City University of Hong Kong
Department of Biomedical Sciences
presents a seminar

AAV Mediated BDNF Expression Rescues Retinal Ganglion Cells and Visual Function in Rodent Models of Elevated Intraocular Pressure

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Date: **23 October 2014 (Thursday)**

Time: **2:00–3:00 pm**

Venue: **B5-308, Blue Zone, 5/F Academic 1, City University of Hong Kong, Kowloon Tong**

Abstract

In a recent study, we showed that the retinal ganglion cells (RGCs) and visual functions measured by visual evoked potential and behaviorally measured visual acuity and contrast sensitivity can be rescued up to 70 weeks by using an AAV vector to express BDNF in the retina. Now, we performed gene therapy in two rodent models of chronic glaucoma at different stages of progression. We showed that if the treatment was performed early, visual functions could be fully restored without taking measures to reduce intraocular pressure. However, if the treatment was delayed, only progression of vision loss could be stopped. These results showed that BDNF is potent in rescuing retinal ganglion cells and visual functions.

About the Speaker

Education and Training:

1997–1999	Research Officer, Vision, Touch and Hearing Research Center, University of Queensland, Brisbane, Australia
1994–1997	Research Associate/Research Fellow, HHMI/Harvard Medical School, USA
1990–1994	Ph.D., John Curtin School of Medical Research, Australian National University, Canberra, Australia
1981–1985	B.S., Department of Biology, East China Normal University, Shanghai, China

Working Experience:

1999–2004	Investigator, Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China
2004–2011	Investigator, Institute of Biophysics, Chinese Academy of Sciences, Beijing, China
2012–	Professor, School of Biomedical Engineering/Institute of Natural Sciences, Shanghai Jiao Tong University, Shanghai, China

Research Interests:

Form, function, development and deseases of mammalian retinal ganglion cells.

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All are welcome