OK lens design and manipulation of peripheral refraction – 5 mins

Up to 4 additional speakers (members/students etc)

Questions/discussion topics:

- What causes myopia in the first place? Is hyperopic peripheral defocus the key factor? Causation versus progression? The chicken or the egg?
- What is the mechanism (or mechanisms) underlying the myopia control effect with different contact lens approaches? Manipulation of peripheral refraction? Spherical aberrations? Dual focus (competitive image) effects? Accommodative lag? Are these variations of the same mechanism, or different mechanisms?
- Why does this work for some kids and not others? How can we optimise or individualise the myopia control effects of contact lenses?
- Role of factors such as genetics/parental myopia/outdoor activity/light levels? Other factors?
- What are the issues with fitting children with contact lenses for myopia control? At what age can children be safely fitted? Is the issue of MK still a major consideration for children in OK contact lenses? What are the drop-out rates?
- High myopia – are the risks well enough quantified? Can contact lenses help?

Session 11: Presbyopia, Optics and Vision (Papas; Ho) – 1h

Dwight Cavanagh – Introduction - "innovations needed to drive contact lens research"

Keynote: Pablo Artal – "advanced optical systems for contact lens research" – 20 mins

Ravi Bakaraju (applicant) - "physical modelling of contact lens optical performance" – 5 mins

Jianhua Wang - "anterior eye OCT" – 5 mins

Trefford Simpson - "Imaging of tarsal conjunctiva" – 5 mins

Isabelle Jalbert - "Immuno-histo staining of lid margin" – 5 mins

Noel Brennan - "Advanced 3D Oxygen Model" – 5 mins

Discussion: What innovations in techniques/instrumentation do we critically need to push contact lens and anterior eye research forward?

Session 12: Rapid Fire Presentations from members (Robertson; Gonzalez) – 1h

Friday – Theme "New frontiers"

Session 13: Presentation and discussion of student posters (Maldonado-Colina; Morgan) – 2h

Session 14: Wrap up