Webcast 1
Sunday March 29th
11AM – WA – 2PM AEDT

LEARNING OBJECTIVES & PRESENTER BIO

Presenter: **Dr Lauren Ayton**

Presentation Title: **Classification and Risk Prediction in Age-Related Macular Degeneration**
CPD: 7512 Face to Face with Assessment

Summary Historically, the classification of AMD was unclear, with various schemes being used around the globe. Since 2014, the internationally accepted scheme has been the Beckman classification, which will be reviewed in this talk. We will then discuss how the Beckman classification can provide information on the risk of progression and direct your patient management.

Learning Objectives

1. Review the Beckman classification of age-related macular degeneration.

2. Understand how the Beckman classification can provide information on risk of progression, and direct appropriate patient management.

3. Understand the limitations of the Beckman classification scheme and learn about emerging schemes (including the use of optical coherence tomography imaging) will be presented and applied to clinical scenarios.

Presenter: **Dr Lauren Ayton**

Presentation Title: **Imaging in AMD: New Signs to Know**
7492   Face to Face with Assessment

Summary: The era of multi-modal imaging in optometry is here, and we now have access to advanced techniques such as near-infrared photography and optical coherence tomography in many practices. At the same time, medical research studies utilising these technologies are discovering a multitude of new imaging biomarkers, and explanations for the strange images that we sometimes see in clinic. The aim of this talk is to update optometrists on new, clinically relevant imaging biomarkers of AMD.

Learning Objectives:

1. Be able to identify common clinical presentations on optical coherence tomography, infrared images, and autofluorescence images (for example, early AMD, intermediate AMD, geographic atrophy and neovascular AMD)

2. Learn about new imaging biomarkers, such as iRORA, cRORA and the SIRE sign.

3. Understand the appropriate referral pathways when you see AMD-related imaging biomarkers in your practice.

Presenter: **Dr Lauren Ayton**

Presentation Title: **Advanced Therapeutics: Ocular Gene Therapy Now , and in The Future**
7502 Face to Face with Assessment

Summary: The past few years have seen significant progress on the development of "advanced therapeutics" for vision disorders, such as stem cells, brain-machine interface implants and gene therapy. This talk will focus on the current status of gene therapy for conditions such as inherited retinal degenerations, glaucoma and age-related macular degeneration.

Learning objectives:

1. Understand the scientific principles behind gene augmentation and gene editing technologies.
2. Learn about the currently available ocular gene therapies, and emerging technologies.
3. Identify which patient groups are the most likely to benefit from gene therapy in the near future.

Dr Lauren Ayton

BOptom PhD GCOT FAAO FACO

Dr Lauren Ayton is a clinician-scientist with research interests in retinal disease, low vision and vision restoration. After completing her professional training in Optometry and a PhD at the University of Melbourne, Dr Ayton completed postdoctoral training in the area of ocular motor assessment in traumatic brain injury. She then took a position at the Centre for Eye Research Australia, where she was the Bionic Eye Clinical Team Leader and worked on a number of projects in age-related macular degeneration.

Between 2017 and 2019, Dr Ayton was the Director of Clinical and Regulatory Affairs at Bionic Eye Technologies, Inc., a USA start-up company affiliated with Harvard and Cornell Universities. This experience cemented Dr Ayton's passion for research innovation and entrepreneurship. Dr Ayton is now a Director of SPARK Melbourne, a University-led research incubator and industry mentoring program that originated from Stanford University.

In 2017, Dr Ayton was awarded a NHMRC Fellowship to translate her research in age-related macular degeneration to practicing clinicians. With long-time collaborator, Prof Robyn Guymer, Dr Ayton is currently working on ways to communicate the most recent research findings in AMD to optometrists, including information on risk assessment, imaging biomarkers and management strategies.

Dr Ayton returned to the University of Melbourne in 2019 and is now the Head of the Vision Optimisation Unit within the Departments of Optometry and Vision Science, and Surgery (Ophthalmology).

Dr Ayton is currently a NHMRC Medical Research Future Fund Next Generation Clinical Fellow and a Driving Research Momentum Fellow at the University of Melbourne.