



## **Professor Wong Tien Yin**

MBBS, MMED (Ophth), MPH, PhD, FRCSE, FRANZCO, FRCOph,  
FAHMS, FAMS

Chair Professor & Founding Head, Tsinghua Medicine, Beijing, China  
Senior Advisor, SingHealth & Singapore National Eye Centre,  
Singapore

Specialty: Medical Retina

Sub-specialties: Medical Retina

**Education Qualifications:** MBBS, MMED (Ophth), MPH, PHD, FRCSE, FRANZCO, FAMS

Professor Wong Tien Yin completed medical school at the National University of Singapore (NUS) as a President's scholar, residency training in ophthalmology at the Singapore National Eye Centre (SNEC), and retinal fellowships at the University of Wisconsin, Madison, USA and University of Sydney, Australia. He has a MPH and PhD from the Johns Hopkins University, USA.

In his previous role as Vice Dean, Office of Academic and Clinical Development, Duke-NUS Medical School, he coordinates clinical and translational research strategy and execution across the SingHealth-Duke-NUS Academic Medicine Centre. As Head of the Academic Medicine Research Institute, he facilitates and plans the development and support of clinician scientists and clinician-investigator across the campus.

Prof Wong is previously Medical Director of SNEC, one of the largest tertiary eye hospitals in Asia, with a faculty of more than 70 ophthalmologists. The Centre manages more than 300,000 outpatient visits and some 27,000 major surgeries annually. SNEC's research division, the Singapore Eye Research Institute (SERI), is one of the world's leading eye research institutes. Prof Wong was previously SERI's Executive Director (2009-13) and is now the Chairman of its Board. Prior to his current appointments, Prof Wong was Chairman of the Department of Ophthalmology, NUS and Chairman of the Department of Ophthalmology, Royal Victorian Eye and Ear Hospital, the University of Melbourne, Australia.

Prof Wong balances clinical practice in Ophthalmology, focusing on retinal diseases such as diabetic retinopathy and age-related macular degeneration, with a broad-based research program comprising epidemiological, clinical and translational studies of Asian retinal diseases, and on the use of retinal imaging to predict disease risk. He has published over a 1,000 peer-reviewed papers, including papers in the New England Journal of Medicine and the Lancet, gave more than 300 invited plenary, symposium and named lectures globally, and received over US\$50 million in grant funding as Principal Investigator.

For his clinical service and academic research, Prof Wong has been recognized nationally and internationally with numerous awards, such as the Sandra Doherty Award from the American Heart Association, the Alcon Research Institute Award, the Novartis Prize in Diabetes, the Australian

Commonwealth Health Minister's Award, and the Arnall Patz Medal from the Macula Society. He has been recognized as the top researcher from two Universities: the Outstanding Researcher Award from the National University of Singapore and the Woodward Medal from the University of Melbourne. He has received the National Clinician Scientist Award, the President's Science Award and the President's Science and Technology Award, the highest awards for scientific contribution in Singapore.

Prof Wong will take up an appointment as Founding Head of Tsinghua Medicine, a new academy of healthcare and medical sciences at Tsinghua University in Beijing, China. The academy will expand and leverage on the resources and capabilities of Tsinghua's Schools of Medicine, Basic Medical Sciences, Biomedical Engineering, Pharmaceutical Sciences and affiliated hospitals, with the aim to develop academic medicine, reform medical education, strengthen translation of research, and build international networks. In this role, Prof Wong will also be identifying and developing new collaborative opportunities with SingHealth Duke-NUS AMC in areas of research, medical education, clinical innovation, global health and cross-campus faculty and student exchanges.

### **Professional Appointments and Committee Memberships:**

Provost's Chair Professor, National University of Singapore  
Deputy Group Chief Executive Officer (Research and Education), SingHealth (2018 - 2021)  
Vice Dean, Office of Academic and Clinical Development, Duke-NUS Medical School (2018 - 2021)  
President, College of Ophthalmologists, Singapore  
Council, the Academy of Medicine Singapore  
Member, the Singapore Medical Council,  
Board member, National Medical Research Council (NMRC)  
President, the Asia Pacific Ocular Imaging Society (APOIS).  
Fellow, the Singapore National Academy of Sciences (SNAS)  
Board member, International Council of Ophthalmology (ICO)  
Council member, Asia Pacific Academy of Ophthalmology (APAO)  
Vice-President, Asia Pacific Vitreo-Retinal Society (APVRS)  
Executive Committee member, the Macula Society

### **Awards:**

Sir Runme Shaw Memorial Lecture, Academy of Medicine Singapore (2017)  
Senior Achievement Award, Asia-Pacific Academy of Ophthalmology (APAO) (2017)  
Senior Achievement Award, American Academy of Ophthalmology (AAO) (2016)  
Tano Lecture, Asia Pacific Vitreo-Retina Society (2015)  
ARVO Fellow (Gold Award), USA (2015)  
President's Science and Technology Award (2014)  
National Outstanding Clinician Scientist Award (2010)  
President's Science Award (2010)

Research Interests: Diabetic retinopathy, age-related macular degeneration, retinal vein occlusion, retinal diseases, ocular imaging, and epidemiology of eye diseases.

## **Selected Publications:**

Ting DSW, Cheung CY, Lim G, Tan GSW, Quang ND, Gan A, Hamzah H, Garcia-Franco, R, San Yeo IY, Lee SY, Wong EYM, Sabanayagam C, Baskaran M, Ibrahim F, Tan NC, Finkelstein EA, Lamoureux EL, Wong IY, Bressler NM, Sivaprasad S, Varma R, Jonas, JB, He MG, Cheng CY, Cheung GCM, Aung T, Hsu W, Lee ML, Wong TY. Development and Validation of a Deep Learning System for Diabetic Retinopathy and Related Eye Diseases Using Retinal Images From Multiethnic Populations With Diabetes. *JAMA*. 2017 Dec 12;318(22):2211-2223.

Wong TY, Bressler NM. Artificial intelligence with deep learning technology looks into diabetic retinopathy screening. *JAMA* 2016;316(22):2366-2367.

Wong WL, Su X, Li X, Cheung CM, Klein R, Cheng CY, Wong TY. Global prevalence of age-related macular degeneration and disease burden projection for 2020 and 2040: a systematic review and meta-analysis. *Lancet Glob Health*. 2014 Feb;2(2):e106-16.

Wong WL, Su X, Li X, Cheung CM, Klein R, Cheng CY, Wong TY. Global prevalence of age-related macular degeneration and disease burden projection for 2020 and 2040: a systematic review and meta-analysis. *Lancet Glob Health*. 2014 Feb;2(2):e106-16.

Cheung CM, Wong TY. Treatment of age-related macular degeneration. *Lancet*. 2013 Oct 12;382(9900):1230-2.

Sasongko MB, Wong TY, Nguyen TT, et al. Serum apolipoprotein AI and B are stronger biomarkers of diabetic retinopathy than traditional lipids. *Diabetes Care*. 2011;34:474-9 (IF: 7.8)

Cheung N, Mitchell P, Wong TY. Diabetic retinopathy. *Lancet*. 2010;376:124-36 (IF: 30.6)

Wong TY, Scott IU. Retinal vein occlusion. *New England Journal Medicine*. 2010;25;363:2135-44 (IF: 52.6)

Lindley RI, Wang JJ, Wong MC,...Wong TY. Retinal Microvascular Changes in Acute Lacunar Stroke. *Lancet Neurology*. 2009;8(7):628-34. (IF: 18.2)

McGeechan K, Liew G, Macaskill P,...Wong TY. Retinal Vessel Caliber and Risk of Coronary Heart Disease. *Ann Intern Med*.2009; 151(6):404-13. (IF: 15.5)

Wong TY, Mwamburi M, Klein R, et al. Rates of Progression in Diabetic Retinopathy during Different Time Periods: A Systematic Review and Meta-Analysis. *Diabetes Care*. 2009;32 :2307-13. (IF: 7.8)

Wong TY, Cheung N, Tay WT, et al. Prevalence and risk factors for diabetic retinopathy: the Singapore Malay Eye Study. *Ophthalmology*. 2008; 115(11):1869-75 (IF: 5.6)

Wong TY, Liew G, Tapp R, et al. Relation of fasting glucose and retinopathy for diagnosis of diabetes: three population-based cross-sectional studies. *Lancet*. 2008; 371: 736-743. (IF: 30.6)

Mitchell P, Wong TY. DIRECT new treatments for diabetic retinopathy. *Lancet*. 2008; 372(9647):1361-3 (IF: 30.6)

Gillies MC, Wong TY. Ranibizumab for neovascular age-related macular degeneration. *N Engl J Med* .2007; 356:748-9 (IF: 52.6)

Wong TY, Mitchell P. The eye in hypertension. *Lancet* 2007; 369:425-35 (IF: 30.6)

Wong TY, Liew G, Mitchell P. Clinical update: New treatments for age-related macular degeneration. *Lancet*. 2007; 370:204-206 (IF: 30.6)

Mohamed Q, Gillies MC, Wong TY. Management of diabetic retinopathy: a systematic review. *JAMA*. 2007; 298:902-916 (IF: 25.5)

Wong TY, Klein R, Sun C, et al. Age-related macular degeneration and risk for stroke. *Annals of Internal Medicine*. 2006;145:98-106 (IF: 15.5)

Wong TY, Kamineni A, Klein R, et al. Quantitative retinal venular caliber and risk of cardiovascular disease in older persons. *Arch Intern Med* 2006; 166:2388-94 (IF: 8.4)

Wong TY, Mitchell P. Hypertensive retinopathy. *New England Journal Medicine*. 2004; 351:2310-7 (IF: 52.6)

Wong TY, Klein R, Sharrett AR, et al. Retinal arteriolar diameters and risk of hypertension. *Annals of Internal Medicine* 2004; 140:248-255 (IF: 15.5)

Wong TY, Klein R, Sharrett AR, et al. Cerebral white matter lesions, retinopathy, and incident clinical stroke. *JAMA*. 2002; 288:67-74 (IF: 25.5)