

Subspecialty: **Laboratory Eye Research** (Age-related macular degeneration and genetics)

A/Prof Kenji Yamashiro (JAPAN)

- Topic: Personalised treatment for age-related macular degeneration

A/Prof Kenji Yamashiro is Assistant Professor Ophthalmology and Visual Sciences, Kyoto University Graduate School of Medicine, Kyoto, Japan. His area of interest is age-related macular degeneration (AMD) and polypoidal choroidal vasculopathy (PCV).

“Recently, it has been shown that genetic variations can predict the response of eyes with AMD/PCV to various treatments. Detection of genetic variation before treatment would help us to choose the best treatment strategy for each patient,” says A/Prof Yamashiro.

A/Prof Yamashiro will talk about his research into the genetic variations associated with response of eyes with AMD/PCV to photodynamic therapy, anti-VEGF treatment, and combination therapy. “Among 42 candidate genes, PEDF [pigment epithelium-derived factor] has significant association to response of PCV to PDT,” he says.

A/Prof Yamashiro’s presentation will also include a brief review of susceptible genes for AMD and PCV.



Subspecialty: **Laboratory Eye Research** (Intraocular inflammation)

Prof Kenichi Namba (Japan)

- Topic: Molecular targeting therapy in intraocular inflammation

A/Prof Namba is Associate Professor, Department of Ophthalmology, Hokkaido University Graduate School of Medicine, Sapporo, Japan.

“Molecular targeting therapies in the treatment of intraocular inflammations have shown excellent efficacy in some disease. Ocular inflammations in Behcet’s disease could not be suppressed well – even with immunosuppressive agents – and showed very poor visual prognosis until Infliximab therapy appeared in 2007. Infliximab, a monoclonal antibody to TNF- α , has shown excellent suppressive effects for ocular inflammation in Behcet’s disease,” says Prof Namba.

“In some intraocular inflammations, chronic cystic macular oedema (CME) occurred and caused visual impairment. Intravitreal injections of bevacizumab (anti-VEGF monoclonal antibody) showed effectiveness in some patients with CME.”

Prof Namba’s presentation will provide an overview of potential drugs for the treatment of intraocular inflammations. “Recently, many new molecular-targeting drugs have been developed,” he says.

Note: All effort has been made to check facts with each presenter. The writer accepts responsibility for any inadvertent errors in transcript.

Subspecialty – Laboratory Eye Research



Professor Robyn Guymer (Australia)

- **The Bionic Eye – The Bionic Vision Australia Partnership**

Prof Guymer is Head, Macular Research Unit, Centre for Eye Research Australia, University of Melbourne, Royal Victorian Eye and Ear hospital, Australia.

During her presentation at APAO, Prof Guymer will summarise the Bionic Vision Australia partnership and the progress it is making towards developing a retinal prosthesis.

“Bionic Vision Australia is a multidisciplinary team of Australian researchers made up of five major partners working together to develop a retinal prosthesis over the next four years.”

“Bionic Vision Australia is pursuing a two-pronged attack to solve the problem and, while a little behind other international groups in the development of a retinal prosthesis, the multidisciplinary team is hoping to deliver a superior device.”

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