

# **Duke-NUS / SingHealth CV Template**

(For Faculty and Senior / Principal Scientist Appointment)

Updated as at 24 November 2024



## **(1) Personal Particulars**

Full Name : Daniel Shu Wei

Last Name : Ting

Date of Birth : 01-Aug-1984

Nationality : Singaporean

Gender : Male

## **(2) Brief Biography**

Assoc Prof Daniel Ting is a senior consultant vitreo-retinal surgeon working in the Singapore National Eye Center (SNEC), an Associate Professor with Duke-NUS Medical School and an Adjunct Clinical Associate Professor and an Innovation Mentor at Stanford University. He is also the Director of Singapore Health Service (SingHealth) AI Office, SNEC Chief Data and Digital Officer, and the Head of AI and Digital Innovation in Singapore Eye Research Institute (SERI). In 2017, Dr Ting was US-ASEAN Fulbright Scholar visiting the Johns Hopkins University Fulbright Scholar to share his expertise in AI and big data in medicine. In addition to that, his research focus span across not only on the technical aspect on machine learning, deep learning, large language models, explainable AI, privacy preserving technologies, but also safe, responsible and ethical clinical AI applications. He is also involved in several international consensus reporting guidelines such as STARD-AI, QUADAS-AI and DECIDE-AI.

To date, Daniel has published >300 publications on peer reviewed, book chapters, educational articles and conference abstracts. Of those, 50 were published in high impact journals such as JAMA, NEJM, Lancet, Nature Medicine, Nature Biomedical Engineering, Lancet Digital Health, Progress in Retinal and Eye Research, Diabetes Care, Nature Digital Medicine, Ophthalmology and etc. As of June 2024 (Google Scholar), his current H index: 64, i-10 index: 182 with total citations of >22748. Dr Ting has received a total of 100M research grants, in which 20 M as a principal investigator, and 80M as co-investigators on AI and digital innovation related projects in health. The 1st patent, SELENA+, is the world's first deep learning AI algorithm tested against 10 independent heterogenous datasets on varying population, medical devices, reference standards, clinical settings (population-based, hospital based with different pre-test probabilities) (Ting et al JAMA 2017), with subsequent co-founding of a start-up, EyRIS and regulatory approvals in >5 countries. It is included in the Singapore National AI Strategy, and was used to screen for >500,000 patients at 300 different screening sites worldwide. Apart from SELENA+, Dr Ting is now transferring these IPs into the new spin offs and licensing deals on the following domains: eye diseases (myopia, diabetic macular edema), systemic diseases (papilloedema, chronic kidney disease), x2 blockchain systems, automachine learning platform, generative AI for medical imaging and smart remote monitoring devices.

Internationally, Dr Ting serves in several leadership positions at the different AI and eye societies, including the EQUATOR Network (STARD-AI, DECIDE-AI, QUADAS-AI, PROBAST-AI), American Academy of

Ophthalmology AI and Retina Ophthalmology Technology Assessment committees, and he also chairs the AI and Digital Innovation Standing Committee for the Asia-Pacific Academy of Ophthalmology and Asia-Pacific Vitreo-Retinal Society. He serves in numerous advisory and editorial boards in the top-tiered digital and medical journals, including Lancet Digital Health (IF = 30.8), ranked 1<sup>st</sup> in digital medical journal), an Editorial Board Member in Ophthalmology (IF=13, ranked 1<sup>st</sup> in clinical ophthalmology journal) and others including Associate Editor for Frontiers in Medicine, Frontiers in Digital Health and Asia-Pacific Journal of Ophthalmology; Section Editor for British Journal of Ophthalmology and Editorial Board Members for Ophthalmology Retina, Ophthalmology Science and Retina. He is also the Macula and Retinal Society members.

For the accomplishment, Dr Ting was recognized by many top-tiered international AI and ophthalmology societies in winning many prestigious scientific awards, including Tatler Asia Gen T Award (2021), Singapore National Clinician Scientist Award (2021), Asia-Pacific Academy Ophthalmology (APAO) Nakajima Award (2021), Asia-Pacific Vitreo-Retinal Society (APVRS) Ian Constable Award (2021), MICCAI OMIA Prestigious Achievement Award (2020), ARVO Bert Glaser Award for Innovative Research in Retina (2020), USA Macula Society Evangelos Gragoudas Award (2019), APAO Young Ophthalmologist's Award (2018) and APTOS Young Innovator Award (2017).

In 2024, he is also ranked number 14 as highly ranked scholars in ophthalmology globally (Number 1 in the Singapore Eye Research Institute as the full-time faculty). Since 2022 till to date (2023 and 2024), he has been consistently included in the World's Top 100 Ophthalmology Power list by the Ophthalmologists; and the World's Top 2% Scientists by the Stanford University world ranking. Since 2021 to 2024, he was also consistently ranked top 3 in the world for deep learning domain in health over the past 10 years by the ExpertScape. He has won the Young Scientist Award by president's science and technology awards (PTSA) 2024, a recognition to under 40 that has contributed researcher and development in Singapore and demonstrate great potential to be world class researcher.

### **(3) Current Appointment Details**

*(Please refer to section (7) Professional Training & Academic Career (Employment History) for more information)*

Institution of Primary Appointment: Singapore National Eye Centre

Secondary Appointment(s), if any *(include clinical faculty appointment with NUS if applicable)*

Present Rank(s) and Title(s) in Duke-NUS: Associate Professor

### **(4) Educational & Training Qualifications**

<u>Qualification</u>	<u>Country</u>	<u>Name of School / Institution / University</u>	<u>Date of Attainment</u>	<u>Highest Qualification</u>
Bachelor of Medical Science Hons Class 1	Australia	University of Tasmania	2007-12-19	
Fellow, Royal Coll of Ophthalmologists	United Kingdom	Royal College of Ophthalmologists, United Kingdom	2013-09-06	
Master of Medicine (Ophthalmology)	Singapore	National University of Singapore	2014-03-31	
Doctor of Philosophy	Australia	University of Western Australia	2015-09-08	X
Fellow Academy of Medicine of Singapore	Singapore	Academy of Medicine	2016-07-16	

### **(5) Certification & Licensure**

#### **(A) Medical Professional License**

<u>Licensing Board</u>	<u>Licensing Number</u>	<u>Date</u> (DDMMYYYY)	<u>Country</u>
General Medical Council	7702185	19/12/2019	United Kingdom
Singapore Medical Council	16522J	06/04/2011	Singapore

### **(B) Specialty Certificate**

<u>Certificate Board</u>	<u>Certificate Number</u>	<u>Name of Medical Sub-Specialty</u>	<u>Year</u>	<u>Country</u>
General Medical Council	7702185	Ophthalmology	2019	United Kingdom
Royal College of Ophthalmology		FRCOphth Refraction Certificate	2014	United Kingdom
Royal College of Ophthalmology		FRCOphth Part 1 (McCartney Prize)	2013	United Kingdom
Singapore Medical Council	16522J	Ophthalmology	2011	Singapore

### **(6) Membership in Professional & Academic Societies**

<u>Organization(s)</u>	<u>Rank / Title / Position</u>	<u>From (YYYY)</u>	<u>To (YYYY)</u>
American Academy of Ophthalmology (AAO)	Member	2011	Present
Asia-Pacific Academy of Ophthalmology (APAO)	Member	2012	Present
European Society of Cataract and Refractive Surgeons (ESCRS)	Member	2013	Present
Asia-Pacific Cataract and Refractive Society meeting	Member	2013	Present
Singapore Society of Ophthalmology	Member	2013	Present
The Association for Research in Vision and Ophthalmology United States (ARVO)	Member	2014	Present
Singapore Fulbright Association	Member	2017	2017
SNEC Faculty Development Committee	Member	2018	Present
EURETINA	Member	2020	Present
QUADAS-AI	EXCO	2020	Present
DECIDE-AI	EXCO	2020	Present
STARD-AI	EXCO	2020	Present
American Academy of Ophthalmology (AAO)	EXCO, AI Committee	2020	Present
International Retinal Imaging Society	Member	2020	Present
Asia-Pacific Academy of Ophthalmology (APAO)	Chair, AI and Digital Innovation Standing Committee	2021	Present
Macula Society	Member	2022	Present
Retina Society	Member	2022	Present
Vit-Buckle Society	International Committee Member	2022	Present

The Scientific Advisory Board, Centre of AI in Medicine, Nanyang Technological University (NTU)	Member	2024	Present
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## **(7) Professional Training & Academic Career (Employment History)**

*Listing of all professional training and work experiences to-date, i.e. training rotations, past and present appointments, beginning with the first postgraduate position.*

### **Academic / Clinical / Research / Administrative / Industry:**

<u>Training Type</u>	<u>Hospital / Institution / Organisation</u>	<u>Rank / Title / Position</u>	<u>From (MM/YYYY)</u>	<u>To (MM/YYYY)</u>
Academic/Clinical	Royal Perth Hospital, Australia	Resident Medical Officer	01/2009	01/2010
Academic/Clinical	Royal Perth Hospital Tele-retinal Diabetic Retinopathy Screening Clinic	Chief Coordinator	01/2010	12/2012
Academic/Clinical	Singapore National Eye Center	Program Evaluation Committee Member – Residents' Representative	01/2012	12/2013
Academic/Clinical	SingHealth Residents' Committee	Head, Education Subcommittee	01/2012	12/2013
Administrative	Singapore National Eye Center	Program Evaluation Committee Resident's Representative	01/2013	12/2014
Academic/Clinical	Singapore National Eye Center	Lead resident	01/2013	12/2014
Academic/Clinical	SingHealth Graduate Medical Education Committee	Committee member	01/2013	12/2014
Academic/Clinical	SingHealth Residents' Committee	Chairman	01/2013	12/2014
Administrative	SingHealth	Residents' Committee Co-chair	01/2014	12/2014
Academic/Clinical	Singapore National Eye Center	Lead Resident	01/2014	12/2014
Administrative	SingHealth	Graduate Medical Education Committee Resident's Representative	01/2014	12/2014
Academic/Clinical	Singapore National Eye Center	Information Technology (IT) Committee Member	01/2014	12/2015
Academic/Clinical	Singapore National Eye Center	Program Evaluation Committee Member – Residents' Representative	01/2014	12/2015
Academic/Clinical	National Health Care Leadership College, Ministry of Health	SingHealth Ophthalmology Chief Resident	01/2014	12/2016
Academic/Clinical	Singapore National Eye Center	Education Research Committee Member	01/2014	12/2016
Academic/Clinical	Singapore National Eye Center	Outpatient Department (OPD) Committee Member	01/2014	12/2016

Academic/Clinical	Singapore National Eye Center	Senior Resident (Year 5)	01/2014	12/2016
Academic/Clinical	Duke-NUS Medical School	Adjunct Research Fellow	01/2014	12/2016
Academic/Clinical	Duke-NUS Medical School	AMRI Khoo Scholar	01/2014	12/2016
Academic/Clinical	SingHealth	Ophthalmology Chief Resident	01/2014	12/2016
Administrative	National Healthcare Leadership College	SingHealth Ophthalmology Chief Resident	01/2015	12/2015
Administrative	Singapore National Eye Center	Outpatient Committee Member	01/2015	12/2015
Administrative	Singapore National Eye Center	IT Committee Member	01/2015	12/2015
Academic/Clinical	NUS Yong Loo Lin School of Medicine	Clinical Lecturer	01/2015	12/2016
Academic/Clinical	Singapore National Eye Center	Associate Consultant	01/2016	10/2018
Academic/Clinical	Singapore National Eye Centre	Vitreo-retinal Fellow	01/2016	01/2019
Academic/Clinical	US Fulbright Association	US-ASEAN Fulbright Fellow	01/2017	08/2018
Academic/Clinical	Duke-NUS Medical School	Assistant Professor	01/2017	12/2020
Academic/Clinical	Singapore National Eye Center	Consultant	01/2018	11/2022
Academic/Clinical	Zhongshan Ophthalmic Center, China	Adjunct Professor	01/2019	12/2021
Administrative	Singapore National Eye Centre	Deputy Director / Digital Transformation Office	01/2020	01/2022
Administrative	Singapore Eye Research Institute	Head / AI and Digital Innovations	01/2020	Present
Administrative	Singapore National Eye Centre	Deputy Clinical Director / Regional Eye System	01/2020	Present
Academic/Clinical	Duke-NUS Medical School	Associate Professor / Center of Regulatory Excellence	01/2021	Present
Academic/Clinical	Duke-NUS Medical School	Associate Professor / Quantitative Medicine	01/2021	Present
Academic/Clinical	Duke-NUS Medical School	Associate Professor / Global Health Institute	01/2021	Present
Academic/Clinical	Duke-NUS Medical School	Associate Professor (Tenure-track) / Ophthalmology and Visual Science	01/2021	Present
Academic/Clinical	National University of Singapore	Associate Professor (Courtesy) / Biomedical Engineering	01/2021	Present
Academic/Clinical	SUTD/Duke-NUS	Clinician Mentor/ Special Track program	01/2021	Present
Administrative	Singapore Health Service	Director / SingHealth AI Office	01/2021	Present
Administrative	Singapore National Eye Centre	Chief Data and Digital Officer (CDDO)	01/2022	Present

Academic/Clinical	Singapore National Eye Centre	Senior Consultant / Surgical Retina Department	11/2022	Present
Academic/Clinical	Byers Eye Institute, Stanford University	Innovator Mentor	11/2022	Present
Academic/Clinical	Stanford University	Adjunct Clinical Associate Professor	03/2023	Present
Academic/Clinical	Bioinformatics Institute (BII), A*STAR Research Entities (ARES)	Adjunct Scientist	03/2023	Present

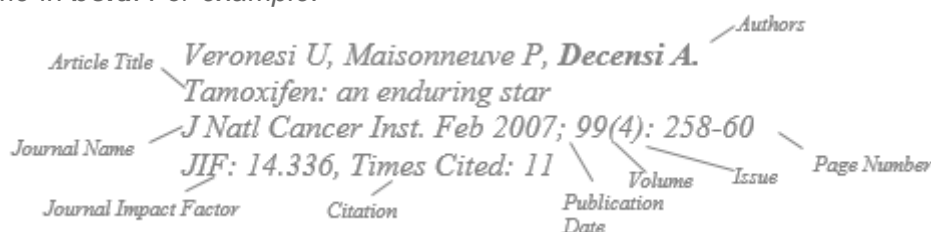
## **(8) Major Personal Events** (Optional)

Inclusive of personal events that might have a bearing on the review of the faculty appointment, promotion or tenure application, e.g. childbirth / maternity leave, major illness requiring extensive leave, loss of property, or disruption of lifestyle (Optional).

Nil

## **(9) Publications**

Inclusive of Authors, Article Title, Journal Name, Date of Publication, Volume / Issue / Page Number with candidate's name in **bold**. For example:



Candidates who are being put up for (1) Associate Professor with tenure, (2) Professor with tenure (3) Professor (Tenure / Research / Educator / Practice Track ) or (4) Senior Principal Research Scientist appointment should include the following:

- (i) Journal Impact Factor of every journal published for the last 5 years;
- (ii) No. of citations for every publication published for the last 5 years (Optional)

**Sequential listing of publications (#1 being the oldest) excluding publications that are submitted for review but have not been accepted or published.**

### **(A) Refereed Journals**

Refereed articles are scientific publications that have active editorial boards and a system of critical review of all submission for publication.

#### **(i) Original Articles**

1. **Ting DSW**, Yuen Y, Clark A, Ng J, Morlet N, Taylor H and Preen D.  
Diabetic Retinopathy Screening and Management Practices of Australian Optometrists: Results from the National Optometrists Survey for Diabetic Retinopathy Management Clin Exp Opth 2009; 37:A70-N.A. (Article; Published in Print) IF: (12.4)
2. **Ting Daniel S W**; Tay-Kearney Mei Ling; Constable Ian; Lim Liam; Preen David B; Kanagasingam Yogesan  
Retinal video recording a new way to image and diagnose diabetic retinopathy. Ophthalmology 2011; 118(8):1588-93 (Article; Published in Print) IF (2.8)
3. **Ting Daniel S W**; Morlet Nigel; Clark Antony; Ng Jonathon Q; Yuen Joshua; Preen David B

- Differences in diabetic retinopathy management by primary eye care providers in Australia.  
Clinical & experimental ophthalmology 2011; 39(6):585-6 (Article; Published in Print) IF (12.4)
4. **Ting Daniel**; Ng Jonathon; Morlet Nigel; Yuen Joshua; Clark Antony; Taylor Hugh; Keefe Jill; Preen David  
Diabetic retinopathy--screening and management by Australian GPs.  
Australian family physician 2011; 40(4):233-8 (Article; Published in Print) IF (0.8)
  5. **Ting Daniel S W**; Ng Jonathon Q; Morlet Nigel; Yuen Joshua; Clark Antony; Taylor Hugh R; Keefe Jill; Preen David B  
Diabetic retinopathy management by Australian optometrists.  
Clinical & experimental ophthalmology 2011; 39(3):230-5 (Article; Published in Print) IF (4.57)
  6. **Ting D S W**; Tay-Kearney M L; Vignarajan J; Kanagasingam Y  
Diabetic retinopathy screening: can the viewing monitor influence the reading and grading outcomes.  
Eye (London, England) 2012; 26(12):1511-6 (Article; Published in Print) . IF (3.5)
  7. Lim F, **Ting DSW**, Cheng B and Perara S  
Severe Fibrin Block Angle Closure Secondary to Retinal Detachment Surgery  
J Clin Exp Ophthalmol 2012; 3:222-N.A. (Article; Published in Print) IF (12.4)
  8. **Ting Daniel S W**; Tay-Kearney Mei Ling; Kanagasingam Yogesan  
Light and portable novel device for diabetic retinopathy screening.  
Clinical & experimental ophthalmology 2012; 40(1):e40-6 (Article; Published in Print) IF (12.4)
  9. **Ting D S W**; Tay-Kearney M L; Constable I; Vignarajan J; Kanagasingam Y  
Retinal video recordings at different compression levels: a novel video-based imaging technology for diabetic retinopathy screening.  
Eye (London, England) 2013; 27(7):848-53 (Article; Published in Print) IF (3.5)
  10. **Ting DSW**, Rosman M, Aw A and Yeo I  
The Implementation of Cataract Simulator to Improve Junior Ophthalmology Residents' Confidence in Cataract Training.  
Invest Ophthalmol Vis Sci. 2015; 56:131-131 (Article; Published in Print) IF (5.0)
  11. **Ting Daniel S W**; Cheung Gemmy C M; Lim Laurence S; Yeo Ian Y S  
Comparison of swept source optical coherence tomography and spectral domain optical coherence tomography in polypoidal choroidal vasculopathy.  
Clinical & experimental ophthalmology 2015; 43(9):815-9 (Article; Published in Print) IF (12.4)
  12. **Ting DSW**, Tan GSW, Ng WY, Yeo IYS, Lim L, Wong EYM, Ong SG, Ang CL and Lee SY.  
The Surgical Outcomes, Complications and Predictive Surgical Factors of Diabetic Retinopathy Vitrectomy in A Large Asian Tertiary Eye Center.  
J Clin Exp Ophthalmol 2015; 6:494-494 (Article; Published in Print) IF (12.4)
  13. **Ting Daniel Shu Wei**; Tan Sarah; Lee Shu Yen; Rosman Mohamad; Aw Ai Tee; Yeo Ian Yew San  
Extracapsular cataract extraction training: junior ophthalmology residents' self-reported satisfaction level with their proficiency and initial learning barrier.  
Postgraduate medical journal 2015; 91(1077):368-72 (Article; Published in Print) IF (3.6)

14. Nguyen Hai V; Tan Gavin Siew Wei; Tapp Robyn Jennifer; Mital Shweta; **Ting Daniel Shu Wei**; Wong Hon Tym; Tan Colin S; Laude Augustinus; Tai E Shyong; Tan Ngiap Chuan; Finkelstein Eric A; Wong Tien Yin; Lamoureux Ecosse L  
Cost-effectiveness of a National Telemedicine Diabetic Retinopathy Screening Program in Singapore.  
Ophthalmology 2016; 123(12):2571-2580 (Article; Published in Print) IF (12.4)
15. Ng WY, **Ting DSW**, Agrawal R, Kahndelwal N, Htoon HM, Lee SY, Wong TY and Cheung GC  
Choroidal Structural Changes in Myopic Choroidal Neovascularization after Treatment with Anti-vascular Endothelial Growth Factor Over One Year.  
Invest Ophth Vis Sci 2016; 57(11):4933-4939 (Article; Published in Print) IF (5.0)
16. **Ting Daniel Shu Wei**; Ng Wei Yan; Ng Si Rui; Tan Shu Pei; Yeo Ian Yew San; Mathur Ranjana; Chan Choi Mun; Tan Anna Cheng Sim; Tan Gavin Siew Wei; Wong Tien Yin; Cheung Chui Ming Gemmy  
Choroidal Thickness Changes in Age-Related Macular Degeneration and Polypoidal Choroidal Vasculopathy: A 12-Month Prospective Study.  
American journal of ophthalmology 2016; 164:128-36.e1 (Article; Published in Print) IF (4.3)
17. **Ting Daniel Sw**; Lee Jill Cs; Loo Benny Kg; Baisa Katherine; Koo Wen Hsin; Cook Sandy; Lim Boon Leng  
A nationwide, resident-led teaching programme for medical students in Singapore: SingHealth Student Internship Programme Bootcamp.  
Singapore medical journal 2016; 57(5):233-7 (Article; Published in Print) IF (3.33)
18. Perera Shamira A; **Ting Daniel Sw**; Nongpiur Monisha E; Chew Paul T; Aquino Maria Cecilia D; Sng Chelvin Ca; Ho Sue-Wei; Aung Tin  
Feasibility study of sustained-release travoprost punctum plug for intraocular pressure reduction in an Asian population.  
Clinical ophthalmology (Auckland, N.Z.) 2016; 10:757-64 (Article; Published in Print) IF (2.2)
19. **Ting Daniel Sw**; Lu Vicky Hsin-Ju; Tan Gavin Sw; Wong Edmund Ym  
A surprising visual improvement following a prolonged 5-month retained subfoveal perfluorocarbon liquid.  
International journal of ophthalmology 2016; 9(7):1079-81 (Article; Published in Print) IF (1.8)
20. **Ting Daniel Shu Wei**; Cheung Carol Yim-Lui; Lim Gilbert; Tan Gavin Siew Wei; Quang Nguyen D; Gan Alfred; Hamzah Haslina; Garcia-Franco Renata; San Yeo Ian Yew; Lee Shu Yen; Wong Edmund Yick Mun; Sabanayagam Charumathi; Baskaran Mani; Ibrahim Farah; Tan Ngiap Chuan; Finkelstein Eric A; Lamoureux Ecosse L; Wong Ian Y; Bressler Neil M; Sivaprasad Sobha; Varma Rohit; Jonas Jost B; He Ming Guang; Cheng Ching-Yu; Cheung Gemmy Chui Ming; Aung Tin; Hsu Wynne; Lee Mong Li; Wong Tien Yin  
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; 318(22):2211-2223 (Article; Published in Print) IF (63.1)
21. **Ting DSW**, Yanagi Y, Agrawal R, Teo HY, Seen S, Yeo IYS, Mathur R, Chan CM, Lee SY, Wong EYM, Wong D, Wong TY, Cheung GCM.  
Choroidal Remodeling in Age-related Macular Degeneration and Polypoidal Choroidal Vasculopathy: A 12-month Prospective Study.  
Sci Rep 2017; 7(1):7868-7868 (Article; Published in Print) IF (3.8)



22. **Ting Daniel Shu Wei**; Tan Gavin Siew Wei; Agrawal Rupesh; Yanagi Yasuo; Sie Nicole Ming; Wong Chee Wai; San Yeo Ian Yew; Lee Shu Yen; Cheung Chui Ming Gemmy; Wong Tien Yin  
Optical Coherence Tomographic Angiography in Type 2 Diabetes and Diabetic Retinopathy. JAMA ophthalmology 2017; 135(4):306-312 (Article; Published in Print) IF (7.8)
23. Soh YQ,**Ting DSW**, Wong TY, Yeo I, Cheung GCM, Tan GSW.  
Optical Coherence Tomography Angiography for Evaluation of the Foveal Avascular Zone in Diabetic Retinopathy  
Invest Ophthalmol Vis Sci 2017; 58(8):1673-1673 (Article; Published in Print) IF (5.0)
24. Lim G,**Ting DSW**, Cheung CY, Tan GS, Rudyanto R, Gan ATL, Cheng CY, Wong TY  
Deep Learning System for Screening of Diabetic Retinopathy, Glaucoma and Age-related Macular Degeneration using Retinal Photographs: The DEEP EYE Study.  
Invest Ophthalmol Vis Sci 2017; 58(8):683-683 (Article; Published in Print) IF (5.0)
25. K. Anbalakan, J. Yap, W.T. Tay,**D. Ting**, Y.L. Cheung, C. Sabanayagam, C.Y. Cheng, T.Y. Wong, K.K. Yeo  
Impact of diabetes, glycemic control and diabetic retinopathy on mortality and cardiovascular outcomes in a multi-ethnic Asian population  
European Heart Journal 2017; 38(1):4449-4449 (Article; Published in Print)
26. Cheung Carol Yim-Lui; Sabanayagam Charumathi; Law Antony Kwan-Pui; Kumari Neelam; **Ting Daniel Shu-Wei**; Tan Gavin; Mitchell Paul; Cheng Ching Yu; Wong Tien Yin  
Retinal vascular geometry and 6 year incidence and progression of diabetic retinopathy. Diabetologia 2017; 60(9):1770-1781 (Article; Published in Print) IF (10.4)
27. Wang Louis Zizhao; Cheung Carol Y; Tapp Robyn J; Hamzah Haslina; Tan Gavin;**Ting Daniel**; Lamoureux Ecosse; Wong Tien Yin  
Availability and variability in guidelines on diabetic retinopathy screening in Asian countries. The British journal of ophthalmology 2017; 101(10):1352-1360 (Article; Published in Print) IF (3.8)
28. Gupta Preeti;**Ting Daniel Shu Wei**; Thakku Sri Gowtham; Wong Tien-Yin; Cheng Ching-Yu; Wong Edmund; Mathur Ranjana; Wong Doric; Yeo Ian; Gemmy Cheung Chui Ming  
DETAILED CHARACTERIZATION OF CHOROIDAL MORPHOLOGIC AND VASCULAR FEATURES IN AGE-RELATED MACULAR DEGENERATION AND POLYPOIDAL CHOROIDAL VASCULOPATHY.  
Retina (Philadelphia, Pa.) 2017; 37(12):2269-2280 (Article; Published in Print) IF (2.3)
29. Wei Xin;**Ting Daniel Shu Wei**; Ng Wei Yan; Khandelwal Neha; Agrawal Rupesh; Cheung Chui Ming Gemmy  
CHOROIDAL VASCULARITY INDEX: A Novel Optical Coherence Tomography Based Parameter in Patients With Exudative Age-Related Macular Degeneration.  
Retina (Philadelphia, Pa.) 2017; 37(6):1120-1125 (Article; Published in Print) IF (2.3)
30. **Daniel Ting**; Ching-Yu Cheng; Carol Yim-lui Cheung; Gilbert Lim; Gavin Tan; Wynne Hsu; Mong Li Lee; Tien Yin Wong  
Classic Risk Factors for Diabetic Retinopathy: Deep Learning versus Human Graders  
Invest Ophthalmol Vis Sci 2018; 59(9):1706-1706 (Article; Published in Print) IF (5.0)
31. Bellemo V, Yip M, Xie Y, Lim G, Nguyen G, Lee ML, Hsu W, Cheng CY, Wong TY,**Ting DSW**  
Artificial Intelligence Using Deep Learning in Classifying Side of the Eyes and Width of Field for Retinal Fundus Photographs

- Asian Conference on Computer Vision 2018; N.A.:N.A.-N.A. (Article; Published in Print) IF (1.8)
32. Yip, M, Lim ZW, Lim G, Nguyen Q, Hamzah H, Ho J, Bellemo V, Xie YC, Lee XQ, Lee ML, Hsu W, Wong TY, **Ting DSW**  
Enhanced Detection of Referable Diabetic Retinopathy via DCNNs and Transfer Learning.  
Asian Conference on Computer Vision 2018; N.A.:N.A.-N.A. (Article; Published in Print) IF (1.8)
  33. Li Zhixi; Keel Stuart; Liu Chi; He Yifan; Meng Wei; Scheetz Jane; Lee Pei Ying; Shaw Jonathan; **Ting Daniel**; Wong Tien Yin; Taylor Hugh; Chang Robert; He Mingguang  
An Automated Grading System for Detection of Vision-Threatening Referable Diabetic Retinopathy on the Basis of Color Fundus Photographs.  
Diabetes care 2018; 41(12):2509-2516 (Article; Published in Print) IF (14.8)
  34. Hamzah H, Lim G, Mani B, Hsu W, Lee M, Cheng-CY, Wong TY, **Ting DSW**  
Artificial Intelligence using Deep Learning System for Glaucoma Suspect Detection  
Invest Ophthalmol Vis Sci 2018; 59(9):4074-4074 (Article; Published in Print) IF (5.0)
  35. Yanagi Yasuo; **Ting Daniel S W**; Ng Wei Yan; Lee Shu Yen; Mathur Ranjana; Chan Choi Mun; Yeo Ian; Wong Tien Yin; Cheung Gemmy Chui Ming  
CHOROIDAL VASCULAR HYPERPERMEABILITY AS A PREDICTOR OF TREATMENT RESPONSE FOR POLYPOIDAL CHOROIDAL VASCULOPATHY.  
Retina (Philadelphia, Pa.) 2018; 38(8):1509-1517 (Article; Published in Print) IF (2.3)
  37. Li S, Liu Y, Su X, Chen C, Tjio G, **Ting DSW**, Goh RSM  
Multi-Instance Multi-Scale CNN for Medical Image Classification  
MICCAI 2019; N.A.:N.A.-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (n.a)
  38. Lim G, Lim ZW, Xu D, **Ting DSW**, Wong TY, Lee ML, Hsu W.  
Feature isolation for hypothesis testing in retinal imaging: an ischemic stroke prediction case study  
Proceedings of the AAAI Conference on Artificial Intelligence 2019; 33:9510-9515 (Article; Published in Print) IF (4.0)
  39. Chua Jacqueline; Chin Calvin Woon Loong; Hong Jimmy; Chee Miao Li; Le Thu-Thao; **Ting Daniel Shu Wei**; Wong Tien Yin; Schmetterer Leopold  
Impact of hypertension on retinal capillary microvasculature using optical coherence tomographic angiography.  
Journal of hypertension 2019; 37(3):572-580 (Article; Published in Print) IF (4.8)
  40. Wong Chee Wai; Teo Yi Chong Kelvin; Tsai Shih Tsiang Andrew; **Ting Shu Wei Daniel**; Yeo Yew San Ian; Wong Wen Kuan Doric; Lee Shu Yen; Wong Tien Yin; Cheung Chui Ming Gemmy  
CHARACTERIZATION OF THE CHOROIDAL VASCULATURE IN MYOPIC MACULOPATHY WITH OPTICAL COHERENCE TOMOGRAPHIC ANGIOGRAPHY.  
Retina (Philadelphia, Pa.) 2019; 39(9):1742-1750 (Article; Published in Print) IF (2.3)
  41. Tjio G, Li S, Xu X, **Ting DSW**, Liu Y, Goh RSM  
Multi-discriminator Generative Adversarial Networks for Improved Thin Retinal Vessel Segmentation  
MICCAI 2019; NA:NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (n.a)

42. Liu Hanruo; Li Liu; Wormstone I Michael; Qiao Chunyan; Zhang Chun; Liu Ping; Li Shuning; Wang Huaizhou; Mou Dapeng; Pang Ruiqi; Yang Diya; Zangwill Linda M; Moghimi Sasan; Hou Huiyuan; Bowd Christopher; Jiang Lai; Chen Yihan; Hu Man; Xu Yongli; Kang Hong; Ji Xin; Chang Robert; Tham Clement; Cheung Carol;**Ting Daniel Shu Wei**; Wong Tien Yin; Wang Zulin; Weinreb Robert N; Xu Mai; Wang Ningli  
Development and Validation of a Deep Learning System to Detect Glaucomatous Optic Neuropathy Using Fundus Photographs.  
JAMA ophthalmology 2019; 137(12):1353-1360 (Article; Published in Print) IF (7.8)
43. Tan Tien-En; Nguyen Quang; Chua Jacqueline; Schmetterer Leopold; Tan Gavin Siew Wei; Wong Chee Wai; Tsai Andrew; Cheung Gemmy Chui Ming; Wong Tien Yin;**Ting Daniel Shu Wei**  
Global Assessment of Retinal Arteriolar, Venular and Capillary Microcirculations Using Fundus Photographs and Optical Coherence Tomography Angiography in Diabetic Retinopathy.  
Scientific reports 2019; 9(1):11751-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (3.8)
44. Bellemo Valentina; Lim Zhan W; Lim Gilbert; Nguyen Quang D; Xie Yuchen; Yip Michelle Y T; Hamzah Haslina; Ho Jinyi; Lee Xin Q; Hsu Wynne; Lee Mong L; Musonda Lillian; Chandran Manju; Chipalo-Mutati Grace; Muma Mulenga; Tan Gavin S W; Sivaprasad Sobha; Menon Geeta; Wong Tien Y;**Ting Daniel S W**  
Artificial intelligence using deep learning to screen for referable and vision-threatening diabetic retinopathy in Africa: a clinical validation study.  
The Lancet. Digital health 2019; 1(1):e35-e44 (Article; Published in Print) IF (23.8)
45. **Ting Daniel S W**; Cheung Carol Y; Nguyen Quang; Sabanayagam Charumathi; Lim Gilbert; Lim Zhan Wei; Tan Gavin S W; Soh Yu Qiang; Schmetterer Leopold; Wang Ya Xing; Jonas Jost B; Varma Rohit; Lee Mong Li; Hsu Wynne; Lamoureux Ecosse; Cheng Ching-Yu; Wong Tien Yin  
Deep learning in estimating prevalence and systemic risk factors for diabetic retinopathy: a multi-ethnic study.  
NPJ digital medicine 2019; 2:24-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
46. Zhang X, Xiao H, Liu C, Zhao L, Wang J, Li H, Wang R, Zhu Y, Chen C, Wu X, Lin D, Wang J, Liu X, Qiu W, Yu PWM,\***Ting DSW**,\* Lin H.\*  
Comparing macular structural and vascular changes in neuromyelitis optica spectrum disorder and primary open-angle glaucoma: a cross-sectional study.  
British Journal of Ophthalmology 2020; N.A.:N.A.-N.A. (Article; In Press) IF (3.8)
47. Tsai Andrew S H; Gan Alfred T L;**Ting Daniel S W**; Wong Chee Wai; Teo Kelvin Y C; Tan Anna C S; Lee Shu Yen; Wong Tien Yin; Tan Gavin S W; Gemmy Cheung Chui Ming  
DIABETIC MACULAR ISCHEMIA: Correlation of Retinal Vasculature Changes by Optical Coherence Tomography Angiography and Functional Deficit.  
Retina (Philadelphia, Pa.) 2020; 40(11):2184-2190 (Article; Published in Print) IF (2.3)
48. Rim Tyler Hyungtaek; Lee Geunyoung; Kim Youngnam; Tham Yih-Chung; Lee Chan Joo; Baik Su Jung; Kim Young Ah; Yu Marco; Deshmukh Mihir; Lee Byoung Kwon; Park Sungha; Kim Hyeon Chang; Sabayanagam Charumathi;**Ting Daniel S W**; Wang Ya Xing; Jonas Jost B; Kim Sung Soo; Wong Tien Yin; Cheng Ching-Yu  
Prediction of systemic biomarkers from retinal photographs: development and validation of deep-learning algorithms.  
The Lancet. Digital health 2020; 2(10):e526-e536 (Article; Published in Print) IF 23.8

49. Fenwick Eva K; Man Ryan E K; Gan Alfred T L; Aravindhan Amudha; Tey Ching Siong; Soon Hasita Jian Tai;**Ting Daniel S W**; Yeo San I Y; Lee Shu Yen; Tan Gavin; Wong Tien Y; Lamoureux Ecosse L  
Validation of a New Diabetic Retinopathy Knowledge and Attitudes Questionnaire in People with Diabetic Retinopathy and Diabetic Macular Edema.  
Translational vision science & technology 2020; 9(10):32-N.A. (Article; Published in Print) IF (3.2)
50. Rim Tyler Hyungtaek; Soh Zhi Da; Tham Yih-Chung; Yang Henrik Hee Seung; Lee Geunyoung; Kim Younghan; Nusinovici Simon;**Ting Daniel Shu Wei**; Wong Tien Yin; Cheng Ching-Yu  
Deep Learning for Automated Sorting of Retinal Photographs.  
Ophthalmology. Retina 2020; 4(8):793-800 (Article; Published in Print) IF (2.3)
51. Sabanayagam Charumathi; Xu Dejiang;**Ting Daniel S W**; Nusinovici Simon; Banu Riswana; Hamzah Haslina; Lim Cynthia; Tham Yih-Chung; Cheung Carol Y; Tai E Shyong; Wang Ya Xing; Jonas Jost B; Cheng Ching-Yu; Lee Mong Li; Hsu Wynne; Wong Tien Y  
A deep learning algorithm to detect chronic kidney disease from retinal photographs in community-based populations.  
The Lancet. Digital health 2020; 2(6):e295-e302 (Article; Published in Print) IF (23.8)
52. Liu T Y Alvin;**Ting Daniel S W**; Yi Paul H; Wei Jinchi; Zhu Hongxi; Subramanian Prem S; Li Taibo; Hui Ferdinand K; Hager Gregory D; Miller Neil R  
Deep Learning and Transfer Learning for Optic Disc Laterality Detection: Implications for Machine Learning in Neuro-Ophthalmology.  
Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society 2020; 40(2):178-184 (Article; Published in Print) IF (3.2)
53. Tham Yih-Chung; Liu Lei; Rim Tyler Hyungtaek; Zhang Liang; Majithia Shivani; Chee Miao Li; Tan Nicholas Y Q; Wong Kah-Hie;**Ting Daniel Shu Wei**; Sabanayagam Charumathi; Wang Jie Jin; Mitchell Paul; Wong Tien Yin; Cheng Ching-Yu  
Association of Cataract Surgery With Risk of Diabetic Retinopathy Among Asian Participants in the Singapore Epidemiology of Eye Diseases Study.  
JAMA network open 2020; 3(6):e208035-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF 13.8
54. Milea Dan; Najjar Raymond P; Zhuo Jiang; **Ting Daniel**; Vasseneix Caroline; Xu Xinxing; Aghsaei Fard Masoud; Fonseca Pedro; Vanikieti Kavin; Lagrèze Wolf A; La Morgia Chiara; Cheung Carol Y; Hamann Steffen; Chiquet Christophe; Sanda Nicolae; Yang Hui; Mejico Luis J; Rougier Marie-Bénédicte; Kho Richard; Thi Ha Chau Tran; Singhal Shweta; Gohier Philippe; Clermont-Vignal Catherine; Cheng Ching-Yu; Jonas Jost B; Yu-Wai-Man Patrick; Fraser Clare L; Chen John J; Ambika Selvakumar; Miller Neil R; Liu Yong; Newman Nancy J; Wong Tien Y; Biousse Valérie;  
Artificial Intelligence to Detect Papilledema from Ocular Fundus Photographs.  
The New England journal of medicine 2020; 382(18):1687-1695 (Article; Published in Print)
55. Fenner Beau J;**Ting Daniel S W**; Tan Anna C S; Teo Kelvin; Chan Choi Mun; Mathur Ranjana; Yeo Ian Y S; Wong Tien Y; Wong Edmund Y M; Cheung Chui Ming Gemmy  
Real-World Treatment Outcomes of Age-Related Macular Degeneration and Polypoidal Choroidal Vasculopathy in Asians.  
Ophthalmology. Retina 2020; 4(4):403-414 (Article; Published in Print) IF(4.5)

56. Bhuiyan Alauddin; Wong Tien Yin; **Ting Daniel Shu Wei**; Govindaiah Arun; Souied Eric H; Smith R Theodore  
Artificial Intelligence to Stratify Severity of Age-Related Macular Degeneration (AMD) and Predict Risk of Progression to Late AMD.  
Translational vision science & technology 2020; 9(2):25-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (3.2)
57. **Ting Daniel S W**; Foo Valencia H X; Tan Tien-En; Sie Nicole M; Wong Chee Wai; Tsai Andrew S H; Tan Gavin S W; Lim Laurence S; Yeo Ian Y S; Wong Doric W K; Ong Sze Guan; Wong Edmund Y M; Ang Chong Lye; Lee Shu Yen  
25-years Trends and Risk factors related to Surgical Outcomes of Giant Retinal Tear-Rhegmatogenous Retinal Detachments.  
Scientific reports 2020; 10(1):5474-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (3.8)
58. Li Zhongwen; Guo Chong; Nie Danyao; Lin Duoru; Zhu Yi; Chen Chuan; Wu Xiaohang; Xu Fabao; Jin Chenjin; Zhang Xiayin; Xiao Hui; Zhang Kai; Zhao Lanqin; Yan Pisong; Lai Weiyi; Li Jianyin; Feng Weibo; Li Yonghao; **Wei Ting Daniel Shu**; Lin Haotian  
Deep learning for detecting retinal detachment and discerning macular status using ultra-widefield fundus images.  
Communications biology 2020; 3(1):15-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (5.6)
59. Biousse Valérie; Newman Nancy J; Najjar Raymond P; Vasseneix Caroline; Xu Xinxing; **Ting Daniel S**; Milea Léonard B; Hwang Jeong-Min; Kim Dong Hyun; Yang Hee Kyung; Hamann Steffen; Chen John J; Liu Yong; Wong Tien Yin; Milea Dan;  
Optic Disc Classification by Deep Learning versus Expert Neuro-Ophthalmologists.  
Annals of neurology 2020; 88(4):785-795 (Article; Published in Print) IF (11.2)
60. Yip Michelle Y T; Lim Gilbert; Lim Zhan Wei; Nguyen Quang D; Chong Crystal C Y; Yu Marco; Bellemo Valentina; Xie Yuchen; Lee Xin Qi; Hamzah Haslina; Ho Jinyi; Tan Tien-En; Sabanayagam Charumathi; Grzybowski Andrzej; Tan Gavin S W; Hsu Wynne; Lee Mong Li; Wong Tien Yin; **Ting Daniel S W**  
Technical and imaging factors influencing performance of deep learning systems for diabetic retinopathy.  
NPJ digital medicine 2020; 3:40-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
61. Sun Christopher; Ladores Carlo; Hong Jimmy; Nguyen Duc Quang; Chua Jacqueline; **Ting Daniel**; Schmetterer Leopold; Wong Tien Yin; Cheng Ching-Yu; Tan Anna C S  
Systemic hypertension associated retinal microvascular changes can be detected with optical coherence tomography angiography.  
Scientific reports 2020; 10(1):9580-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (3.8)
62. Huang Ching-Yen; Kuo Ren-Jieh; Li Cheng-Han; **Ting Daniel S**; Kang Eugene Yu-Chuan; Lai Chi-Chun; Tseng Hsiao-Jung; Yang Lan-Yan; Wu Wei-Chi  
Prediction of visual outcomes by an artificial neural network following intravitreal injection and laser therapy for retinopathy of prematurity.  
The British journal of ophthalmology 2020; 104(9):1277-1282 (Article; Published in Print) IF (3.8)

63. Li Fei; Song Diping; Chen Han; Xiong Jian; Li Xingyi; Zhong Hua; Tang Guangxian; Fan Sujie; Lam Dennis S C; Pan Weihua; Zheng Yajuan; Li Ying; Qu Guoxiang; He Junjun; Wang Zhe; Jin Ling; Zhou Rouxi; Song Yunhe; Sun Yi; Cheng Weijing; Yang Chunman; Fan Yazhi; Li Yingjie; Zhang Hengli; Yuan Ye; Xu Yang; Xiong Yunfan; Jin Lingfei; Lv Aiguo; Niu Lingzhi; Liu Yuhong; Li Shaoli; Zhang Jiani; Zangwill Linda M; Frangi Alejandro F; Aung Tin; Cheng Ching-Yu; Qiao Yu; Zhang Xiulan;**Ting Daniel S W**  
Development and clinical deployment of a smartphone-based visual field deep learning system for glaucoma detection.  
NPJ digital medicine 2020; 3:123-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
64. Xie Yuchen; Nguyen Quang D; Hamzah Haslina; Lim Gilbert; Bellemo Valentina; Gunasekeran Dinesh V; Yip Michelle Y T; Qi Lee Xin; Hsu Wynne; Li Lee Mong; Tan Colin S; Tym Wong Hon; Lamoureux Ecosse L; Tan Gavin S W; Wong Tien Y; Finkelstein Eric A;**Ting Daniel S W**  
Artificial intelligence for teleophthalmology-based diabetic retinopathy screening in a national programme: an economic analysis modelling study.  
The Lancet. Digital health 2020; 2(5):e240-e249 (Article; Published in Print) IF 23.8
65. Campbell Cara G;**Ting Daniel S W**; Keane Pearse A; Foster Paul J  
The potential application of artificial intelligence for diagnosis and management of glaucoma in adults.  
British medical bulletin 2020; 134(1):21-33 (Article; Published in Print) IF (7.8)
- 6 Du Ran; Xie Shiqi; Fang Yuxin; Igarashi-Yokoi Tae; Moriyama Muka; Ogata Satoko; Tsunoda Tatsuhiko; Kamatani Takashi; Yamamoto Shinji; Cheng Ching-Yu; Saw Seang-Mei;**Ting Daniel**; Wong Tien Y; Ohno-Matsui Kyoko  
Deep Learning Approach for Automated Detection of Myopic Maculopathy and Pathologic Myopia in Fundus Images. Ophthalmology. Retina 2021; 5(12):1235-1244 (Article; Published in Print) IF (4.5)
67. Xu Fabao; Wan Cheng; Zhao Lanqin; You Qijing; Xiang Yifan; Zhou Lijun; Li Zhongwen; Gong Songjian; Zhu Yi; Chen Chuan; Li Cong; Zhang Li; Guo Chong; Li Longhui; Gong Yajun; Zhang Xiayin; Lai Kunbei; Huang Chuangxin; Zhao Hongkun;**Ting Daniel**; Jin Chenjin; Lin Haotian  
Predicting Central Serous Chorioretinopathy Recurrence Using Machine Learning.  
Frontiers in physiology 2021; 12:649316-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (4.1)
68. Xu Fabao; Wan Cheng; Zhao Lanqin; Liu Shaopeng; Hong Jiaming; Xiang Yifan; You Qijing; Zhou Lijun; Li Zhongwen; Gong Songjian; Zhu Yi; Chen Chuan; Zhang Li; Gong Yajun; Li Longhui; Li Cong; Zhang Xiayin; Guo Chong; Lai Kunbei; Huang Chuangxin;**Ting Daniel**; Lin Haotian; Jin Chenjin  
Predicting Post-Therapeutic Visual Acuity and OCT Images in Patients With Central Serous Chorioretinopathy by Artificial Intelligence.  
Frontiers in bioengineering and biotechnology 2021; 9:649221-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF(4.3)
69. Xu Y, Xu X, Jin L, Gao S, Goh RS,**Ting DSW**, Liu Y  
Partially-Supervised Learning for Vessel Segmentation in Ocular Images  
In International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI) 2021; NA:NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (n.a)

70. Li S, Sui X, Fu J, Fu H, Luo X, Feng Y, Xu X, Liu Y, **Ting DSW**, Goh RS.  
Few-Shot Domain Adaptation with Polymorphic Transformers  
In International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI) 2021; NA:NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (n.a)
71. Yang Lily Wei Yun; Ng Wei Yan; Foo Li Lian; Liu Yong; Yan Ming; Lei Xiaofeng; Zhang Xiaoman; **Ting Daniel Shu Wei**  
Deep learning-based natural language processing in ophthalmology: applications, challenges and future directions.  
Current opinion in ophthalmology 2021; 32(5):397-405 (Article; Published in Print) IF(3,8)
72. Liu T Y Alvin; Wei Jinchi; Zhu Hongxi; Subramanian Prem S; Myung David; Yi Paul H; Hui Ferdinand K; Unberath Mathias; **Ting Daniel S W**; Miller Neil R  
Detection of Optic Disc Abnormalities in Color Fundus Photographs Using Deep Learning.  
Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society 2021; 41(3):368-374 (Article; Published in Print) IF (3.2)
73. Lin Duoru; Xiong Jianhao; Liu Congxin; Zhao Lanqin; Li Zhongwen; Yu Shanshan; Wu Xiaohang; Ge Zongyuan; Hu Xinyue; Wang Bin; Fu Meng; Zhao Xin; Wang Xin; Zhu Yi; Chen Chuan; Li Tao; Li Yonghao; Wei Wenbin; Zhao Mingwei; Li Jianqiao; Xu Fan; Ding Lin; Tan Gang; Xiang Yi; Hu Yongcheng; Zhang Ping; Han Yu; Li Ji-Peng Olivia; Wei Lai; Zhu Pengzhi; Liu Yizhi; Chen Weirong; **Ting Daniel S W**; Wong Tien Y; Chen Yuzhong; Lin Haotian  
Application of Comprehensive Artificial intelligence Retinal Expert (CARE) system: a national real-world evidence study.  
The Lancet. Digital health 2021; 3(8):e486-e495 (Article; Published in Print) IF 23.8
74. Rim Tyler Hyungtaek; Lee Aaron Y; **Ting Daniel S**; Teo Kelvin; Betzler Bjorn Kaijun; Teo Zhen Ling; Yoo Tea Keun; Lee Geunyoung; Kim Youngnam; Lin Andrew C; Kim Seong Eun; Tham Yih Chung; Kim Sung Soo; Cheng Ching-Yu; Wong Tien Yin; Cheung Chui Ming Gemmy  
Detection of features associated with neovascular age-related macular degeneration in ethnically distinct data sets by an optical coherence tomography: trained deep learning algorithm.  
The British journal of ophthalmology 2021; 105(8):1133-1139 (Article; Published in Print) IF (3.8)
75. Tang Fangyao; Wang Xi; Ran An-Ran; Chan Carmen K M; Ho Mary; Yip Wilson; Young Alvin L; Lok Jerry; Szeto Simon; Chan Jason; Yip Fanny; Wong Raymond; Tang Ziqi; Yang Dawei; Ng Danny S; Chen Li Jia; Brelén Marten; Chu Victor; Li Kenneth; Lai Tracy H T; Tan Gavin S; **Ting Daniel S W**; Huang Haifan; Chen Haoyu; Ma Jacey Hongjie; Tang Shibo; Leng Theodore; Kakavand Schahrouz; Mannil Suria S; Chang Robert T; Liew Gerald; Gopinath Bamini; Lai Timothy Y Y; Pang Chi Pui; Scanlon Peter H; Wong Tien Yin; Tham Clement C; Chen Hao; Heng Pheng-Ann; Cheung Carol Y  
A Multitask Deep-Learning System to Classify Diabetic Macular Edema for Different Optical Coherence Tomography Devices: A Multicenter Analysis.  
Diabetes care 2021; 44(9):2078-2088 (Article; Published in Print) IF (14.8)
76. Vasseneix Caroline; Najjar Raymond P; Xu Xinxing; Tang Zhiqun; Loo Jing Liang; Singhal Shweta; Tow Sharon; Milea Leonard; **Ting Daniel Shu Wei**; Liu Yong; Wong Tien Y; Newman Nancy J; Biousse Valerie; Milea Dan;

Accuracy of a Deep Learning System for Classification of Papilledema Severity on Ocular Fundus Photographs.

Neurology 2021; 97(4):e369-e377 (Article; Published in Print) IF (8.0)

77. Chen Huan; Pan Xuefeng; Yang Jingyuan; Fan Jing; Qin Mingwei; Sun Hu; Liu Jinxin; Li Na;**Ting Daniel Shu Wei**; Chen Youxin  
Application of 5G Technology to Conduct Real-Time Teleretinal Laser Photocoagulation for the Treatment of Diabetic Retinopathy.  
JAMA ophthalmology 2021; 139(9):975-982 (Article; Published in Print) IF (7.8)
78. Yap Jonathan; Anbalakan Kamalesh; Tay Wan Ting;**Ting Daniel**; Cheung Carol Yim; Sabanayagam Charumathi; Cheng Ching-Yu; Wong Tien-Yin; Yeo Khung Keong  
Impact of type 2 diabetes and microvascular complications on mortality and cardiovascular outcomes in a multiethnic Asian population.  
BMJ open diabetes research & care 2021; 9(1):NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (4.1)
79. Ang Marcus; Devarajan Kavya; Tan Anna Cs; Ke Mengyuan; Tan Bingyao; Teo Kaiying; Sng Chelvin C A;**Ting Daniel S**; Schmetterer Leopold  
Anterior segment optical coherence tomography angiography for iris vasculature in pigmented eyes.  
The British journal of ophthalmology 2021; 105(7):929-934 (Article; Published in Print) IF (3.8)
80. Wu Xiaohang; Chen Jingjing; Yun Dongyuan; Yuan Meng; Liu Zhenzhen; Yan Pisong; Sim Dawn A; Zhu Yi; Chen Chuan; Hu Weiling; Wu Zijian; Lin Huaide; Wang Yandong; Wu Yanling; Chen Mingfei; Zhang Caoxian; Zheng Yongxin; Liu Xialin; Zhong Xingwu; Diao Hongxing;**Wei Ting Daniel Shu**; Gunasekeran Dinesh Visva; Li Yongqiang; Zhang Jie; Cai Yaobin; Lao Zhihao; Liu Yizhi; Wong Tien Yin; Lin Xiaofeng; Lin Haotian  
Effectiveness of an Ophthalmic Hospital-Based Virtual Service during the COVID-19 Pandemic.  
Ophthalmology 2021; 128(6):942-945 (Article; Published in Print) IF (19.8)
81. Cheung Carol Y; Xu Dejiang; Cheng Ching-Yu; Sabanayagam Charumathi; Tham Yih-Chung; Yu Marco; Rim Tyler Hyungtaek; Chai Chew Yian; Gopinath Bamini; Mitchell Paul; Poulton Richie; Moffitt Terrie E; Caspi Avshalom; Yam Jason C; Tham Clement C; Jonas Jost B; Wang Ya Xing; Song Su Jeong; Burrell Louise M; Farouque Omar; Li Ling Jun; Tan Gavin;**Ting Daniel S W**; Hsu Wynne; Lee Mong Li; Wong Tien Y  
A deep-learning system for the assessment of cardiovascular disease risk via the measurement of retinal-vessel calibre.  
Nature biomedical engineering 2021; 5(6):498-508 (Article; Published in Print) IF (29.2 )
82. Tey Kai Yuan; Wong Qiu Ying; Dan Yee Shan; Tsai Andrew S H;**Ting Daniel S W**; Ang Marcus; Cheung Gemmy Chiu Ming; Lee Shu Yen; Wong Tien Yin; Hoang Quan V; Wong Chee Wai  
Association of Aberrant Posterior Vitreous Detachment and Pathologic Tractional Forces With Myopic Macular Degeneration.  
Investigative ophthalmology & visual science 2021; 62(7):7-N.A. (Article; E-Published Only (Never in Print)/E-collection)
83. Valikodath Nita G; Al-Khaled Tala; Cole Emily;**Ting Daniel S W**; Tu Elmer Y; Campbell J Peter; Chiang Michael F; Hallak Joelle A; Chan R V Paul  
Evaluation of pediatric ophthalmologists' perspectives of artificial intelligence in ophthalmology.



Journal of AAPOS : the official publication of the American Association for Pediatric Ophthalmology and Strabismus 2021; 25(3):164.e1-164.e5 (Article; Published in Print) IF (2.1)

84. Rim Tyler Hyungtaek; Lee Chan Joo; Tham Yih-Chung; Cheung Ning; Yu Marco; Lee Geunyoung; Kim Youngnam;**Ting Daniel S W**; Chong Crystal Chun Yuen; Choi Yoon Seong; Yoo Tae Keun; Ryu Ik Hee; Baik Su Jung; Kim Young Ah; Kim Sung Kyu; Lee Sang-Hak; Lee Byoung Kwon; Kang Seok-Min; Wong Edmund Yick Mun; Kim Hyeon Chang; Kim Sung Soo; Park Sungha; Cheng Ching-Yu; Wong Tien Yin  
Deep-learning-based cardiovascular risk stratification using coronary artery calcium scores predicted from retinal photographs.  
The Lancet. Digital health 2021; 3(5):e306-e316 (Article; Published in Print) IF 23.8
85. Tan Tien-En; Anees Ayesha; Chen Cheng; Li Shaohua; Xu Xinxing; Li Zengxiang; Xiao Zhe; Yang Yechao; Lei Xiaofeng; Ang Marcus; Chia Audrey; Lee Shu Yen; Wong Edmund Yick Mun; Yeo Ian Yew San; Wong Yee Ling; Hoang Quan V; Wang Ya Xing; Bikbov Mukharram M; Nangia Vinay; Jonas Jost B; Chen Yen-Po; Wu Wei-Chi; Ohno-Matsui Kyoko; Rim Tyler Hyungtaek; Tham Yih-Chung; Goh Rick Siow Mong; Lin Haotian; Liu Hanruo; Wang Ningli; Yu Weihong; Tan Donald Tiang Hwee; Schmetterer Leopold; Cheng Ching-Yu; Chen Youxin; Wong Chee Wai; Cheung Gemmy Chui Ming; Saw Seang-Mei; Wong Tien Yin; Liu Yong;  
**Ting Daniel Shu Wei**  
Retinal photograph-based deep learning algorithms for myopia and a blockchain platform to facilitate artificial intelligence medical research: a retrospective multicohort study.  
The Lancet. Digital health 2021; 3(5):e317-e329 (Article; Published in Print) IF 23.8
86. Li Wangting; Wang Xiaoli; Yang Yahan; Zhao Lanqin; Lin Duoru; Wang Jinghui; Zhu Yi; Chen Chuan; Liu Zhenzhen; Wu Xiaohang; Zhang Xiayin; Wang Ruixin; Li Ruiyang;**Ting Daniel Shu Wei**; Huang Wenyong; Lin Haotian  
The associations of population mobility in HIV disease severity and mortality rate in China.  
Annals of translational medicine 2021; 9(4):315-N.A. (Article; Published in Print) IF (3.9)
87. Yang Yahan; Li Ruiyang;**Ting Daniel**; Wu Xiaohang; Huang Jialing; Zhu Yi; Chen Chuan; Lin Bingsen; Li Sijin; Zhang Xinliang; Chen Kexin; Yu Tongyong; Wu Dongxuan; Mo Zijun; Wang Hongxi; Li Shiqun; Lin Haotian  
The associations of high academic performance with childhood ametropia prevalence and myopia development in China.  
Annals of translational medicine 2021; 9(9):745-N.A. (Article; Published in Print) IF (3.9)
88. Sounderajah Viknesh; Ashrafian Hutan; Golub Robert M; Shetty Shravya; De Fauw Jeffrey; Hooft Lotty; Moons Karel; Collins Gary; Moher David; Bossuyt Patrick M; Darzi Ara; Karthikesalingam Alan; Denniston Alastair K; Mateen Bilal Akhter;**Ting Daniel**; Treanor Darren; King Dominic; Greaves Felix; Godwin Jonathan; Pearson-Stuttard Jonathan; Harling Leanne; McInnes Matthew; Rifai Nader; Tomasev Nenad; Normahani Pasha; Whiting Penny; Aggarwal Ravi; Vollmer Sebastian; Markar Sheraz R; Panch Trishan; Liu Xiaoxuan;  
Developing a reporting guideline for artificial intelligence-centred diagnostic test accuracy studies: the STARD-AI protocol.  
BMJ open 2021; 11(6):e047709-NA (Article; E-Published Only (Never in Print)/E-collection) IF 2.4
89. Zhang Xiayin; Xiao Hui; Liu Chunxin; Zhao Lanqin; Wang Jinghui; Li Haiquan; Wang Ruixin; Zhu Yi; Chen Chuan; Wu Xiaohang; Lin Duoru; Wang Jingqi; Liu Xing; Qiu Wei; Yu-Wai-Man Patrick;**Ting Daniel S**; Lin Haotian

Comparison of macular structural and vascular changes in neuromyelitis optica spectrum disorder and primary open angle glaucoma: a cross-sectional study.  
The British journal of ophthalmology 2021; 105(3):354-360 (Article; Published in Print) IF (3.8)

90. Sreejith Kumar Ashish Jith; Chong Rachel S; Crowston Jonathan G; Chua Jacqueline; Bujor Inna; Husain Rahat; Vithana Eranga N; Girard Michaël J A;**Ting Daniel S W**; Cheng Ching-Yu; Aung Tin; Popa-Cherecheanu Alina; Schmetterer Leopold; Wong Damon  
Evaluation of Generative Adversarial Networks for High-Resolution Synthetic Image Generation of Circumpapillary Optical Coherence Tomography Images for Glaucoma.  
JAMA ophthalmology 2022; 140(10):974-981 (Article; Published in Print) IF (7.8)
91. Gunasekeran Dinesh V; Zheng Feihui; Lim Gilbert Y S; Chong Crystal C Y; Zhang Shihao; Ng Wei Yan; Keel Stuart; Xiang Yifan; Park Ki Ho; Park Sang Jun; Chandra Aman; Wu Lihteh; Campbel J Peter; Lee Aaron Y; Keane Pearse A; Denniston Alastair; Lam Dennis S C; Fung Adrian T; Chan Paul R V; Sadda SriniVas R; Loewenstein Anat; Grzybowski Andrzej; Fong Kenneth C S; Wu Wei-Chi; Bachmann Lucas M; Zhang Xiulan; Yam Jason C; Cheung Carol Y; Pongsachareonnont Pear; Ruamviboonsuk Paisan; Raman Rajiv; Sakamoto Taiji; Habash Ranya; Girard Michael; Milea Dan; Ang Marcus; Tan Gavin S W; Schmetterer Leopold; Cheng Ching-Yu; Lamoureux Ecosse; Lin Haotian; van Wijngaarden Peter; Wong Tien Y;**Ting Daniel S W**  
Acceptance and Perception of Artificial Intelligence Usability in Eye Care (APPRAISE) for Ophthalmologists: A Multinational Perspective.  
Frontiers in medicine 2022; 9:875242-N.A (Article; E-Published Only (Never in Print)/E-collection) IF (5.0)
92. Ferraz Daniel Araújo; Guan Zeyu; Costa Edinilson A; Martins Eduardo; Keane Pearse A;**Ting Daniel Shu Wei**; Belfort Rubens; Scherer Rafael; Koh Victor; Muccioli Cristina  
Proposal of a new slit-lamp shield for ophthalmic examination and assessment of its effectiveness using computational simulations.  
Arquivos brasileiros de oftalmologia 2022; 9:N.A.-N.A. (Article; E-Published Only (Never in Print)/E-collection)
93. Ning Yilin; Ong Marcus Eng Hock; Chakraborty Bibhas; Goldstein Benjamin Alan;**Ting Daniel Shu Wei**; Vaughan Roger; Liu Nan  
Shapley variable importance cloud for interpretable machine learning.  
Patterns (New York, N.Y.) 2022; 3(4):100452-N.A. (Article; E-Published Only (Never in Print)/E-collection)
94. Li Fei; Yang Yifan; Sun Xu; Qiu Zhen; Zhang Shihao; Tun Tin Aung; Mani Baskaran; Nongpiur Monisha Esther; Chansangpetch Sunee; Ratanawongphaibul Kitiya; Manassakorn Anita; Tantisevi Visanee; Rojanapongpun Prin; Lin Fengbin; Cheng Weijing; Zhou Rouxi; Liu Yuhong; Chen Yu; Xiong Jian; Tan Mingkui; Aung Tin; Xu Yanwu;**Ting Daniel S W**; Zhang Xiulan  
Digital Gonioscopy Based on Three-dimensional Anterior-Segment OCT: An International Multicenter Study.  
Ophthalmology 2022; 129(1):45-53 (Article; Published in Print)
95. Yang Yahan; Chen Wenben; Xu Andi; Zhao Lanqin; Ding Xiaohu; Li Jiawei; Zhu Yi; Chen Chuan; Long Erping; Liu Zhenzhen; Wang Xun; Li Xuelong; Zhang Xingying; Jiang Zhiyu; He Huagui; Wang Guojun; Jin Ling; Liao Huipeng; Yun Dongyuan; Yu-Wai-Man Patrick; Yan Pisong; Wang Ruixin; Li Zhongwen; Xie Yi; Liu Yuantao; Wang Xiaodan; Zhang Qingling;

- Wang Jiantao; Nie Danyao; Zhang Shaochong; **Ting Daniel Shu Wei**; Wong Tien Yin; He Mingguang; Liu Yizhi; Morgan Ian George; Lin Haotian  
Spatial Technology Assessment of Green Space Exposure and Myopia.  
Ophthalmology 2022; 129(1):113-117 (Article; Published in Print) IF (12.8)
96. Xiong Jian; Li Fei; Song Diping; Tang Guangxian; He Junjun; Gao Kai; Zhang Hengli; Cheng Weijing; Song Yunhe; Lin Fengbin; Hu Kun; Wang Peiyuan; Olivia Li Ji-Peng; Aung Tin; Qiao Yu; Zhang Xiulan;**Ting Daniel**  
Multimodal Machine Learning Using Visual Fields and Peripapillary Circular OCT Scans in Detection of Glaucomatous Optic Neuropathy.  
Ophthalmology 2022; 129(2):171-180 (Article; Published in Print) IF (12.8)
97. Rim Tyler Hyungtaek; Lee Aaron Yuntai;**Ting Daniel S**; Teo Kelvin Yi Chong; Yang Hee Seung; Kim Hyeonmin; Lee Geunyoung; Teo Zhen Ling; Teo Wei Jun Alvin; Takahashi Kengo; Yoo Tea Keun; Kim Sung Eun; Yanagi Yasuo; Cheng Ching-Yu; Kim Sung Soo; Wong Tien Yin; Cheung Chui Ming Gemmy  
Computer-aided detection and abnormality score for the outer retinal layer in optical coherence tomography.  
The British journal of ophthalmology 2022; 106(9):1301-1307 (Article; Published in Print) IF (3.8)
98. Sim Ralene; Cheung Gemmy;**Ting Daniel**; Wong Edmund; Wong Tien Yin; Yeo Ian; Wong Chee Wai  
Retinal microvascular signs in COVID-19.  
The British journal of ophthalmology 2022; 106(9):1308-1312 (Article; Published in Print) IF (3.8)
99. Vasey Baptiste; Nagendran Myura; Campbell Bruce; Clifton David A; Collins Gary S; Denaxas Spiros; Denniston Alastair K; Faes Livia; Geerts Bart; Ibrahim Mudathir; Liu Xiaoxuan; Mateen Bilal A; Mathur Piyush; McCradden Melissa D; Morgan Lauren; Ordish Johan; Rogers Campbell; Saria Suchi;**Ting Daniel S W**; Watkinson Peter; Weber Wim; Wheatstone Peter; McCulloch Peter;  
Reporting guideline for the early-stage clinical evaluation of decision support systems driven by artificial intelligence: DECIDE-AI.  
Nature medicine 2022; 28(5):924-933 (Article; Published in Print)
100. Wang Zhaoran; Lim Gilbert; Ng Wei Yan; Tan Tien-En; Lim Jane; Lim Sing Hui; Foo Valencia; Lim Joshua; Sinisterra Laura Gutierrez; Zheng Feihui; Liu Nan; Tan Gavin Siew Wei; Cheng Ching-Yu; Cheung Gemmy Chui Ming; Wong Tien Yin;**Ting Daniel Shu Wei**  
Synthetic artificial intelligence using generative adversarial network for retinal imaging in detection of age-related macular degeneration.  
Frontiers in medicine 2023; 10:1184892-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (5.0)
101. Vasseneix Caroline; Nusinovici Simon; Xu Xinxing; Hwang Jeong-Min; Hamann Steffen; Chen John J; Loo Jing Liang; Milea Leonard; Tan Kenneth B K;**Ting Daniel S W**; Liu Yong; Newman Nancy J; Biousse Valerie; Wong Tien Ying; Milea Dan; Najjar Raymond P;  
Deep Learning System Outperforms Clinicians in Identifying Optic Disc Abnormalities.  
Journal of neuro-ophthalmology : the official journal of the North American Neuro-Ophthalmology Society 2023; 43(2):159-167 (Article; E-Published Only (Never in Print)/E-collection) IF (3.2)

102. Xie Feng; Ning Yilin; Liu Mingxuan; Li Siqi; Safari Seyed Ehsan; Yuan Han; Volovici Victor;**Ting Daniel Shu Wei**; Goldstein Benjamin Alan; Ong Marcus Eng Hock; Vaughan Roger; Chakraborty Bibhas; Liu Nan  
A universal AutoScore framework to develop interpretable scoring systems for predicting common types of clinical outcomes.  
STAR protocols 2023; 4(2):102302-N.A. (Article; E-Published Only (Never in Print)/E-collection)
103. Yang Lily Wei Yun; Ng Wei Yan; Lei Xiaofeng; Tan Shaun Chern Yuan; Wang Zhaoran; Yan Ming; Pargi Mohan Kashyap; Zhang Xiaoman; Lim Jane Sujuan; Gunasekeran Dinesh Visva; Tan Franklin Chee Ping; Lee Chen Ee; Yeo Khung Keong; Tan Hiang Khoon; Ho Henry Sun Sien; Tan Benedict Wee Bor; Wong Tien Yin; Kwek Kenneth Yung Chiang; Goh Rick Siow Mong; Liu Yong;**Ting Daniel Shu Wei**  
Development and testing of a multi-lingual Natural Language Processing-based deep learning system in 10 languages for COVID-19 pandemic crisis: A multi-center study.  
Frontiers in public health 2023; 11:1063466-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (4.8)
104. Foo Li Lian; Lim Gilbert Yong San; Lanca Carla; Wong Chee Wai; Hoang Quan V; Zhang Xiu Juan; Yam Jason C; Schmetterer Leopold; Chia Audrey; Wong Tien Yin;**Ting Daniel S W**; Saw Seang-Mei; Ang Marcus  
Deep learning system to predict the 5-year risk of high myopia using fundus imaging in children.  
NPJ digital medicine 2023; 6(1):10-N.A (Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
105. Tan Jamaica Pei Ying; Tan Michelle W J; Towle Rachel Marie; Lee Joanne Sze Win; Lei Xiaofeng; Liu Yong; Goh Rick Siow Mong; Chee Ping Franklin Tan; Tan Teck Choon;**Ting Daniel Shu Wei**; Lee Chen Ee; Low Lian Leng  
mHealth App to Facilitate Remote Care for Patients With COVID-19: Rapid Development of the DrCovid+ App.  
JMIR formative research 2023; 7:e38555-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (2.0)
106. Wang Yining; Du Ran; Xie Shiqi; Chen Changyu; Lu Hongshuang; Xiong Jianping;**Ting Daniel S W**; Uramoto Kengo; Kamoi Koji; Ohno-Matsui Kyoko  
Machine Learning Models for Predicting Long-Term Visual Acuity in Highly Myopic Eyes.  
JAMA ophthalmology 2023; 141(12):1117-1124 (Article; E-Published Ahead of Print) IF (7.8)
107. Tan Ting Fang; Thirunavukarasu Arun James; Campbell J Peter; Keane Pearse A; Pasquale Louis R; Abramoff Michael D; Kalpathy-Cramer Jayashree; Lum Flora; Kim Judy E; Baxter Sally L;**Ting Daniel Shu Wei**  
Generative Artificial Intelligence Through ChatGPT and Other Large Language Models in Ophthalmology: Clinical Applications and Challenges.  
Ophthalmology science 2023; 3(4):100394-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (3.2)
108. Li Yong; Yip Michelle; Ning Yilin; Chung Joey; Toh Angeline; Leow Cheryl; Liu Nan;**Ting Daniel**; Schmetterer Leopold; Saw Seang-Mei; Jonas Jost B; Chia Audrey; Ang Marcus  
Topical Atropine for Childhood Myopia Control: The Atropine Treatment Long-Term Assessment Study.  
JAMA ophthalmology 2023; NA:NA-NA (Article; E-Published Ahead of Print) IF(7.8)

109. Man Ryan Eyn Kidd; Ho Aricia Xin Yi; Lee Ester Pei Xuan; Fenwick Eva Katie Diana; Aravindhan Amudha; Ho Kam Chun; Wei Tan Gavin Siew;**Wei Ting Daniel Shu**; Wong Tien Yin; Yeo Khung Keong; Goh Su-Yen; Gupta Preeti; Lamoureux Ecosse Luc  
Awareness and attitudes of elderly Southeast Asian adults towards telehealth during the COVID-19 pandemic: a qualitative study.  
Singapore medical journal 2023; NA:N.A.-N.A. (Article; E-Published Ahead of Print) IF (3.33)
110. Gao Yan; Soh Nicholas Yock Teck; Liu Nan; Lim Gilbert;**Ting Daniel**; Cheng Lionel Tim-Ee; Wong Kang Min; Liew Charlene; Oh Hong Choon; Tan Jin Rong; Venkataraman Narayan; Goh Siang Hiong; Yan Yet Yen  
Application of a deep learning algorithm in the detection of hip fractures.  
iScience 2023; 26(8):107350-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (5.8)
111. Verma Tanvi; Jin Liyuan; Zhou Jun; Huang Jia; Tan Mingrui; Choong Benjamin Chen Ming; Tan Ting Fang; Gao Fei; Xu Xinxing;**Ting Daniel S**; Liu Yong  
Privacy-preserving continual learning methods for medical image classification: a comparative analysis.  
Frontiers in medicine 2023; 10:1227515-NA (Article; E-Published Only (Never in Print)/E-collection) IF (5.0)
112. Bhatnagar Anshul;**Ting Daniel S W**; Weng Christina Y  
Treatment Options for Diabetic Macular Edema.  
International ophthalmology clinics 2024; 64(1):57-69 (Article; E-Published Ahead of Print) IF (0.9)
113. Tan Jin Rong; Gao Yan; Raghuraman Raghavan;**Ting Daniel**; Wong Kang Min; Cheng Lionel Tim-Ee; Oh Hong Choon; Goh Siang Hiong; Yan Yet Yen  
Application of deep learning algorithms in classification and localization of implant cutout for the postoperative hip.  
Skeletal radiology 2024; NA:NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (2.1)
114. Elangovan Kabilan; Lim Gilbert;**Ting Daniel**  
A comparative study of an on premise AutoML solution for medical image classification.  
Scientific reports 2024; 14(1):10483-NA (Article; E-Published Only (Never in Print)/E-collection) IF (3.8)
115. Bellemo Valentina; Kumar Das Ankit; Sreng Syna; Chua Jacqueline; Wong Damon; Shah Janika; Jonas Rahul; Tan Bingyao; Liu Xinyu; Xu Xinxing; Tan Gavin Siew Wei; Agrawal Rupesh;**Ting Daniel Shu Wei**; Yong Liu; Schmetterer Leopold  
Optical coherence tomography choroidal enhancement using generative deep learning.  
NPJ digital medicine 2024; 7(1):115-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
116. Biousse Valérie; Najjar Raymond P; Tang Zhiqun; Lin Mung Yan; Wright David W; Keadey Matthew T; Wong Tien Y; Bruce Beau B; Milea Dan; Newman Nancy J;**BONSAI Study Group**.  
Application of a Deep Learning System to Detect Papilledema on Nonmydriatic Ocular Fundus Photographs in an Emergency Department.  
American journal of ophthalmology 2024; 261:199-207 (Article; Published in Print) IF (4.3)
117. Shi Danli; Zhou Yukun; He Shuang; Wagner Siegfried K; Huang Yu; Keane Pearse A;**Ting Daniel S W**; Zhang Lei; Zheng Yingfeng; He Mingguang

Cross-modality Labeling Enables Noninvasive Capillary Quantification as a Sensitive Biomarker for Assessing Cardiovascular Risk.

Ophthalmology science 2024; 4(3):100441-NA (Article; E-Published Only (Never in Print)/E-collection) IF (3.2)

118. Wu Xiaohang; Wu Yuxuan; Tu Zhenjun; Cao Zizheng; Xu Miaohong; Xiang Yifan; Lin Duoru; Jin Ling; Zhao Lanqin; Zhang Yingzhe; Liu Yu; Yan Pisong; Hu Weiling; Liu Jiali; Liu Lixue; Wang Xun; Wang Ruixin; Chen Jieying; Xiao Wei; Shang Yuanjun; Xie Peichen; Wang Dongni; Zhang Xulin; Dongye Meimei; Wang Chenxinqi;**Ting Daniel Shu Wei**; Liu Yizhi; Pan Rong; Lin Haotian  
Cost-effectiveness and cost-utility of a digital technology-driven hierarchical healthcare screening pattern in China.  
Nature communications 2024; 15(1):3650-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (16.1)
119. Thirunavukarasu Arun James; Mahmood Shathar; Malem Andrew; Foster William Paul; Sanghera Rohan; Hassan Refaat; Zhou Sean; Wong Shiao Wei; Wong Yee Ling; Chong Yu Jeat; Shakeel Abdullah; Chang Yin-Hsi; Tan Benjamin Kye Jyn; Jain Nikhil; Tan Ting Fang; Raaz Saaeha;**Ting Daniel Shu Wei**; Ting Darren Shu Jeng  
Large language models approach expert-level clinical knowledge and reasoning in ophthalmology: A head-to-head cross-sectional study.  
PLOS digital health 2024; 3(4):e0000341-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (2.9)
120. Lim Jane S; Tan Shayne S; Yeo Yi Lin; Hong Merrelynn; Teo Alvin W J; Lee Yi Fang;**Ting Daniel S W**; Aung Tin; Husain Rahat  
Replacing the postoperative week 1 visit after routine phacoemulsification with a telephone consult.  
Canadian journal of ophthalmology. Journal canadien d'ophtalmologie 2024; NA:NA-NA (Article; E-Published Only (Never in Print)/E-collection) IF (3.3)
121. Foo Valencia Hui Xian; Lim Gilbert Y S; Liu Yu-Chi; Ong Hon Shing; Wong Evan; Chan Stacy; Wong Jipson; Mehta Jodhbir S;**Ting Daniel S W**; Ang Marcus  
Deep learning for detection of Fuchs endothelial dystrophy from widefield specular microscopy imaging: a pilot study.  
Eye and vision (London, England) 2024; 11(1):11-NA (Article; E-Published Only (Never in Print)/E-collection) IF (4.45)
122. Xu Yueyuan; Jiang Zehua;**Ting Daniel Shu Wei**; Kow Alfred Wei Chieh; Bello Fernando; Car Josip; Tham Yih-Chung; Wong Tien Yin  
Medical education and physician training in the era of artificial intelligence.  
Singapore medical journal 2024; 65(3):159-166 (Article; E-Published Only (Never in Print)/E-collection) IF (3.33)
123. Lin Mung Yan; Najjar Raymond P; Tang Zhiqun; Cioplean Daniela; Dragomir Mihaela; Chia Audrey; Patil Ajay; Vasseneix Caroline; Peragallo Jason H; Newman Nancy J; Biousse Valérie; Milea Dan;**BONSAI (Brain and Optic Nerve Study with Artificial Intelligence) group**  
The BONSAI (Brain and Optic Nerve Study with Artificial Intelligence) deep learning system can accurately identify pediatric papilledema on standard ocular fundus photographs.  
Journal of AAPOS : the official publication of the American Association for Pediatric Ophthalmology and Strabismus 2024; 28(1):103803-N.A. (Article; E-Published Only (Never in Print)/E-collection) IF (2.1)

124. Wang Yan; Zhen Liangli; Tan Tien-En; Fu Huazhu; Feng Yangqin; Wang Zizhou; Xu Xinxing; Goh Rick Siow Mong; Ng Yipin; Calhoun Claire; Tan Gavin Siew Wei; Sun Jennifer K; Liu Yong;**Ting Daniel Shu Wei**  
Geometric Correspondence-Based Multimodal Learning for Ophthalmic Image Analysis.  
IEEE transactions on medical imaging 2024; 43(5):1945-1957 (Article; E-Published Only (Never in Print)/E-collection) IF (10.6)

**(ii) Review Articles**

1. Ting Darren S J; Pollock Alex; Dutton Gordon N; Doubal Fergus N;**Ting Daniel S W**; Thompson Michelle; Dhillon Baljean  
Visual neglect following stroke: current concepts and future focus.  
Survey of ophthalmology 2011; 56(2):114-34 (Review Article; Published in Print) IF (5.9)
2. Sabanayagam Charumathi; Yip WanFen;**Ting Daniel S W**; Tan Gavin; Wong Tien Y  
Ten Emerging Trends in the Epidemiology of Diabetic Retinopathy.  
Ophthalmic epidemiology 2016; 23(4):209-22 (Review Article; Published in Print) IF(1.9)
3. **Ting Daniel Shu Wei**; Tan Kara-Anne; Phua Val; Tan Gavin Siew Wei; Wong Chee Wai; Wong Tien Yin  
Biomarkers of Diabetic Retinopathy.  
Current diabetes reports 2016; 16(12):125-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (5.8)
4. **Ting Daniel Shu Wei**; Sim Shaun Sebastian Khung Peng; Yau Christine Wen Leng; Rosman Mohamad; Aw Ai Tee; Yeo Ian Yew San  
Ophthalmology simulation for undergraduate and postgraduate clinical education.  
International journal of ophthalmology 2016; 9(6):920-4 (Review Article; Published in Print)
5. **Ting Daniel Shu Wei**; Cheung Gemmy Chui Ming; Wong Tien Yin  
Diabetic retinopathy: global prevalence, major risk factors, screening practices and public health challenges: a review.  
Clinical & experimental ophthalmology 2016; 44(4):260-77 (Review Article; Published in Print)
6. Wang Louis Zizhao; Cheung Carol Y; Tapp Robyn J; Hamzah Haslina; Tan Gavin;**Ting Daniel**; Lamoureux Ecosse; Wong Tien Yin  
Availability and variability in guidelines on diabetic retinopathy screening in Asian countries.  
The British journal of ophthalmology 2017; 101(10):1352-1360 (Review Article; Published in Print) IF (3.8)
7. **Ting Daniel Shu Wei**; Pasquale Louis R; Peng Lily; Campbell John Peter; Lee Aaron Y; Raman Rajiv; Tan Gavin Siew Wei; Schmetterer Leopold; Keane Pearse A; Wong Tien Yin  
Artificial intelligence and deep learning in ophthalmology.  
The British journal of ophthalmology 2019; 103(2):167-175 (Review Article; Published in Print) IF (3.8)
8. **Ting Daniel S W**; Peng Lily; Varadarajan Avinash V; Keane Pearse A; Burlina Philippe M; Chiang Michael F; Schmetterer Leopold; Pasquale Louis R; Bressler Neil M; Webster Dale R; Abramoff Michael; Wong Tien Y  
Deep learning in ophthalmology: The technical and clinical considerations.  
Progress in retinal and eye research 2019; 72:100759-NA (Review Article; E-Published Only (Never in Print)/E-collection)

9. Cheung Carol Y; Tang Fangyao;**Ting Daniel Shu Wei**; Tan Gavin Siew Wei; Wong Tien Yin  
Artificial Intelligence in Diabetic Eye Disease Screening.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2019; NA:NA-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (4.4)
10. Bellemo Valentina; Lim Gilbert; Rim Tyler Hyungtaek; Tan Gavin S W; Cheung Carol Y; Satta Srinivas; He Ming-Guang; Tufail Adnan; Lee Mong Li; Hsu Wynne;**Ting Daniel Shu Wei**  
Artificial Intelligence Screening for Diabetic Retinopathy: the Real-World Emerging Application.  
Current diabetes reports 2019; 19(9):72-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (5.8)
11. Campbell J Peter; Lee Aaron Y; Abramoff Michael; Keane Pearse A;**Ting Daniel S W**; Lum Flora; Chiang Michael F  
Reporting Guidelines for Artificial Intelligence in Medical Research.  
Ophthalmology 2020; 127(12):1596-1599 (Review Article; Published in Print)
12. Campbell Cara G;**Ting Daniel S W**; Keane Pearse A; Foster Paul J  
The potential application of artificial intelligence for diagnosis and management of glaucoma in adults.  
British medical bulletin 2020; 134(1):21-33 (Review Article; Published in Print)
13. Liu Nan; Chee Marcel Lucas; Niu Chenglin; Pek Pin Pin; Siddiqui Fahad Javaid; Ansah John Pastor; Matchar David Bruce; Lam Sean Shao Wei; Abdullah Hairil Rizal; Chan Angelique; Malhotra Rahul; Graves Nicholas; Koh Mariko Siyue; Yoon Sungwon; Ho Andrew Fu Wah;**Ting Daniel Shu Wei**; Low Jenny Guek Hong; Ong Marcus Eng Hock  
Coronavirus disease 2019 (COVID-19): an evidence map of medical literature.  
BMC medical research methodology 2020; 20(1):177-N.A. (Review Article; E-Published Only (Never in Print)/E-collection)
14. Sounderajah Viknesh; Ashrafian Hutan; Aggarwal Ravi; De Fauw Jeffrey; Denniston Alastair K; Greaves Felix; Karthikesalingam Alan; King Dominic; Liu Xiaoxuan; Markar Sheraz R; McInnes Matthew D F; Panch Trishan; Pearson-Stuttard Jonathan; **Ting Daniel S W**; Golub Robert M; Moher David; Bossuyt Patrick M; Darzi Ara  
Developing specific reporting guidelines for diagnostic accuracy studies assessing AI interventions: The STARD-AI Steering Group.  
Nature medicine 2020; 26(6):807-808 (Review Article; Published in Print) IF (59.2)
15. Lim Gilbert; Bellemo Valentina; Xie Yuchen; Lee Xin Q; Yip Michelle Y T;**Ting Daniel S W**  
Different fundus imaging modalities and technical factors in AI screening for diabetic retinopathy: a review.  
Eye and vision (London, England) 2020; 7:21-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (4.45)
16. Xie Yuchen; Gunasekeran Dinesh V; Balaskas Konstantinos; Keane Pearse A; Sim Dawn A; Bachmann Lucas M; Macrae Carl;**Ting Daniel S W**  
Health Economic and Safety Considerations for Artificial Intelligence Applications in Diabetic Retinopathy Screening.  
Translational vision science & technology 2020; 9(2):22-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.2)
17. Ruamviboonsuk Paisan; Cheung Carol Y; Zhang Xiulan; Raman Rajiv; Park Sang Jun;**Ting Daniel Shu Wei**



- Artificial Intelligence in Ophthalmology: Evolutions in Asia.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2020; 9(2):78-84 (Review Article;  
Published in Print) IF (4.4)
18. Yanagihara Ryan T; Lee Cecilia S;**Ting Daniel Shu Wei**; Lee Aaron Y  
Methodological Challenges of Deep Learning in Optical Coherence Tomography for Retinal Diseases: A Review.  
Translational vision science & technology 2020; 9(2):11-N.A. (Review Article; Published in Print) IF (3.2)
  19. Gunasekeran Dinesh V;**Ting Daniel S W**; Tan Gavin S W; Wong Tien Y  
Artificial intelligence for diabetic retinopathy screening, prediction and management.  
Current opinion in ophthalmology 2020; 31(5):357-365 (Review Article; Published in Print) IF(3,8)
  20. Tan Tien-En; Xu Xinxing; Wang Zhaoran; Liu Yong;**Ting Daniel S W**  
Interpretation of artificial intelligence studies for the ophthalmologist.  
Current opinion in ophthalmology 2020; 31(5):351-356 (Review Article; Published in Print) IF(3,8)
  21. FRCOphth Alasdair Kennedy; Shantha Jessica G; Olivia Li Ji-Peng; Faia Lisa J; Hartley Caleb; Kuthyar Sanjana; Albin Thomas A; Wu Henry; Chodosh James;**Ting Daniel S W**; Yeh Steven  
SARS-CoV-2 and the Eye: Implications for the Retina Specialist from Human Coronavirus Outbreaks and Animal Models.  
Journal of vitreoretinal diseases 2020; 4(5):411-419 (Review Article; Published in Print)
  22. Wang Sophia Y; Pershing Suzann; Lee Aaron Y; **AAOTaskforce on AI** and AAO Medical Information Technology Committee  
Big data requirements for artificial intelligence.  
Current opinion in ophthalmology 2020; 31(5):318-323 (Review Article; Published in Print) IF(3,8)
  23. Grzybowski Andrzej; Brona Piotr; Lim Gilbert; Ruamviboonsuk Paisan; Tan Gavin S W; Abramoff Michael;**Ting Daniel S W**  
Artificial intelligence for diabetic retinopathy screening: a review.  
Eye (London, England) 2020; 34(3):451-460 (Review Article; Published in Print) IF (3.5)
  24. Wong Raymond L M;**Ting Daniel S W**; Wan Kelvin H; Lai Kenny H W; Ko Chung-Nga; Ruamviboonsuk Paisan; Huang Suber S; Lam Dennis S C; Tham Clement C Y  
COVID-19: Ocular Manifestations and the APOA Prevention Guidelines for Ophthalmic Practices.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2020; 9(4):281-284 (Review Article; Published in Print) IF (4.4)
  25. Khor Wei Boon; Yip Leonard; Zhao Paul; Foo Valencia H X; Lim Louis; **Ting Daniel S W**; Loon Seng Chee; Wong Edmund; Yong Vernon; Tan Clement; Wong Tien Yin; Wong Hon Tym  
Evolving Practice Patterns in Singapore's Public Sector Ophthalmology Centers During the COVID-19 Pandemic.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2020; 9(4):285-290 (Review Article; Published in Print) IF (4.4)
  26. Singh Rishi P; Hom Grant L; Abramoff Michael D; Campbell J Peter; Chiang Michael F;**AAO Task Force on Artificial Intelligence**

Current Challenges and Barriers to Real-World Artificial Intelligence Adoption for the Healthcare System, Provider, and the Patient.

Translational vision science & technology 2020; 9(2):45-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.2)

27. Abràmoff Michael D; Leng Theodore;**Ting Daniel S W**; Rhee Kyu; Horton Mark B; Brady Christopher J; Chiang Michael F  
Automated and Computer-Assisted Detection, Classification, and Diagnosis of Diabetic Retinopathy.  
Telemedicine journal and e-health : the official journal of the American Telemedicine Association 2020; 26(4):544-550 (Review Article; Published in Print) IF (2.8)
28. Aung Yuri Y M; Wong David C S;**Ting Daniel S W**  
The promise of artificial intelligence: a review of the opportunities and challenges of artificial intelligence in healthcare.  
British medical bulletin 2021; 139(1):4-15 (Review Article; Published in Print)
29. Gunasekeran Dinesh V; Tham Yih-Chung;**Ting Daniel S W**; Tan Gavin S W; Wong Tien Y  
Digital health during COVID-19: lessons from operationalising new models of care in ophthalmology.  
The Lancet. Digital health 2021; 3(2):e124-e134 (Review Article; Published in Print) IF 23.8
30. Sim Shaun Sebastian; Yip Michelle Yt; Wang Zhaoran; Tan Anna Cheng Sim; Tan Gavin Siew Wei; Cheung Chui Ming Gemmy; Chakravarthy Usha; Wong Tien Yin; Teo Kelvin Yi Chong;**Ting Daniel Sw**  
Digital Technology for AMD Management in the Post-COVID-19 New Normal.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2021; 10(1):39-48 (Review Article; Published in Print) IF (4.4)
31. Wong Chee Wai; Tsai Andrew; Jonas Jost B; Ohno-Matsui Kyoko; Chen James; Ang Marcus;**Ting Daniel Shu Wei**  
Digital Screen Time During the COVID-19 Pandemic: Risk for a Further Myopia Boom?  
American journal of ophthalmology 2021; 223:333-337 (Review Article; Published in Print) IF (4.3)
32. Ting Darren Shu Jeng; Foo Valencia Hx; Yang Lily Wei Yun; Sia Josh Tjunrong; Ang Marcus; Lin Haotian; Chodosh James; Mehta Jodhbir S;**Ting Daniel Shu Wei**  
Artificial intelligence for anterior segment diseases: Emerging applications in ophthalmology.  
The British journal of ophthalmology 2021; 105(2):158-168 (Review Article; Published in Print) IF (3.8)
33. Aggarwal Ravi; Sounderajah Viknesh; Martin Guy;**Ting Daniel S W**; Karthikesalingam Alan; King Dominic; Ashrafian Hutan; Darzi Ara  
Diagnostic accuracy of deep learning in medical imaging: a systematic review and meta-analysis.  
NPJ digital medicine 2021; 4(1):65-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
34. Teo Zhen Ling; Tham Yih-Chung; Yu Marco; Chee Miao Li; Rim Tyler Hyungtaek; Cheung Ning; Bikbov Mukharram M; Wang Ya Xing; Tang Yating; Lu Yi; Wong Ian Y;**Ting Daniel Shu Wei**; Tan Gavin Siew Wei; Jonas Jost B; Sabanayagam Charumathi; Wong Tien Yin; Cheng Ching-Yu

- Global Prevalence of Diabetic Retinopathy and Projection of Burden through 2045: Systematic Review and Meta-analysis.  
Ophthalmology 2021; 128(11):1580-1591 (Review Article; Published in Print) IF (12.5)
35. Rampat Radhika; Deshmukh Rashmi; Chen Xin;**Ting Daniel S W**; Said Dalia G; Dua Harinder S; Ting Darren S J  
Artificial Intelligence in Cornea, Refractive Surgery, and Cataract: Basic Principles, Clinical Applications, and Future Directions.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2021; 10(3):268-281 (Review Article; Published in Print) IF (4.4)
  36. **Ting Daniel S W**; Al-Aswad Lama A  
Augmented Intelligence in Ophthalmology: The Six Rights.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2021; 10(3):231-233 (Review Article; Published in Print) IF (4.4)
  37. Yang Lily Wei Yun; Ng Wei Yan; Foo Li Lian; Liu Yong; Yan Ming; Lei Xiaofeng; Zhang Xiaoman;**Ting Daniel Shu Wei**  
Deep learning-based natural language processing in ophthalmology: applications, challenges and future directions.  
Current opinion in ophthalmology 2021; 32(5):397-405 (Review Article; Published in Print) IF(3,8)
  38. Foo Li Lian; Lanca Carla; Wong Chee Wai;**Ting Daniel**; Lamoureux Ecosse; Saw Seang-Mei; Ang Marcus  
Cost of Myopia Correction: A Systematic Review.  
Frontiers in medicine 2021; 8:718724-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (5.0)
  39. Foreman Joshua; Salim Arief Tjitra; Praveen Anitha; Fonseka Dwight; Ting**Daniel Shu Wei**; Guang He Ming; Bourne Rupert R A; Crowston Jonathan; Wong Tien Y; Dirani Mohamed  
Association between digital smart device use and myopia: a systematic review and meta-analysis.  
The Lancet. Digital health 2021; 3(12):e806-e818 (Review Article; Published in Print) IF 23.8
  40. Ng Wei Yan; Tan Tien-En; Movva Prasanth V H; Fang Andrew Hao Sen; Yeo Khung-Keong; Ho Dean; Foo Fuji Shyy San; Xiao Zhe; Sun Kai; Wong Tien Yin; Sia Alex Tiong-Heng;**Ting Daniel Shu Wei**  
Blockchain applications in health care for COVID-19 and beyond: a systematic review.  
The Lancet. Digital health 2021; 3(12):e819-e829 (Review Article; Published in Print) IF 23.8
  41. Raman Rajiv; Dasgupta Debarati; Ramasamy Kim; George Ronnie; Mohan Viswanathan;**Ting Daniel**  
Using artificial intelligence for diabetic retinopathy screening: Policy implications.  
Indian journal of ophthalmology 2021; 69(11):2993-2998 (Review Article; Published in Print)
  42. Tan Tien-En; Chodosh James; McLeod Stephen D; Parke David W; Yeh Steven; Wong Tien Yin;**Ting Daniel Shu Wei**  
Global Trends in Ophthalmic Practices in Response to COVID-19.  
Ophthalmology 2021; 128(11):1505-1515 (Review Article; Published in Print) IF (12.5)

43. Ng Wei Yan; Zhang Shihao; Wang Zhaoran; Ong Charles Jit Teng; Gunasekeran Dinesh V; Lim Gilbert Yong San; Zheng Feihui; Tan Shaun Chern Yuan; Tan Gavin Siew Wei; Rim Tyler Hyungtaek; Schmetterer Leopold;**Ting Daniel Shu Wei**  
Updates in deep learning research in ophthalmology.  
Clinical science (London, England : 1979) 2021; 135(20):2357-2376 (Review Article; Published in Print) IF (6.7)
  
44. Sounderajah Viknesh; Ashrafian Hutan; Rose Sherri; Shah Nigam H; Ghassemi Marzyeh; Golub Robert; Kahn Charles E; Esteva Andre; Karthikesalingam Alan; Mateen Bilal; Webster Dale; Milea Dan;**Ting Daniel**; Treanor Darren; Cushnan Dominic; King Dominic; McPherson Duncan; Glocker Ben; Greaves Felix; Harling Leanne; Ordish Johan; Cohen Jérémie F; Deeks Jon; Leeflang Mariska; Diamond Matthew; McInnes Matthew D F; McCradden Melissa; Abramoff Michael D; Normahani Pasha; Markar Sheraz R; Chang Stephanie; Liu Xiaoxuan; Mallett Susan; Shetty Shravya; Denniston Alastair; Collins Gary S; Moher David; Whiting Penny; Bossuyt Patrick M; Darzi Ara  
A quality assessment tool for artificial intelligence-centered diagnostic test accuracy studies: QUADAS-AI.  
Nature medicine 2021; 27(10):1663-1665 (Review Article; Published in Print) IF (59.2)
  
45. Foo Li Lian; Ng Wei Yan; Lim Gilbert Yong San; Tan Tien-En; Ang Marcus;**Ting Daniel Shu Wei**  
Artificial intelligence in myopia: current and future trends.  
Current opinion in ophthalmology 2021; 32(5):413-424 (Review Article; Published in Print) IF(3,8)
  
46. Wang Zhaoran; Lim Gilbert; Ng Wei Yan; Keane Pearse A; Campbell J Peter; Tan Gavin Siew Wei; Schmetterer Leopold; Wong Tien Yin; Liu Yong;**Ting Daniel Shu Wei**  
Generative adversarial networks in ophthalmology: what are these and how can they be used?  
Current opinion in ophthalmology 2021; 32(5):459-467 (Review Article; Published in Print) IF(3,8)
  
47. **Ting Daniel S W**; Wong Tien Y; Park Ki Ho; Cheung Carol Y; Tham Clement C; Lam Dennis S C  
Ocular Imaging Standardization for Artificial Intelligence Applications in Ophthalmology: the Joint Position Statement and Recommendations From the Asia-Pacific Academy of Ophthalmology and the Asia-Pacific Ocular Imaging Society.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2021; 10(4):348-349 (Review Article; Published in Print) IF (4.4)
  
48. Ng Wei Yan; Tan Tien-En; Xiao Zhe; Movva Prasanth V H; Foo Fuji S S; Yun Dongyuan; Chen Wenben; Wong Tien Yin; Lin Hao Tian;**Ting Daniel S W**  
Blockchain Technology for Ophthalmology: Coming of Age?  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2021; 10(4):343-347 (Review Article; Published in Print) IF (4.4)
  
49. Bakshi Shaunak K; Lin Shawn R;**Ting Daniel Shu Wei**; Chiang Michael F; Chodosh James  
The era of artificial intelligence and virtual reality: transforming surgical education in ophthalmology.  
The British journal of ophthalmology 2021; 105(10):1325-1328 (Review Article; Published in Print) IF (3.8)
  
50. Teo Zhen Ling;**Ting Daniel Shu Wei**  
Eyeing severe diabetes upfront.

Nature biomedical engineering 2022; 6(12):1321-1322 (Review Article; Published in Print) IF (29.2)

51. Li Yong; Zheng Feihui; Foo Li Lian; Wong Qiu Ying; **Ting Daniel**; Hoang Quan V; Chong Rachel; Ang Marcus; Wong Chee Wai  
Advances in OCT Imaging in Myopia and Pathologic Myopia.  
Diagnostics (Basel, Switzerland) 2022; 12(6):NA-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.1)
52. Teo Zhen Ling; Lee Aaron Y; Campbell Peter; Chan R V Paul; **Ting Daniel S W**  
Developments in Artificial Intelligence for Ophthalmology: Federated Learning.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2022; 11(6):500-502 (Review Article; Published in Print) IF (4.4)
53. Kwee Ann; Teo Zhen Ling; **Ting Daniel Shu Wei**  
Digital health in medicine: Important considerations in evaluating health economic analysis.  
The Lancet regional health. Western Pacific 2022; 23:100476-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (5.0)
54. Yaghy Antonio; Lee Aaron Y; Keane Pearse A; Keenan Tiarnan D L; Mendonca Luisa S M; Lee Cecilia S; Cairns Anne Marie; Carroll Joseph; Chen Hao; Clark Julie; Cukras Catherine A; de Sisternes Luis; Domalpally Amitha; Durbin Mary K; Goetz Kerry E; Grassmann Felix; Haines Jonathan L; Honda Naoto; Hu Zhihong Jewel; Mody Christopher; Orozco Luz D; Owsley Cynthia; Poor Stephen; Reisman Charles; Ribeiro Ramiro; Sadda Srinivas R; Sivaprasad Sobha; Staurengi Giovanni; **Ting Daniel Sw**; Tumminia Santa J; Zalunardo Luca; Waheed Nadia K  
Artificial intelligence-based strategies to identify patient populations and advance analysis in age-related macular degeneration clinical trials.  
Experimental eye research 2022; 220:109092-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.0)
55. Lim Jane S; Hong Merrellynn; Lam Walter S T; Zhang Zheting; Teo Zhen Ling; Liu Yong; Ng Wei Yan; Foo Li Lian; **Ting Daniel S W**  
Novel technical and privacy-preserving technology for artificial intelligence in ophthalmology.  
Current opinion in ophthalmology 2022; 33(3):174-187 (Review Article; Published in Print) IF(3,8)
56. Tan Ting Fang; Li Yong; Lim Jane Sujuan; Gunasekeran Dinesh Visva; Teo Zhen Ling; Ng Wei Yan; **Ting Daniel Sw**  
Metaverse and Virtual Health Care in Ophthalmology: Opportunities and Challenges.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2022; 11(3):237-246 (Review Article; Published in Print) IF (4.4)
57. Gutierrez Laura; Lim Jane Sujuan; Foo Li Lian; Ng Wei Yan; Yip Michelle; Lim Gilbert Yong San; Wong Melissa Hsing Yi; Fong Allan; Rosman Mohamad; Mehta Jodhbir Singth; Lin Haotian; Ting Darren Shu Jeng; **Ting Daniel Shu Wei**  
Application of artificial intelligence in cataract management: current and future directions.  
Eye and vision (London, England) 2022; 9(1):3-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (4.45)
58. Evans Nicholas G; Wenner Danielle M; Cohen I Glenn; Purves Duncan; Chiang Michael F; **Ting Daniel S W**; Lee Aaron Y  
Emerging Ethical Considerations for the Use of Artificial Intelligence in Ophthalmology.

- Ophthalmology science 2022; 2(2):100141-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.2)
59. Tham Yih-Chung; Husain Rahat; Teo Kelvin Yi Chong; Tan Anna Cheng Sim; Chew Annabel Chee Yen; **Ting Daniel S**; Cheng Ching-Yu; Tan Gavin Siew Wei; Wong Tien Yin  
New digital models of care in ophthalmology, during and beyond the COVID-19 pandemic.  
The British journal of ophthalmology 2022; 106(4):452-457 (Review Article; Published in Print) IF (3.8)
  60. Al-Khaled Tala; Acaba-Berrocal Luis; Cole Emily; **Ting Daniel S W**; Chiang Michael F; Chan R V Paul  
Digital Education in Ophthalmology.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2022; 11(3):267-272 (Review Article; Published in Print) IF (4.4)
  61. Tan Ting Fang; Thirunavukarasu Arun J; Jin Liyuan; Lim Joshua; Poh Stanley; Teo Zhen Ling; Ang Marcus; Chan R V Paul; Ong Jasmine; Turner Angus; Karlström Jonas; Wong Tien Yin; Stern Jude; **Ting Daniel Shu-Wei**  
Artificial intelligence and digital health in global eye health: opportunities and challenges.  
The Lancet. Global health 2023; 11(9):e1432-e1443 (Review Article; E-Published Ahead of Print) IF (19.9)
  62. Tan Ting Fang; Dai Peilun; Zhang Xiaoman; Jin Liyuan; Poh Stanley; Hong Dylan; Lim Joshua; Lim Gilbert; Teo Zhen Ling; Liu Nan; **Ting Daniel Shu Wei**  
Explainable artificial intelligence in ophthalmology.  
Current opinion in ophthalmology 2023; 34(5):422-430 (Review Article; E-Published Ahead of Print) IF(3,8)
  63. Chng Chiaw-Ling; Zheng Kaiping; Kwee Ann Kerwen; Lee Ming-Han Hugo; **Ting Daniel**; Wong Chen Pong; Hu Guoyu; Ooi Beng Chin; Kheok Si Wei  
Application of artificial intelligence in the assessment of thyroid eye disease (TED) - a scoping review.  
Frontiers in endocrinology 2023; 14:1300196-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.9)
  64. RaviChandran Narrendar; Teo Zhen Ling; **Ting Daniel S W**  
Artificial intelligence enabled smart digital eye wearables.  
Current opinion in ophthalmology 2023; 34(5):414-421 (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)
  65. **Ting Daniel Shu Wei**; Humayun Mark S; Huang Suber S;  
Gaps and future of human-centered artificial intelligence in ophthalmology: Future Vision Forum consensus statement.  
Current opinion in ophthalmology 2023; 34(5):431-436 (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)
  66. Chou Yu-Bai; Kale Aditya U; Lanzetta Paolo; Aslam Tariq; Barratt Jane; Danese Carla; Eldem Bora; Eter Nicole; Gale Richard; Korobelnik Jean-François; Kozak Igor; Li Xiaorong; Li Xiaoxin; Loewenstein Anat; Ruamviboonsuk Paisan; Sakamoto Taiji; **Ting Daniel S W**; van Wijngaarden Peter; Waldstein Sebastian M; Wong David; Wu Lihteh; Zapata Miguel A; Zarranz-Ventura Javier  
Current status and practical considerations of artificial intelligence use in screening and diagnosing retinal diseases: Vision Academy retinal expert consensus.

Current opinion in ophthalmology 2023; 34(5):403-413 (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)

67. Danese Carla; Kale Aditya U; Aslam Tariq; Lanzetta Paolo; Barratt Jane; Chou Yu-Bai; Eldem Bora; Eter Nicole; Gale Richard; Korobelnik Jean-François; Kozak Igor; Li Xiaorong; Li Xiaoxin; Loewenstein Anat; Ruamviboonsuk Paisan; Sakamoto Taiji; **Ting Daniel S W**; van Wijngaarden Peter; Waldstein Sebastian M; Wong David; Wu Lihteh; Zapata Miguel A; Zarranz-Ventura Javier  
The impact of artificial intelligence on retinal disease management: Vision Academy retinal expert consensus.  
Current opinion in ophthalmology 2023; 34(5):396-402 (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)
68. Yilin Ning, Salinelat Teixayavong, Yuqing Shang, Julian Savulescu, Vaishaanth Nagaraj, Di Miao, Mayli Mertens, **Daniel Shu Wei Ting**, Jasmine Chiat Ling Ong, Mingxuan Liu, Jiuwen Cao, Michael Dunn, Roger Vaughan, Marcus Eng Hock Ong, Joseph Jao-Yiu Sung, Eric J Topol, Nan Liu  
Generative Artificial Intelligence in Healthcare: Ethical Considerations and Assessment Checklist  
arXiv 2023; NA:NA-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (n.a)
69. Rui Yang, Ting Fang Tan, Wei Lu, Arun James Thirunavukarasu, **Daniel Shu Wei Ting**, Nan Liu  
Large language models in health care: Development, applications, and challenges  
Health Care Science 2023; 2(4):255-263 (Review Article; E-Published Ahead of Print) IF : (2.4)
70. Li Yong; Yip Michelle Y T; **Ting Daniel S W**; Ang Marcus  
Artificial intelligence and digital solutions for myopia.  
Taiwan journal of ophthalmology 2023; 13(2):142-150 (Review Article; E-Published Only (Never in Print)/E-collection) IF (1.0)
71. Chng Chiaw-Ling; Zheng Kaiping; Kwee Ann Kerwen; Lee Ming-Han Hugo; **Ting Daniel**; Wong Chen Pong; Hu Guoyu; Ooi Beng Chin; Kheok Si Wei  
Application of artificial intelligence in the assessment of thyroid eye disease (TED) - a scoping review.  
Frontiers in endocrinology 2023; 14:1300196-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.9)
72. Yeung Andy Wai Kan; Torkamani Ali; Butte Atul J; Glicksberg Benjamin S; Schuller Björn; Rodriguez Blanca; **Ting Daniel S W**; Bates David; Schaden Eva; Peng Hanchuan; Willschke Harald; van der Laak Jeroen; Car Josip; Rahimi Kazem; Celi Leo Anthony; Banach Maciej; Kletecka-Pulker Maria; Kimberger Oliver; Eils Roland; Islam Sheikh Mohammed Shariful; Wong Stephen T; Wong Tien Yin; Gao Wei; Brunak Søren; Atanasov Atanas G  
The promise of digital healthcare technologies.  
Frontiers in public health 2023; 11:1196596-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (3.0)
73. Chou Yu-Bai; Kale Aditya U; Lanzetta Paolo; Aslam Tariq; Barratt Jane; Danese Carla; Eldem Bora; Eter Nicole; Gale Richard; Korobelnik Jean-François; Kozak Igor; Li Xiaorong; Li Xiaoxin; Loewenstein Anat; Ruamviboonsuk Paisan; Sakamoto Taiji; **Ting Daniel S W**; van Wijngaarden Peter; Waldstein Sebastian M; Wong David; Wu Lihteh; Zapata Miguel A; Zarranz-Ventura Javier;  
Current status and practical considerations of artificial intelligence use in screening and diagnosing retinal diseases: Vision Academy retinal expert consensus.  
Current opinion in ophthalmology 2023; NA:NA-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)

74. Ting Darren S J; Deshmukh Rashmi;**Ting Daniel S W**; Ang Marcus  
Big data in corneal diseases and cataract: Current applications and future directions.  
Frontiers in big data 2023; 6:1017420-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (5.2)
75. Arun James Thirunavukarasu, Darren Shu Jeng Ting, Kabilan Elangovan, Laura Gutierrez, Ting Fang Tan,**Daniel Shu Wei Ting**  
Large language models in medicine  
Nature Medicine 2023; NA:NA-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (59.2)
76. Danese Carla; Kale Aditya U; Aslam Tariq; Barratt Jane; Chou Yu-Bai; Eldem Bora; Eter Nicole; Gale Richard; Korobelnik Jean-François; Kozak Igor; Lanzetta Paolo; Li Xiaorong; Li Xiaoxin; Loewenstein Anat; Ruamviboonsuk Paisan; Sakamoto Taiji;**Ting Daniel S W**; van Wijngaarden Peter; Waldstein Sebastian M; Wong David; Wu Lihteh; Zapata Miguel A; Zarranz-Ventura Javier;  
The impact of artificial intelligence on retinal disease management: Vision Academy retinal expert consensus.  
Current opinion in ophthalmology 2023; NA:NA-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)
77. Ong Zun Zheng; Sadek Youssef; Liu Xiaoxuan; Qureshi Riaz; Liu Su-Hsun; Li Tianjing; Sounderajah Viknesh; Ashrafian Hutan;**Ting Daniel Shu Wei**; Said Dalia G; Mehta Jodhbir S; Burton Matthew J; Dua Harminder Singh; Ting Darren Shu Jeng  
Diagnostic performance of deep learning in infectious keratitis: a systematic review and meta-analysis protocol.  
BMJ open 2023; 13(5):e065537-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (2.4)
78. Liu Mingxuan; Ning Yilin; Teixayavong Salinelat; Mertens Mayli; Xu Jie;**Ting Daniel Shu Wei**; Cheng Lionel Tim-Ee; Ong Jasmine Chiat Ling; Teo Zhen Ling; Tan Ting Fang; RaviChandran Narrendar; Wang Fei; Celi Leo Anthony; Ong Marcus Eng Hock; Liu Nan  
A translational perspective towards clinical AI fairness.  
NPJ digital medicine 2023; 6(1):172-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (15.3)
79. Li Yong; Foo Li-Lian; Wong Chee Wai; Li Jonathan; Hoang Quan V; Schmetterer Leopold;**Ting Daniel S W**; Ang Marcus  
Pathologic myopia: advances in imaging and the potential role of artificial intelligence.  
The British journal of ophthalmology 2023; 107(5):600-606 (Review Article; Published in Print) IF (3.8)
80. Mingxuan Liu, Y. N., Salinelat Teixayavong, Mayli Mertens, Jie Xu,**Daniel Shu Wei Ting**, Lionel Tim-Ee Cheng, Jasmine Chiat Ling Ong, Zhen Ling Teo, Ting Fang Tan, Ravi Chandran Narrendar, Fei Wang, Leo Anthony Celi, Marcus Eng Hock Ong, Nan Liu  
Towards clinical AI fairness: A translational perspective  
arXiv 2023; NA:NA-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (n.a)



81. 112.&#9;S Li, P. L., Gustavo G. Nascimento, Xinru Wang, Fabio Renato Manzolli Leite, Bibhas Chakraborty, Chuan Hong, Yilin Ning, Feng Xie, Zhen Ling Teo, **Daniel Shu Wei Ting**, Hamed Haddadi, Marcus Eng Hock Ong, Marco Aurélio Peres, Nan Liu  
Federated and distributed learning applications for electronic health records and structured medical data: A scoping review  
arXiv 2023; NA:NA-N.A. (Review Article; E-Published Only (Never in Print)/E-collection) IF (n.a)
  
82. Sharma Ashish; Wu Lihteh; Bloom Steven; Stanga Paulo; RaviChandran Narrendar; **Ting Daniel S W**; Parolini Barbara; Matello Veronika; Rezaei Kourous A  
RWC Update: Artificial Intelligence and Smart Eyewearables for Healthy Longevity; Choroidal Hemangioma Widefield Optical Coherence Tomography.  
Ophthalmic surgery, lasers & imaging retina 2023; 54(2):74-77 (Review Article; Published in Print) IF (0.9)
  
83. Teo Zhen Ling; **Ting Daniel Shu Wei**  
Non-fungible tokens for the management of health data.  
Nature medicine 2023; 29(2):287-288 (Review Article; Published in Print) IF (59.2)
  
84. Chen Dinah; Anran Emma; Fang Tan Ting; Ramachandran Rithu; Li Fei; Cheung Carol; Yousefi Siamak; Tham Clement C Y; **Ting Daniel S W**; Zhang Xiulan; Al-Aswad Lama A  
Applications of Artificial Intelligence and Deep Learning in Glaucoma.  
Asia-Pacific journal of ophthalmology (Philadelphia, Pa.) 2023; 12(1):80-93 (Review Article; Published in Print) IF (4.4)
  
85. Ng Faye Yu Ci; Thirunavukarasu Arun James; Cheng Haoran; Tan Ting Fang; Gutierrez Laura; Lan Yanyan; Ong Jasmine Chiat Ling; Chong Yap Seng; Ngiam Kee Yuan; Ho Dean; Wong Tien Yin; Kwek Kenneth; Doshi-Velez Finale; Lucey Catherine; Coffman Thomas; **Ting Daniel Shu Wei**  
Artificial intelligence education: An evidence-based medicine approach for consumers, translators, and developers.  
Cell reports. Medicine 2023; 4(10):101230-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (11.7)
  
86. Ong Jasmine Chiat Ling; Chang Shelley Yin-Hsi; William Wasswa; Butte Atul J; Shah Nigam H; Chew Lita Sui Tjien; Liu Nan; Doshi-Velez Finale; Lu Wei; Savulescu Julian; **Ting Daniel Shu Wei**  
Ethical and regulatory challenges of large language models in medicine.  
The Lancet. Digital health 2024; 6(6):e428-e432 (Review Article; E-Published Only (Never in Print)/E-collection) IF 23.8
  
87. Momenaei Bitá; Mansour Hana A; Kuriyan Ajay E; Xu David; Sridhar Jayanth; **Ting Daniel S W**; Yonekawa Yoshihiro  
ChatGPT enters the room: what it means for patient counseling, physician education, academics, and disease management.  
Current opinion in ophthalmology 2024; 35(3):205-209 (Review Article; E-Published Only (Never in Print)/E-collection) IF(3,8)
  
88. Teo Zhen Ling; Jin Liyuan; Li Siqi; Miao Di; Zhang Xiaoman; Ng Wei Yan; Tan Ting Fang; Lee Deborah Meixuan; Chua Kai Jie; Heng John; Liu Yong; Goh Rick Siow Mong; **Ting Daniel Shu Wei**  
Federated machine learning in healthcare: A systematic review on clinical applications and technical architecture.

Cell reports. Medicine 2024; 5(2):101419-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (11.4)

89. Poh Stanley S J; Sia Josh T; Yip Michelle Y T; Tsai Andrew S H; Lee Shu Yen; Tan Gavin S W; Weng Christina Y; Kadonosono Kazuaki; Kim Min; Yonekawa Yoshihiro; Ho Allen C; Toth Cynthia A; **Ting Daniel S W**  
Artificial Intelligence, Digital Imaging, and Robotics Technologies for Surgical Vitreoretinal Diseases.  
Ophthalmology. Retina 2024; NA:NA-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (4.5)
90. Ong Jasmine Chiat Ling; Seng Benjamin Jun Jie; Law Jeren Zheng Feng; Low Lian Leng; Kwa Andrea Lay Hoon; Giacomini Kathleen M; **Ting Daniel Shu Wei**  
Artificial intelligence, ChatGPT, and other large language models for social determinants of health: Current state and future directions.  
Cell reports. Medicine 2024; 5(1):101356-NA (Review Article; E-Published Only (Never in Print)/E-collection) IF (11.4)

### (iii) Letters (e.g. to Editor), Editorials & Case Reports

1. **Ting DSW**, Sim SSKP, Yau CWL, Mohamad R and Yeo IYS.  
The Use of Simulation in Ophthalmology Residency Training: Singapore National Eye Centre Experience  
Proceedings of Singapore Healthcare 2014; 23:N.A.-N.A. (Editorial; Published in Print) IF(0.6)
2. Foo Li Lian; **Ting Daniel S W**; Ng Wei Yan; Quah Boon Long  
Novel technique of dog tick removal from the eyelid.  
Acta ophthalmologica 2016; 94(8):e819-e820 (Letter; Published in Print) IF (3.0)
3. **Ting Daniel Shu Wei**; Wong Tien Yin  
Proliferative diabetic retinopathy: laser or eye injection?  
Lancet (London, England) 2017; 389(10085):2165-2166 (Editorial; Published in Print) IF (106.9)
4. **Ting Daniel Shu Wei**; Tan Gavin Siew Wei  
Telemedicine for Diabetic Retinopathy Screening.  
JAMA ophthalmology 2017; 135(7):722-723 (Editorial; Published in Print) IF (7.8)
5. **Ting Daniel Shu Wei**; Wong Tien Yin  
Eyeing cardiovascular risk factors.  
Nature biomedical engineering 2018; 2(3):140-141 (Editorial; Published in Print) IF (29.2)
6. **Ting Daniel S W**; Liu Yong; Burlina Philippe; Xu Xinxing; Bressler Neil M; Wong Tien Y  
AI for medical imaging goes deep.  
Nature medicine 2018; 24(5):539-540 (Editorial; Published in Print) IF (59.2)
7. **Ting Daniel S W**; Wu Wei-Chi; Toth Cynthia  
Deep learning for retinopathy of prematurity screening.  
The British journal of ophthalmology 2018; NA:NA-N.A. (Editorial; E-Published Only (Never in Print)/E-collection) IF (3.8)
8. **Ting Daniel S W**; Yi Paul H; Hui Ferdinand  
Clinical Applicability of Deep Learning System in Detecting Tuberculosis with Chest Radiography.  
Radiology 2018; 286(2):729-731 (Editorial; Published in Print) IF (12.1)

9. Yi Paul H; Hui Ferdinand K; **Ting Daniel S W**  
Artificial Intelligence and Radiology: Collaboration Is Key.  
Journal of the American College of Radiology : JACR 2018; 15(5):781-783 (Editorial; Published in Print) (4.6)
  
- 10 **Ting Daniel S W**; Lee Aaron Y; Wong Tien Y  
. An Ophthalmologist's Guide to Deciphering Studies in Artificial Intelligence.  
Ophthalmology 2019; 126(11):1475-1479 (Editorial; Published in Print) IF (12.8)
  
- 11 **Ting Daniel Sw**; Rim Tyler H; Choi Yoon Seong; Ledsam Joseph R  
. Deep Learning in Medicine. Are We Ready?  
Annals of the Academy of Medicine, Singapore 2019; 48(1):1-4 (Editorial; Published in Print) IF (8.7)
  
- 12 **Ting Daniel Shu Wei**; Tan Tien-En; Lim C C Tchoyoson  
. Development and Validation of a Deep Learning System for Detection of Active Pulmonary Tuberculosis on Chest Radiographs: Clinical and Technical Considerations.  
Clinical infectious diseases : an official publication of the Infectious Diseases Society of America 2019; 69(5):748-750 (Editorial; Published in Print) IF (8.2)
  
- 13 Ting Darren Shu Jeng; Ang Marcus; Mehta Jodhbir S;**Ting Daniel Shu Wei**  
. Artificial intelligence-assisted telemedicine platform for cataract screening and management: a potential model of care for global eye health.  
The British journal of ophthalmology 2019; 103(11):1537-1538 (Editorial; Published in Print) IF (3.8)
  
- 14 **Ting DSW**, Carin L, Abramoff M  
. Observations and Lessons Learned From the Artificial Intelligence Studies for Diabetic Retinopathy Screening  
JAMA Ophthalmol 2019; N.A.:N.A.-N.A. (Editorial; E-Published Ahead of Print) IF (7.8)
  
- 15 Yu Marco; Tham Yih-Chung; Rim Tyler H;**Ting Daniel S W**; Wong Tien Y; Cheng Ching-Yu  
. Reporting on deep learning algorithms in health care.  
The Lancet. Digital health 2019; 1(7):e328-e329 (Letter; Published in Print) IF (23.8)
  
- 16 Yun Dongyuan; Chen Wenben; Wu Xiaohang;**Ting Daniel Shu Wei**; Lin Haotian  
. Blockchain: chaining digital health to a new era.  
Annals of translational medicine 2020; 8(11):696-N.A. (Editorial; E-Published Only (Never in Print) collection) IF (3.9)
  
- 17 **Ting Daniel S**; Gunasekeran Dinesh V; Wickham Louisa; Wong Tien Yin  
. Next generation telemedicine platforms to screen and triage.  
The British journal of ophthalmology 2020; 104(3):299-300 (Editorial; Published in Print) IF (3.8)
  
- 18 **Ting Daniel Shu Wei**; Carin Lawrence; Dzau Victor; Wong Tien Y  
. Digital technology and COVID-19.  
Nature medicine 2020; 26(4):459-461 (Letter; Published in Print) IF (59.2)
  
- 19 Jeon Sohee; Liu Yun; Li Ji-Peng Olivia; Webster Dale; Peng Lily;**Ting Daniel**  
. AI papers in ophthalmology made simple.  
Eye (London, England) 2020; 34(11):1947-1949 (Editorial; Published in Print) IF (3.5)

- 20 Olivia Li Ji-Peng; Shantha Jessica; Wong Tien Y; Wong Edmund Y; Mehta Jod; Lin Haotian; Lin Xiaofeng; Strouthidis Nicholas G; Park Ki Ho; Fung Adrian T; McLeod Stephen D; Busin Massimo; Parke David W; Holland Gary N; Chodosh James; Yeh Steven;**Ting Daniel S W**  
Preparedness among Ophthalmologists: During and Beyond the COVID-19 Pandemic.  
Ophthalmology 2020; 127(5):569-572 (Editorial; Published in Print) IF (12.8)
- 21 Sounderajah Viknesh; Ashrafian Hutan; Aggarwal Ravi; De Fauw Jeffrey; Denniston Alastair K; Greaves Felix; Karthikesalingam Alan; King Dominic; Liu Xiaoxuan; Markar Sheraz R; McInnes Matthew D F; Panch Trishan; Pearson-Stuttard Jonathan;**Ting Daniel S W**; Golub Robert M; Moher David; Bossuyt Patrick M; Darzi Ara  
Developing specific reporting guidelines for diagnostic accuracy studies assessing AI interventions: The STARD-AI Steering Group.  
Nature medicine 2020; 26(6):807-808 (Editorial; Published in Print) IF (59.2)
- 22 Bakshi Shaunak K; Ho Allen C; Chodosh James; Fung Adrian T; Chan R V Paul;**Ting Daniel Shu Wei**  
Training in the year of the eye: the impact of the COVID-19 pandemic on ophthalmic education.  
The British journal of ophthalmology 2020; 104(9):1181-1183 (Editorial; Published in Print) IF (3.8)
- 23 Li JPO, Lam D, Youxin Chen,**Ting DSW**  
Coronavirus 2019 (COVID-19): The Importance of Recognizing Early Ocular Manifestation and Using Protective Eyewear  
British Journal of Ophthalmology 2020; N.A.:N.A.-N.A. (Editorial; E-Published Ahead of Print) IF (3.8)
- 24 Liu T Y Alvin; Farsiu Sina;**Ting Daniel S**  
Generative adversarial networks to predict treatment response for neovascular age-related macular degeneration: interesting, but is it useful?  
The British journal of ophthalmology 2020; 104(12):1629-1630 (Editorial; Published in Print) IF (3.8)
- 25 Tan Tien-En;**Ting Daniel Shu Wei**; Wong Tien Yin; Sim Dawn A  
Deep learning for identification of peripheral retinal degeneration using ultra-wide-field fundus images: is it sufficient for clinical translation?  
Annals of translational medicine 2020; 8(10):611-NA (Editorial; E-Published Only (Never in Print) collection) IF (3.9)
- 26 Li Ji-Peng Olivia; Lam Dennis Shun Chiu; Chen Youxin;**Ting Daniel Shu Wei**  
Novel Coronavirus disease 2019 (COVID-19): The importance of recognizing possible early ocular manifestation and using protective eyewear.  
The British journal of ophthalmology 2020; 104(3):297-298 (Editorial; Published in Print) IF (3.8)
- 27 **Ting Daniel S W**; Lin Haotian; Ruamviboonsuk Paisan; Wong Tien Yin; Sim Dawn A  
Artificial intelligence, the internet of things, and virtual clinics: ophthalmology at the digital translation forefront.  
The Lancet. Digital health 2020; 2(1):e8-e9 (Editorial; Published in Print) IF (23.8)
- 28 Stanescu-Segall Dinu; Sales de Gauzy Thomas; Reynolds Rhianon; Faes Livia; Pohlmann Dominika; Pakzad-Vaezi Kaivon;**Ting Daniel**; Saadoun David; Ambati Jayakrishna; Loewenstein Anat; Bodaghi Bahram; de Smet Marc D; Touhami Sara  
Expert opinion on the management and follow-up of uveitis patients during SARS-CoV-2 outbreak.  
Expert review of clinical immunology 2020; 16(7):651-657 (Editorial; Published in Print) IF:(4.7)
- 29 Chao Daniel L; Sridhar Jayanth; Kuriyan Ajay E; Leng Theodore; Barnett Brad P; Carlin Aaron F; Wykoff Charles C; Gayer Stephen; Mruthyunjaya Prithvi; Yonekawa Yoshihiro; Fawzi Amani A; Berrocal Audina

- M; Yeh Steven;**Ting Daniel**; Modi Yasha; Zacks David N; Yannuzzi Nicholas; Afshari Natalie A; Murray Timothy  
 Rationale for American Society of Retina Specialists Best Practice Recommendations for Conducting Vitreoretinal Surgery during the COVID-19 Era.  
 Journal of vitreoretinal diseases 2020; 4(5):420-429 (Editorial; Published in Print) IF (0.5)
- 30 Ooi Gideon Su Kai; Liew Charlene;**Ting Daniel Shu Wei**; Lim Tchoyoson Choie Cheio  
 . Artificial Intelligence: A Singapore Response.  
 Annals of the Academy of Medicine, Singapore 2020; 49(4):256-258 (Editorial; Published in Print) IF (8.7)
- 31 Chandra Aman; Romano Mario R;**Ting Daniel Sw**; Chao Daniel L  
 . Implementing the new normal in ophthalmology care beyond COVID-19.  
 European journal of ophthalmology 2021; 31(2):321-327 (Editorial; Published in Print) IF (1.6)
- 32 Tan Tien-En; Wong Tien Yin;**Ting Daniel Shu Wei**  
 . Artificial Intelligence for Prediction of Anti-VEGF Treatment Burden in Retinal Diseases: Towards Precision Medicine.  
 Ophthalmology. Retina 2021; 5(7):601-603 (Editorial; Published in Print) IF (4.5)
- 33 Foo Li Lian; Ang Marcus; Wong Chee Wai; Ohno-Matsui Kyoko; Saw Seang-Mei; Wong Tien Yin;**Ting Daniel S**  
 . Is artificial intelligence a solution to the myopia pandemic?  
 The British journal of ophthalmology 2021; 105(6):741-744 (Editorial; Published in Print) IF (3.8)
- 34 Ng Wei Yan; Cheung Carol Y; Milea Dan;**Ting Daniel Shu Wei**  
 . Artificial intelligence and machine learning for Alzheimer's disease: let's not forget about the retina.  
 The British journal of ophthalmology 2021; 105(5):593-594 (Editorial; Published in Print) IF (3.8)
- 35 Tan Tien-En; Chan Hwei Wuen; Singh Mandeep; Wong Tien Yin; Pulido Jose S; Michaelides Michel;  
 . Sohn Elliott H;**Ting Daniel**  
 Artificial intelligence for diagnosis of inherited retinal disease: an exciting opportunity and one step forward.  
 The British journal of ophthalmology 2021; 105(9):1187-1189 (Editorial; Published in Print) IF (3.8)
- 36 Teo Zhen Ling;**Ting Daniel Shu Wei**  
 . Federated Learning in Ophthalmology: Retinopathy of Prematurity.  
 Ophthalmology. Retina 2022; 6(8):647-649 (Editorial; Published in Print) IF (4.5)
- 37 Ting Darren Shu Jeng; Tan Ting Fang;**Ting Daniel Shu Wei**  
 . ChatGPT in ophthalmology: the dawn of a new era?  
 Eye (London, England) 2023; NA:NA-N.A. (Editorial; E-Published Only (Never in Print)/E-collection) IF (3)
- 38 Ludwig M Heindl, Senmao Li, **Daniel S W Ting**, Pearse A Keane  
 . Artificial intelligence in ophthalmological practice: when ideal meets reality  
 BMJ Open Ophthalmology 2023; 8:e001129-NA (Editorial; E-Published Only (Never in Print)/E-collection) IF (2.4)
- 39 Teo Zhen Ling;**Ting Daniel Shu Wei**  
 . AI telemedicine screening in ophthalmology: health economic considerations.  
 The Lancet. Global health 2023; 11(3):e318-e320 (Editorial; Published in Print) IF (19.9)

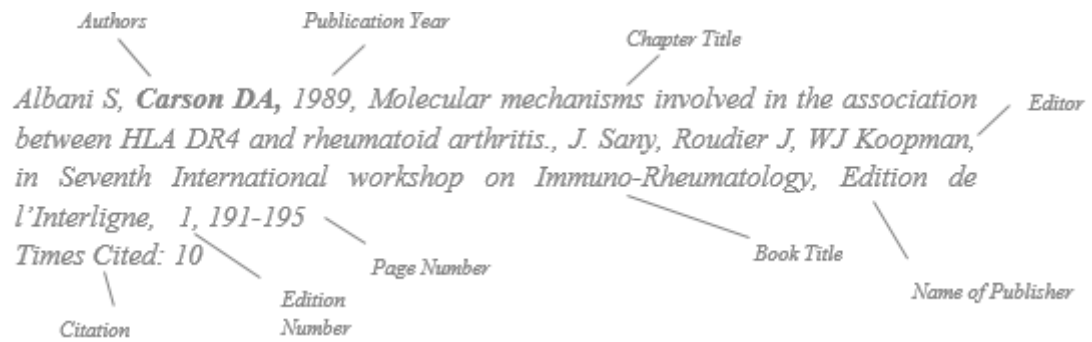
- 40 Tan TF, Thirunavukarasu AJ, Jin LY, Lim J, Poh S, Teo ZL, Ang M, Chan PRV, Ong J, Karlstrom J, Wong TY, BOptom JS, **Ting DSW**  
 Artificial intelligence and digital health: the opportunities and challenges in global eye health  
 Lancet Digital Health 2023; NA:NA-N.A. (Editorial; In Press) IF (27.7)
- 41 Tan Ting Fang; Teo Zhen Ling; **Ting Daniel Shu Wei**  
 Artificial Intelligence Bias and Ethics in Retinal Imaging.  
 JAMA ophthalmology 2023; 141(6):552-553 (Editorial; Published in Print) IF (7.8)
- 42 Zhang Xinyuan; Sivaprasad Sobha; **Ting Daniel Shu Wei**  
 Editorial: Ocular complications associated with diabetes mellitus.  
 Frontiers in endocrinology 2023; 14:1193522-N.A. (Editorial; E-Published Only (Never in Print)/E-collecti  
 IF (3.9)
- 43 Betzler Bjorn Kaijun; Chen Haichao; Cheng Ching-Yu; Lee Cecilia S; Ning Guochen; Song Su Jeong; Lee Aaron Y; Kawasaki Ryo; van Wijngaarden Peter; Grzybowski Andrzej; He Mingguang; Li Dawei; Ran Ran An; **Ting Daniel Shu Wei**; Teo Kelvin; Ruamviboonsuk Paisan; Sivaprasad Sobha; Chaudhary Varun; Tadayoni Ramin; Wang Xiaofei; Cheung Carol Y; Zheng Yingfeng; Wang Ya Xing; Tham Yih Chung; Wong Tien Yin  
 Large language models and their impact in ophthalmology.  
 The Lancet. Digital health 2023; 5(12):e917-e924 (Editorial; E-Published Only (Never in Print)/E-collecti  
 IF 23.8
- 44 Tan Ting Fang; Chang Shelley Yin-His; **Ting Daniel Shu Wei**  
 Deep learning for precision medicine: Guiding laser therapy in ischemic retinal diseases.  
 Cell reports. Medicine 2023; 4(10):101239-NA (Letter; E-Published Ahead of Print) IF (11.4)
- 45 Vujosevic Stela; **Ting Daniel S W**  
 Is Central Retina Thickness the Most Relevant Parameter in the Management of Diabetic Macular Edema?  
 Retina (Philadelphia, Pa.) 2023; 43(10):1639-1643 (Editorial; E-Published Ahead of Print) IF(2.3)
- 46 Li Yong; Gunasekeran Dinesh Visva; RaviChandran Narrendar; Tan Ting Fang; Ong Jasmine Chiat Ling; Thirunavukarasu Arun James; Polascik Bryce W; Habash Ranya; Khaderi Khizer; **Ting Daniel Sw**  
 The next generation of healthcare ecosystem in the metaverse.  
 Biomedical journal 2023; NA:100679-N.A. (Letter; E-Published Ahead of Print) IF (5.4)

## **(B) Non-Refereed Publications**

*Non-refereed publications refer to those which do not routinely use a system of critical review prior to publication; such articles are often solicited by the publisher.*

### **(i) Reviews Articles**

### **(ii) Books & Chapters**



1. **Ting DSW**, Kanagasingam Y, Constable I, Tay-Kearney ML, 2013, N.A., N.A., in Video Imaging Technology: A Novel Method for Diabetic Retinopathy Screening, Springer, N.A., N.A.-N.A.
2. **Ting DSW**, Kanagasingam Y, Vignarajan J, Tay-Kearney ML, 2013, N.A., N.A., in Influence of Monitor Size on the Grading of Diabetic Retinopathy, N.A., N.A., N.A.-N.A.
3. **Ting DSW**, Lamoureux E, Wong TY, 2015, N.A., N.A., in Innovative Approaches in Delivery of Primary and Secondary Eye Care for Diabetic Retinopathy, Springer, N.A., N.A.-N.A.
4. Teo K, Wong CW, Tsai A, **Ting DSW**, 2015, N.A., N.A., in Swept-source Optical Coherence Tomography (SS-OCT) Imaging on Retinal Diseases, Springer, N.A., N.A.-N.A.
5. Tsai A, Wong CW, Teo K, Milea D, Ang M, **Ting DSW**, 2017, N.A., N.A., in Swept-source Optical Coherence Tomography (SS-OCT) with Angiography Imaging on Retinal Diseases., N.A., N.A., N.A.-N.A.
6. Patil R, Wong CW, Michelet F, Teo K, **Ting DSW**, Tsai A et al, 2017, Angiogenesis-based Therapies for Eye Diseases, N.A., in Advances in Biochemistry in Health and Disease, Springer, N.A., 259-299
7. Sim SS, **Ting DSW**, 2017, N.A., N.A., in Management of Central Retinal Artery Occlusion, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
8. Soh YQ, **Ting DSW**, Wong EYM, 2017, N.A., N.A., in Diagnosis and Management of Posteriorly Dislocated Lenses, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
9. Kiew SY, **Ting DSW**, 2017, N.A., N.A., in Diagnosis and Management of Central Retinal Vein Occlusions, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
10. Phua V, **Ting DSW**, Wong D, 2018, N.A., N.A., in Diagnosis and Management of Giant Retinal Tear, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
11. Ng WY, Mathur R, **Ting DSW**, 2018, N.A., N.A., in Diagnosis and Management of Macroaneurysm, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
12. Chiam N, **Ting DSW**, Lee SY, Ang CL, 2018, N.A., N.A., in Diagnosis and Management of Rhegmatogenous Retinal Detachment, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
13. Lim G, Hsu W, Lee ML, **Ting DSW**, Wong TY  
 Technical and Clinical Challenges of A.I. in Retinal Image Analysis.  
 MICCAI 2018; (Article; E-Published Only (Never in Print)/E-collection)

14. Chiam N, **Ting DSW**, Lee SY and Ang CL. , 2019, NA, NA, in Rhegmatogenous Retinal Detachment: Management, Part 2, EyeNet Ophthalmic Pearls, NA, NA-NA
15. Lim G, Hsu W, Lee ML, **Ting DSW**, Wong TY. Technical and Clinical Challenges of A.I. in Retinal Image Analysis. MICCAI 2018; (Article; E-Published Only (Never in Print)/E-collection
16. Kiew SY, Yeo I, **Ting DSW**, 2019, N.A., N.A., in Simulation Training in Ophthalmology: Current Status, Dove Medical Press, N.A., N.A.-N.A.
17. Lim XH, **Ting DSW**, Koh A, 2019, N.A., N.A., in Diagnosis and Management of Retinitis Pigmentosa, American Academy of Ophthalmology (AAO) EyeNet Ophthalmic Pearls, N.A., N.A.-N.A.
18. **Ting DSW**, Peng L, Varadarajan A, Liu ATY, 2019, N.A., N.A., in Novel Retinal Imaging in Assessment of Cardiovascular Risk Factors and Systemic Vascular Diseases, Frontiers in Diabetes, N.A., 106-118 IF (3.9)
19. Lim G, Lim ZW, Xu D, **Ting DSW**, Wong TY, Lee ML, Hsu W, 2019, N.A., N.A., in Feature Isolation for Hypothesis Testing in Retinal Imaging: An Ischemic Stroke Prediction Case Study, Association for the Advancement of Artificial Intelligence, N.A., N.A.-N.A.
20. Lim XH, **Ting DSW** and Koh A, 2020, NA, N.A, in Diagnosis and Management of Retinitis Pigmentosa, EyeNet Ophthalmic Pearls, NA, NA-N.A.
21. **Ting SW**. , 2022, Artificial Intelligence for Diabetes-related Complications: The Eye as a Window to the Systemic Health, Abderrahmani. A Szunerits S Boukerroub R El Ouaamari A. , in Nanotechnology for Diabetes Management., Cambridge: Royal Society of Chemistry, NA, NA-NA

### (iii) Abstracts (Optional)

1. Ning, Y., Li, S., Ong, M. E., Xie, F., Chakraborty, B., Ting, D. S., & Liu, N. (2022). A novel interpretable machine learning system to generate clinical risk scores: An application for predicting early mortality or unplanned readmission in a retrospective cohort study. arXiv. <https://doi.org/10.48550/arXiv.2201.03291>
2. Ting DSW\*, Bellemo V, Hamzah H et al. Artificial Intelligence-Assisted Diabetic Retinopathy Screening Program: A 5-year Bench to Bedside Translational Study. ARVO 2020.
3. Ting DSW\*, Tan GSW, Tan C et al. The Real World Application of Deep Learning System in a National Tele-Retinal Diabetic Retinopathy Screening Program: A Non-randomized Prospective Comparative Trial. American Academy of Ophthalmology. Poster.
4. Tham YC, .... Ting DSW, Cheng CY. Deep Learning System in Detecting Diabetes and HbA1c. ARVO, Vancouver, Canada 2019.
5. Tien Y Wong.....Ting DSW, Sabanayagam C. Deep Learning System in Detecting Chronic Kidney Disease. ARVO, Vancouver, Canada 2019.
6. Milea D, ..... Ting DSW, Tien Y Wong. Deep Learning System for Abnormal Optic Disc. ARVO, Vancouver, Canada 2019.
7. Tan TE, Yong L, Cheng C.... Ting DSW\*. Development and Validation of a Deep Learning System for Prediction of Refractive Error and Detection of Myopic Macular Degeneration using Retinal Images: A Multi-ethnic Study. ARVO, Vancouver, Canada 2019.



8. Bellemo V, Lim Z, Lim G, Nguyen Q, Xie Y, Yip M, Hamzah H, Ho J, Lee XQ, Hsu W, Lee M, Musonda L, Chandran M, Chipalo-Mutati G, Muma M, Tan G, Sivaprasad S, Menon G, Wong TY, Ting DSW\*. Artificial Intelligence using Deep Learning to Screen for Referable and Vision-threatening Diabetic Retinopathy in Africa. ARVO, Vancouver, Canada 2019.
9. Yip M, Nguyen Q... Ting DSW\*. The influence of the number of fields, technical architecture, software framework and image resolution on the deep learning system for diabetic retinopathy screening. ARVO, Vancouver, Canada 2019
10. Xie YC, Nguyen Q...Ting DSW\*. The cost-effectiveness analysis of deep learning-assisted national tele-retinal diabetic retinopathy screening program. ARVO, Vancouver, Canada 2019.
11. Bellemo V, Yip M, Xie Y, Lim G, Nguyen G, Lee ML, Hsu W, Cheng CY, Wong TY, Ting DSW\*. Artificial Intelligence using Deep Learning in Classifying Side of the Eyes and Width of field using Retinal Fundus Photographs. 2018. ACCV.
12. Bellemo V, Yong L, Wong TY, Ting DSW\*. Generative Adversarial Networks (GANs) for the Synthesis of Colour Retinal Fundus Images. 2018. ACCV.
13. Yip, M, Lim ZW, Lim G, Nguyen Q, Hamzah H, Ho J, Bellemo V, Xie YC, Lee XQ, Lee ML, Hsu W, Wong TY, Ting DSW\*. Enhanced Detection of Referable Diabetic Retinopathy via DCNNs and Transfer Learning. 2018. ACCV.
14. Ting DSW\*, Cheung CY, Nguyen Q et al. Classic Risk Factors for Diabetic Retinopathy: Deep Learning versus Human Graders. May 2018. ARVO, Honolulu, Hawaii, USA.
15. Deep Learning System for Detection of Diabetic Macular Using Fundus Imaging and Optical Coherence Tomography. May 2018. ARVO, Honolulu, Hawaii, USA.
16. Artificial Intelligence using Deep Learning System for Glaucoma Suspect Detection. May 2018. ARVO, Honolulu, Hawaii, USA.
17. Deep Learning System for Myopic Macular Degeneration Using Fundus Images. May 2018. ARVO, Honolulu, Hawaii, USA.
18. Ting DSW\*, Lim G, Tan GSW et al. Artificial Intelligence using Deep Learning System for Diabetic Retinopathy Screening in Multi-ethnic Population with Diabetes. Feb 2018. Asia-Pacific Academy of Ophthalmology Conference, Hong Kong. Awarded the Young Ophthalmologists' Award.
19. Quantification of Retinal Microvascular Parameters using Optical Coherence Tomographic Angiography in Adults with Systemic Hypertension. Feb 2018. Asia-Pacific Academy of Ophthalmology Conference, Hong Kong.
20. Ting DSW\*, Lim G, Hamzah H et al. Deep Learning system for Referable Diabetic Retinopathy, Glaucoma Suspect and Age-related Macular Degeneration in a National Diabetic Retinopathy Screening Program. Nov 2017. American Academy of Ophthalmology. Poster presentation.
21. Ting DSW\*, Lim G, Tan GSW. Artificial Intelligence in Screening for Diabetes-related Eye Diseases. July 2017. Asia-Pacific Tele-Ophthalmology Society Conference, Hong Kong. Awarded the Young Innovator Award.
22. Artificial Intelligence using Deep Learning for Retinal Imaging. Singapore General Hospital (SGH) Annual Scientific Congress 2017. Awarded the SGH Young Investigator Award 2017.
23. Ting DSW\*, Wong TY, Lim et al. A Novel Automated Technology for Diabetic Retinopathy Screening. Rapid Fire Oral Presentation. Asia-Pacific Academy of Ophthalmology. 2017. Singapore
24. Ting DSW\*, Tan GSW, Agrawal R et al. Optical Coherence Tomography for Diabetes and Diabetic Retinopathy. Rapid Fire Oral Presentation. Asia-Pacific Academy of Ophthalmology. 2017. Singapore

25. Ting DSW\*, Hsu W, Lee ML et al. Deep Learning System for Diabetic Retinopathy Screening. Rapid Fire Oral Presentation. Asia-Pacific Vitreo-Retinal Society. 2016. Bangkok, Thailand.
26. Ting DSW\*, Ng WY, Sie N, et al. Choroidal Vasculature Imaging for Polypoidal Choroidal Vasculopathy. Oral Presentation. International Polypoidal Choroidal Vasculopathy Conference. 2016. Bangkok, Thailand.
27. Automated Diabetic Retinopathy Screening Program in Singapore. Malaysia-Singapore Joint Ophthalmology Scientific Congress. 2016. Kuching, Malaysia. – Best oral presentation
28. Swept-Source Optical Coherence Tomography for Polypoidal Choroidal Vasculopathy. Asean Ophthalmology Society 2015.
29. The Visual and Anatomical Outcome of Vitrectomy for Proliferative Diabetic Retinopathy. Asia-Pacific Vitreo-retinal Society, Sydney, Australia. 2015.
30. The Effect of Anti-Vascular Endothelial Growth Factor in Choroidal Thickness of Patients with Age-Related Macular Degeneration. Asia-Pacific Vitreo-retinal Society, Sydney, Australia. 2015.
31. The Surgical Outcomes, Complications and Predictive Surgical Factors of Diabetic Retinopathy Vitrectomy in A Large Asian Tertiary Eye Center. 2015. Singapore National Eye Center 25th Anniversary International Meeting.
32. The Implementation of Cataract Simulator To Improve Junior Ophthalmology Residents' Confidence In Cataract Training. 2015. American Research in Vision and Ophthalmology, Denver, Colorado, USA.
33. The Implementation of Cataract Simulator to Improve Junior Ophthalmology Residents' Confidence in Cataract Training. Asia-Pacific Cataract and Refractive Surgery Conference 2015.
34. Resident-led Large Group Teaching Bootcamp to Complement Student Internship Program'. SingHealth Duke-NUS Scientific Congress 2014.
35. Extracapsular Cataract Extraction Training for Junior Ophthalmology Residents in Singapore. Singapore Malaysia Ophthalmology Scientific Congress. Singapore. 2014. - Top 8 E-poster Finalist
36. Resident-led Large Group Teaching Bootcamp to Complement Student Internship Program'. 2014 ACGME Annual Education Conference, Maryland, USA. 2014.
37. Deep Range Imaging Optical Coherence Tomography (DRI-OCT): A Novel Imaging Technique for Polypoidal Choroidal Vasculopathy. Singapore Malaysia Ophthalmology Scientific Congress. Malaysia 2013.
38. Thyroid Eye Disease in Singapore. Asia Pacific Oculoplastic Conference, Singapore. 2012. Free Paper session, primary Presenter. – Top 5 finalist presentation
39. Severe Fibrin Block Angle Closure Secondary to Retinal Detachment Surgery. Duke-National University Singapore Scientific Congress, Singapore. 2012.
40. Low Cost Technology with Video Recording for the Telemedicine Based Screening of Diabetic Retinopathy. Presentation Abstract. Florida, USA. American Telemedicine Association. May 1-3, 2011.
41. The Use of Quantiferon Gold in Tuberculosis Diagnosis. Singapore Malaysia Ophthalmology Scientific Congress, Singapore. 2012.
42. A Novel Video-based Imaging Technology for Diabetic Retinopathy Screening. Singapore Malaysia Ophthalmology Scientific Congress, Singapore. 2012 - Top 20 finalist
43. Video-based Imaging Technology: A Novel Method for Diabetic Retinopathy Screening. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).

44. The Optimal Screen Sizes of Reading Devices for Diabetic Retinopathy Screening. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).
45. Retinal Digital Videos at Different Compression Levels for Diabetic Retinopathy. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).
46. A Portable Multipurpose Ophthalmic Imaging Device for Diabetic Retinopathy. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).
47. Australian National Survey: Diabetic Retinopathy Screening by Community. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).
48. Australian National Survey: Diabetic Retinopathy Screening by General Practitioners. 45th Singapore Malaysia Congress of Medicine, Singapore (22-23 July 2011).
49. Validation of a New Alternative Diabetic Retinopathy Screening Method: Retinal Video Recording. 26th Asia Pacific Academy of Ophthalmology Conference, Sydney, Australia (20-24 March 2011).
50. Evaluation of the Optimal Compression Level for Retinal Video Recording in the Setting of Diabetic Retinopathy Screening. 26th Asia Pacific Academy of Ophthalmology Conference, Sydney, Australia (20-24 March 2011).
51. The Eye is the Window into the Status of Diabetes. Australian E-Health Research Centre Annual Scientific Congress. Commonwealth Scientific Industrial and Research Organization (CSIRO). March 2011.
52. A Novel Foldable Retina Camera for Tele-Ophthalmology Screening for Diabetic Retinopathy. Australian E-Health Research Centre Annual Scientific Congress. Commonwealth Scientific Industrial and Research Organization (CSIRO). March 2011. – Best Poster Award
53. Mechanism of Visual Neglect: Are we there yet? Asia-ARVO, Singapore (20-22 January 2011).
54. An Economical Portable Device for Diabetic Retinopathy Screening. American Academy of Ophthalmology Conference, Chicago, IL, United States (16-19 October 2010).
55. Australian National Survey of Diabetic Retinopathy Management among General Practitioners and Optometrists. World Ophthalmology Congress, Berlin, Germany (5-9 June 2010)
56. Are We Neglecting Visual Neglect? World Ophthalmology Congress Berlin, Germany (5-9 June 2010)
57. Screening for Diabetic Retinopathy by Australian Optometrists. Annual Scientific Congress of Royal Australian New Zealand College of Ophthalmologists, Brisbane, Australia (14-18 November 2009).

**(C) Top 10 Publications** *(from the most impactful publication onwards. Optional for Tenure / Research / Educator / Practice/ Adjunct / Clinical Track (1) Instructor and (2) Assistant Professor candidates)*

Rank	Article Title	List of Authors with candidate's name in bold	Publication Name	Edition No.	Publication Year	Remarks (*Indicate Candidate's Role and Contribution, and provide 3-5 sentences on the impact of publications)
1	Development and Validation of a Deep Learning System for Diabetic Retinopathy and Related Eye Diseases Using Retinal Images From Multiethnic Populations	<b>Ting Daniel Shu Wei</b> ; Cheung Carol Yim-Lui; Lim Gilbert; Tan Gavin Siew Wei; Quang	JAMA	Not Applicable	2017	Dr. Daniel lead the study and drafted the paper as the first author. We developed a deep learning system capable of detecting

	With Diabetes.	Nguyen D; Gan Alfred; Hamzah Haslina; Garcia-Franco Renata; San Yeo Ian Yew; Lee Shu Yen; Wong Edmund Yick Mun; Sabanayaga m Charumathi; Baskaran Mani; Ibrahim Farah; Tan Ngiap Chuan; Finkelstein Eric A; Lamoureux Ecosse L; Wong Ian Y; Bressler Neil M; Sivaprasad Sobha; Varma Rohit; Jonas Jost B; He Ming Guang; Cheng Ching- Yu; Cheung Gemmy Chui Ming; Aung Tin; Hsu Wynne; Lee Mong Li; Wong Tien Yin				diabetes-related eye diseases by analyzing retinal images from diverse populations with diabetes. The paper demonstrated the effectiveness of deep learning in accurately identifying these eye conditions, highlighting its potential as a screening tool. The findings presented a promising solution for early detection and timely intervention in diabetes-related eye diseases, potentially preventing vision loss and improving patient outcomes. The paper's publication sparked further research and development in deep learning algorithms for retinal image analysis, leading to advancements in automated screening systems. Overall, the paper has contributed to the field of diabetic retinopathy detection and has paved the way for the implementation of AI-based systems in clinical practice. This is the first paper in the field that highlighted the importance of AI biases, generalizability, the need for independent testing datasets for AI medical imaging studies.
2	Digital technology and COVID-19.	<b>Ting Daniel Shu Wei</b> ; Carin Lawrence; Dzau Victor; Wong Tien Y	Nature medicine	Not Applicable	2020	Dr Daniel is the first and corresponding author. At the start of the pandemic crisis, we described the role of digital technology in managing and mitigating the effects of the COVID-19 pandemic. The paper discussed various digital tools such as contact tracing apps, telemedicine, and remote monitoring systems that played

						<p>a crucial role in curbing the spread of the virus and supporting healthcare delivery during the crisis. The paper highlighted the potential of digital solutions in enhancing public health responses and fostering innovation in healthcare. It stimulated further research and development in the field of digital health technologies, leading to the implementation and refinement of these tools in real-world scenarios. Overall, the paper contributed to a deeper understanding of the importance of digital technology in pandemic response and has shaped the trajectory of digital health strategies and initiatives. It has been referenced by the US CDC, and has now been cited for &gt;1000 times, and viewed &gt;110,000 times.</p>
3	AI for medical imaging goes deep.	<b>Ting Daniel S W</b> ; Liu Yong; Burlina Philippe; Xu Xinxing; Bressler Neil M; Wong Tien Y	Nature medicine	Not Applicable	2018	<p>Dr Ting is the 1st and corresponding author for this piece, in collaboration with all the major AI experts in Ophthalmology. We described the potential of artificial intelligence (AI) and deep learning in medical imaging and its application in various diagnostic tasks with high accuracy and efficiency. The paper highlighted the potential of AI in improving diagnostic accuracy, reducing healthcare costs, and enhancing patient outcomes. It sparked increased interest and research in the field of AI in medical imaging, leading to the development of advanced AI</p>

						algorithms and their integration into clinical practice. Overall, the paper contributed to a deeper understanding of the possibilities and challenges of AI in medical imaging and has paved the way for further advancements in this domain.
4	Non-fungible tokens for the management of health data.	Teo Zhen Ling; <b>Ting Daniel Shu Wei</b>	Nature medicine	Not Applicable	2023	Dr Ting is the last and corresponding author. Non-fungible tokens (NFTs) have the potential to significantly impact health data management. By leveraging blockchain technology, NFTs can offer secure and tamper-proof methods of storing and accessing health data, ensuring data integrity and authenticity. NFTs can empower patients by giving them greater control over their health data, allowing them to grant or revoke access as needed. These tokens also have the potential to streamline data exchange and interoperability among healthcare providers, improving coordination and continuity of care. However, the implementation of NFTs in health data management also raises important considerations regarding data privacy, consent, and regulatory compliance, which must be carefully addressed. Overall, the use of NFTs in health data management holds promise for enhancing data security, patient autonomy, and healthcare system

5	Large language models in medicine	Arun James Thirunavukarasu, Darren Shu Jeng Ting, Kabilan Elangovan, Laura Gutierrez, Ting Fang Tan, <b>Daniel Shu Wei Ting</b>	Nature Medicine	Not Applicable	2023	<p>efficiency.</p> <p>Dr Ting is the last and corresponding author for this piece. Large language models (LLMs) have had a transformative impact on the field of medicine. These models, such as GPT-4, possess the ability to analyze vast amounts of medical literature and provide insights, aiding in clinical decision-making and research. LLMs have shown potential in tasks such as disease diagnosis, treatment recommendation, and medical image analysis. They enable efficient information retrieval, saving time for healthcare professionals and researchers. However, concerns regarding bias, data privacy, and the need for human oversight in critical decision-making processes have also been raised. LLMs continue to evolve and have the potential to revolutionize medical practice, but ethical considerations and ongoing research are crucial to ensuring their responsible and effective use in healthcare.</p>
6	AI telemedicine screening in ophthalmology: health economic considerations.	Teo Zhen Ling; <b>Ting Daniel Shu Wei</b>	The Lancet. Global health	Not Applicable	2023	<p>Dr Ting is the last and corresponding author. Health economic considerations play a crucial role in assessing the feasibility and cost-effectiveness of implementing AI telemedicine screening in ophthalmology. By reducing the need for in-person consultations, AI telemedicine screening can</p>

						<p>potentially improve access to eye care, especially in underserved areas. The health economic analysis includes the clinical factors, technical factors, mode of AI deployment and several other factors. If deployed appropriately, the AI algorithm has the potential to enhance efficiency by streamlining the screening process and reducing the burden on healthcare resources. Health economic analysis can help determine the cost savings, resource allocation, and potential return on investment associated with AI telemedicine screening in ophthalmology. It can guide decision-making and policy development to ensure the adoption of cost-effective and sustainable solutions. Overall, health economic considerations can inform the implementation and scalability of AI telemedicine screening in ophthalmology, leading to improved eye care outcomes and resource optimization.</p>
7	Artificial intelligence and digital health: the opportunities and challenges in global eye health	Tan TF, Thirunavukarasu AJ, Jin LY, Lim J, Poh S, Teo ZL, Ang M, Chan PRV, Ong J, Karlstrom J, Wong TY, BOptom JS, <b>Ting DSW</b>	Lancet Digital Health	Not Applicable	2023	Dr Ting is the last and corresponding author for this piece. The integration of AI and digital health has had a profound impact on global eye health by revolutionizing diagnosis, treatment, and accessibility. AI-powered diagnostic tools can analyze eye images and detect early signs of eye diseases with high accuracy, enabling timely



						<p>interventions and reducing the risk of vision loss. Telemedicine platforms equipped with AI algorithms allow remote eye consultations, especially benefiting underserved populations in rural and remote areas. AI-assisted surgical systems improve precision and safety during complex eye surgeries, resulting in better patient outcomes. Digital health technologies also facilitate data sharing and collaboration among healthcare professionals, fostering advancements in research and improving the overall understanding of eye diseases. Overall, the convergence of AI and digital health has the potential to transform eye care on a global scale, enhancing early detection, increasing access to care, and improving treatment outcomes.</p>
8	Retinal photograph-based deep learning algorithms for myopia and a blockchain platform to facilitate artificial intelligence medical research: a retrospective multicohort study.	Tan Tien-En; Anees Ayesha; Chen Cheng; Li Shaohua; Xu Xinxing; Li Zengxiang; Xiao Zhe; Yang Yechao; Lei Xiaofeng; Ang Marcus; Chia Audrey; Lee Shu Yen; Wong Edmund Yick Mun; Yeo Ian Yew San; Wong Yee Ling; Hoang Quan V; Wang Ya Xing; Bikbov Mukharram M; Nangia Vinay; Jonas Jost B; Chen Yen-Po; Wu Wei-Chi; Ohno-Matsui Kyoko; Rim	The Lancet. Digital health	Not Applicable	2021	Dr Ting is the last and corresponding author for this piece. First, this is the first paper worldwide to describe the use of AI and deep learning to accurately diagnose myopia using retinal photographs, which could lead to improved screening and early intervention for this common eye condition. Second, this is also the first paper worldwide to describe the use of a blockchain platform as the privacy-preserving technology to enable secure and transparent sharing of medical research data, fostering

		Tyler Hyungtaek; Tham Yih-Chung; Goh Rick Siow Mong; Lin Haotian; Liu Hanruo; Wang Ningli; Yu Weihong; Tan Donald Tiang Hwee; Schmetterer Leopold; Cheng Ching-Yu; Chen Youxin; Wong Chee Wai; Cheung Gemmy Chui Ming; Saw Seang-Mei; Wong Tien Yin; Liu Yong; <b>Ting Daniel Shu Wei</b>				collaboration and accelerating advancements in AI-driven healthcare. This publication contributes to the growing body of evidence supporting the application of AI in ophthalmology and highlights the importance of blockchain technology in medical research. The findings have the potential to inspire further research and development in the field, ultimately benefiting patients by enhancing myopia management strategies and promoting data-driven healthcare innovation.
9	Blockchain applications in health care for COVID-19 and beyond: a systematic review.	Ng Wei Yan; Tan Tien-En; Movva Prasanth V H; Fang Andrew Hao Sen; Yeo Khung-Keong; Ho Dean; Foo Fuji Shyy San; Xiao Zhe; Sun Kai; Wong Tien Yin; Sia Alex Tiong-Heng; <b>Ting Daniel Shu Wei</b>	The Lancet. Digital health	Not Applicable	2021	Dr Ting is the last and corresponding author for this piece. This paper describes blockchain's immutability and decentralized nature provide secure and transparent storage of health records, ensuring data integrity and privacy protection during the pandemic and beyond. Blockchain-based smart contracts can streamline and automate processes such as supply chain management, vaccine distribution, and contact tracing, enabling efficient and trustless execution. We also highlighted the potential of blockchain in facilitating interoperability among disparate healthcare systems, enabling seamless data sharing and enhancing care coordination. Blockchain can empower individuals by giving them control over their health data, allowing

						for consented sharing and empowering patients to participate actively in their own care.
10	Artificial intelligence for teleophthalmology-based diabetic retinopathy screening in a national programme: an economic analysis modelling study.	Xie Yuchen; Nguyen Quang D; Hamzah Haslina; Lim Gilbert; Bellemo Valentina; Gunasekeran Dinesh V; Yip Michelle Y T; Qi Lee Xin; Hsu Wynne; Li Lee Mong; Tan Colin S; Tym Wong Hon; Lamoureux Ecosse L; Tan Gavin S W; Wong Tien Y; Finkelstein Eric A; <b>Ting Daniel S W</b>	The Lancet. Digital health	Not Applicable	2020	Dr Ting is the last and corresponding author for this piece. This is the first paper worldwide to demonstrate the potential of deep learning algorithms in teleophthalmology-based diabetic retinopathy screening, which could lead to improved efficiency and accessibility of screening programs. The economic analysis modeling shows that the implementation of AI in diabetic retinopathy screening can result in cost savings by reducing the need for manual grading and specialist involvement. This study also highlighted the scalability of AI-based screening programs, particularly in national healthcare systems, where large-scale screening initiatives are required. The findings contribute to the evidence base supporting the integration of AI in diabetic retinopathy screening and provide valuable insights for policymakers and healthcare providers. This publication stimulates further research and discussions on the implementation and impact of AI-driven teleophthalmology in diabetic retinopathy screening, potentially leading to wider adoption and improved patient outcomes.

**(D) h-index**

*(Required for (1) Associate Professor with tenure, (2) Professor with tenure, (3) Professor (non-tenure), (4) Adjunct / Clinical Associate Professor, (5) Adjunct / Clinical Professor and (6) Senior Principal Research Scientist appointments)*

*Inclusive of h-index, method of calculation [e.g. Google Scholar Citations (preferred), Web of Science] and date that the index was determined.*

H index: h-index (Google Scholar): 65; i10-index: 186; Citations: 23636

Date Index Determined: 24/11/2024

**(E) ORCID**

*(Required for all Faculty appointment ranks and (Senior) Principal Research Scientists)*

ORCID: 0000-0003-2264-7174

**(10) Intellectual Property / Technology Declarations**

**(A)** Total number of Duke-NUS affiliated Invention Disclosures submitted: NIL

**(B)** Total number of Duke-NUS affiliated Trademarks submitted: NIL

**(C)** Total number of Duke-NUS affiliated Patents filed: NIL  
*Inclusive of provisional and published patents.*

**(D)** Total number of Duke-NUS affiliated IP granted / registered: NIL  
*Inclusive of copyrights and trademarks registered.*

**(E) Duke-NUS Patents Published**

<u>Title</u>	<u>Inventor(s)</u>	<u>Publication Date</u>	<u>Publication Number</u>	<u>Patent Office</u>

**(F) Duke-NUS Copyrights and Trademarks Registered**

<u>Registration Date</u>	<u>Type</u>	<u>Title</u>	<u>Inventor(s)</u>	<u>Registration Number</u>	<u>Country</u>

**(G) Duke-NUS Technology Declarations**

<u>Title</u>	<u>Inventor(s)</u>	<u>Application Date</u>	<u>Application Number</u>	<u>Patent Office</u>	<u>Date Granted</u>	<u>Patent Number (if granted)</u>

**(H) Other Intellectual Property (Trademark / Copyright / Patent)**

<u>Registration / Publication Date</u>	<u>Type of IP</u>	<u>Title</u>	<u>Inventor(s)</u>	<u>Registration / Publication Number</u>	<u>Country</u>	<u>Patent Office</u>

01/01/2021	Copyright	A Deep Learning Algorithm to Detect Chronic Kidney Disease through Retina Fundus Image	Hsu Wynne Lee Mong Li Xu Dejiang SABANAYAGA M Charumathi Cheng Ching Yu Tan Gavin Ting Shu Wei Chueng Yim Lui Wong Tien Yin	ILO Ref: 2020-145	Singapore	Others
30/09/2020	Patent	Automatically extracting measurements from an image of a display of a measurement device	Ting Daniel	10202009732 S	Singapore	Others
08/02/2019	Patent	Method and system for classification and visualisation of 3D images	Ting DSW Liu Y Tan GSW Wong TY Cheng CY Cheung G Li SH Goh RSM	10201901083 Y	Singapore	Others
28/07/2017	Patent	Method Of Modifying A Retina Fundus Image For A Deep Learning Model	Hsu W Lee ML Lim GYS Wong TY Ting DSW	10201706186 V	Singapore	Others

### (I) Other Technology Declarations

<u>Title</u>	<u>Inventor(s)</u>	<u>Application Date</u>	<u>Application Number</u>	<u>Patent Office</u>	<u>Date Granted</u>	<u>Patent Number (if granted)</u>
Deep Learning System to Predict the Risk of High Myopia in Children	Ting Daniel	01/01/2022	Deep Learning System to Predict the Risk of High Myopia in Children	SingHealth	01/01/2022	
Sandbox for testing and evaluation of healthcare AI models for chest X-ray	Goh Rick Gao Fei Seet Kiang Yeow Fiho Ricardo Liu Yong Shao LuJie Ting Daniel Ong Marcus Yeo Khung Keong Cheng Lionel Heng Mark Aw Kok Leong	01/11/2022	Sandbox for testing and evaluation of healthcare AI models for chest X-ray	ASTAR	22/02/2023	

### (J) Licences / Agreement with Companies

<u>Registration Date</u>	<u>Type</u>	<u>Title</u>	<u>Company</u>	<u>Licence/ Agreement Number</u>	<u>Country</u>

## **(11) Editorship**

*Inclusive of roles (e.g. editor, reviewer or member of editorial board) in editorship of journals and books.*

- International Advisory Board

o Lancet Digital Health (Jan 2024 – present) (IF: 30.8)

- Editorial Board

o Associate Editor

npj Digital Medicine (2020 – present) (IF: 15.4) (Tier 1 digital journal)

Frontiers in Medicine (2020 – present) (IF: 5.1)

Frontiers in Digital Health (2021 – present) (IF pending)

Asia-Pacific Journal of Ophthalmology (IF: 4.4)

o Section Editor: British Journal of Ophthalmology (2019 – present) (IF: 5.9) (Tier 1 ophthalmology journal)

o Editorial board members

Ophthalmology (2019 – present) (IF: 14.3)

Ophthalmology Retina (2019 – present) (IF: 4.2)

Ophthalmology Science (2020 – present) (IF pending)

Retina (2022 – present)

- AI Reviewers

Lancet, Nature Medicine, Nature Communication, Nature Biomedical Engineering, Clinical Infectious Diseases, Lancet Digital Health

Ophthalmology, JAMA Ophthalmology, American Journal of Ophthalmology, British Journal of Ophthalmology, Investigative Ophthalmology and Visual Sciences and Theranostics

- Regular retina and ocular imaging reviewers for retinal diseases in many Ophthalmology and medical journals

Hypertension, Diabetes Care, Diabetes Medicine, Ophthalmic Epidemiology, Scientific Reports, Ophthalmology, JAMA Ophthalmology, Investigative Ophthalmic Visual and Science, Retina, British Journal of Ophthalmology, and etc.

- AI Research Grant

Singapore, USA, Europe and UAE countries

## **(12) Education Activities (Teaching Portfolio)**

*Chronological listing of activities related to Medical Education, or educational activities related to Research / Clinical Innovation, beginning with the oldest.*

### **(A) Educational Philosophy (500 words max):**

*Inclusive of the following elements: personal theory of learning, goals of instruction, role and responsibility of the student and instructor, and a description of the variables that promote learning.*

The importance of mentorship within health care training is well recognized. It offers a mean to further enhance workforce performance and engagement, promote learning opportunities and encourage multidisciplinary collaboration. There are both career and life benefits associated with mentorship, and it is increasingly recognized as a bidirectional process that benefits both mentors and mentees. Mentoring has been regarded as a crucial step in professional and personal development, particularly in the field of health care.

Learning within the workplace includes the development of knowledge and skills, and an understanding of the values important to the profession and the culture of organisations. Within health care training, organisations may encompass hospitals, universities, training organisations and regulatory bodies. The practice of mentorship may help to foster an understanding of the enduring elements of practice within these organisations. Mentoring involves both a coaching and an educational role, requiring a generosity of time, empathy, a willingness to share knowledge and skills, and an enthusiasm for teaching and the success of others. Being mentored is believed to have an important influence on personal development, career guidance and career choice. Ethical issues and potential difficulties in mentorship include conflict of interest, imbalance of power and unrealistic expectations.

Below are some of the philosophies that I have always been sharing with my personal mentees.

1. Be kind and fair with what we do. Treat everyone in team as per our family members and help each other out.
2. Treat the sky as the limit. Although this is sometimes hard to be done in the clinical setting, but everything is possible in the innovation space. In the tech space, I have always shared great examples about Mark Zuckerberg (Facebook CEO) and Evan Spiegel (Snapchat CEO) who have turned their innovations to impact millions of users prior to the age of 30. A quote that I really like from President Theodore Roosevelt – Eyes on the stars, but feet on the ground. To me, it means dream big, but work hard. Be passionate about what we do.
3. Be a sound clinician and surgeon. Having strong understanding about a clinical or surgical topic will enable one to identify and potentially solve the unmet need. We need to ensure that the research outcome is not confounded by the lack of basic understanding or surgical expertise.
4. Make many friends. Be friendly even though some may not be our immediate collaborators for now. Coffee, lunch or dinner are always good ways to facilitate friendship and collaboration.
5. Stay focused, coin the niche, and be a great enabler. Without having sound academic reputations and wide network of collaborators, it could be challenging to be a good enabler to help the mentee/peers to be world-class academicians, although there are always exceptions to this. Both my mentors, Prof Tien Wong and Tin Aung have shown me the important of doing this, and this is also consistent with what I am currently experiencing at present.

## **(B) Seminars / Lectureships**

### **(i) Local**

1. ESASO Asia Module in Medical Retina Jul-2024 Singapore
  - a. Speaker: Digital innovations for retinal care – now and the future
2. Singapore-Malaysia Joint Meeting in Ophthalmology-Singapore SNEC Jan-2024
  - a. AI & Innovations Symposium 37<sup>th</sup> (Organiser)
3. Annual TVM Healthcare Institute Tank Dinner - Singapore Nov 2023
  - a. The role of AI in Healthcare and the fast tracking of affordable and accessible care
4. AI Health Summit November 2023, W Hotel, Sentosa
  - a. Organizing chairperson for a 2-day event
  - b. 8 expert panels discussions, 4 AI symposiums
  - c. Invited speakers included the 3 Editor-in-Chiefs (Nature Medicine, Nature Biomedical Engineering, Lancet Digital Health), Vice Chancellor of UCSF, Founding Dean of School of Medicine Tsinghua, Various Deans of Medical School in Duke-NUS, LKC School of Medicine, Regulators, Commercial, Industrial/Commercial Partners
5. Global AI Trend in Health, Innovation Center, Feb 28th, 2023
6. Large Language Models and ChatGPT for Health, Ministry of Health, March 2nd, 2023
7. Global AI Trend in Health, Innovation Center, Feb 28th, 2023

8. AI Health Summit Nov 23-24 2023
9. Ophthalmic Artificial Intelligence Summit April 1, 2023
  - i. Artificial Intelligence in Ophthalmology
  - ii. The Foundation for the Development of Ophthalmology
  - iii. Artificial Intelligence Part 1 webinar
10. INTEGRATE: Technology & Innovation = Access & Impact Sept 2023
11. Keynote at Supercomputing Asia 2022 March
12. 4th National Ophthalmic Artificial Intelligence Conference June 2022
13. The Annual Meeting of Cross-Straits Macular Society & The 9th Polypoidal Choroid Vasculopathy (PCV) Summit Jan 2022
14. APTOS-ZOC AI Seminar, Asia Pacific Tele-Ophthalmology Society and Zhongshan Ophthalmic Centre Dec 2021
15. RADSC ACP Research Day April 2021
16. 2021 International Undergraduate Ophthalmology Conference Oct 2021
17. SLAS 2021 AI-Powered Drug Discovery Symposium Nov. 2021
18. 6th Asia Pacific Tele-Ophthalmology Society Symposium August 2021
19. SGCR WIRES August 2021
20. International Conference on Clinical Research in Ophthalmology April 2021
21. 13th IDF-WPR Congress & 12th AASD Scientific Meeting Nov 2021
22. One Belt One Road National AI Medical Alliance Annual Conference May 2021
23. 5th Asia Pacific Glaucoma Congress (APGC) June 2021
24. The Ophthalmic Artificial Intelligence Summit June 2021
25. Macular Summit April 2021
26. Artificial Intelligence and Digital Innovation Journal Club May 2021
  - a. Adaptation and Innovation across the Pacific in Response to the COVID-19 Pandemic: Part 3 - Technology-driven Innovation for Education and Population Health 2021
27. In the Spotlight : How the Pandemic Changed the use of Blockchain, AI & Cloud in Healthcare 2021
28. Retina Master Class 2020: AI and big data in retina December
29. KnowDis Machine Learning Day
30. 33rd APACRS – SNEC 30th Anniversary Virtual Meeting July 2020
31. World Young Scientist Summit 2020
  - a. Artificial Intelligence and Digital Innovation in Eye: insights from Google AI and Eye Experts
  - b. Explainable AI in Healthcare
32. American Academy of Ophthalmology 2019
33. Asia Pacific Vitreo Retinal Society 2019
34. AI in Retinal Imaging 2019 – Invited speakers
  - a. AI for Retinal Diseases: the state-of-art technologies
  - b. AI in Ophthalmology: The clinical and technical considerations
  - c. Artificial Intelligence in Ophthalmology – Current Clinical Relevance
  - d. The Clinical and Technical Considerations of Deep Learning Applications in Ophthalmology
35. AI in Ophthalmology: Where are we now? Where is next? 2019 Macula Society Evangelos Gragoudas Award Lecture
  - a. The use of AI in Ophthalmology



- b. Deep Learning in Retina
- 36. How will AI Affect Ophthalmology? 2018
- 37. The Use of Deep Learning Systems to Study Epidemiology and Risk Factors for Diabetic Retinopathy
- 38. The application of AI in Ophthalmology
- 39. Deep Learning in Ophthalmology: Where are we now? Where is next? Asia-Pacific Tele-Ophthalmology Society Meeting, Singapore 2018
  - a. Deep Learning System in Detection of Retinal Diseases
  - b. Artificial Intelligence for Diabetic Retinopathy Screening
  - c. Deep Learning for Retinal Image Analysis
  - d. Artificial Intelligence and Telemedicine in Screening for Diabetic Eye Center
  - e. Artificial Intelligence using Deep Learning Systems for Tele-Retinal Diabetic Retinopathy Screening Programs: Fully-automated versus Semi-automated System
  - f. Deep Eye Study: Lessons and Challenges Learnt
  - g. Artificial Intelligence and Tele-Ophthalmology for Diabetic Retinopathy Screening
  - h. Deep Learning System: A Novel Artificial Intelligence for Diabetic Retinopathy in a National Screening Program
  - i. Automated Cloud-Based Deep Learning System for Diabetic Retinopathy Screening
- 40. Residents as Future Teachers – Sharing Experience of Student Internship Program Bootcamp
  - a. A Model of Tele-ophthalmology in Providing Eye Care for Patients with Diabetes in a Low/Middle Income Country
  - b. Eye as the Window to the Body to Diagnose Diseases Non-invasively

**(ii) International**

- 1. Ophthalmology Innovation Symposium and Workshop - Stanford University School of Medicine Jul-2024 USA
  - a. Chairman and Workshop Organizer
- 2. The Associate for Research in Vision and Ophthalmology (ARVO) May 2024, Seattle, USA
  - a. Organizer: AI in Ophthalmology: What's new in 2024? 1-day event
- 3. Collaborative Community on Ophthalmic Imaging (CCOI) 2024 January 18–19, 2024 USA
  - a. Ethical considerations of LLM in ophthalmology
  - b. Expanding datasets for digitally enhanced management of eye diseases: patient-generated data, generative AI, 4D imaging, and other alternate data streams
- 4. Asia-Pacific Academy Ophthalmology Feb 2024, Bali, Nusa Dua, Indonesia
  - a. Safe and Segment Imaging
  - b. Asia-Pacific Vitreo-Retinal Society HK Dec 2023
  - c. AI for Retinal Diseases
  - d. Emerging technology for retinal diseases
- 5. Floretina Dec 2023- Italy
  - a. What's new for diabetic retinopathy in 2023?
- 6. AI + Health Conference Stanford University School of Medicine 11-2023 United States
  - a. The AI global trend in Ophthalmology
- 7. AI Health Summit November 2023, W Hotel, Sentosa
  - a. Organizing chairperson for a 2-day event
  - b. 8 expert panels discussions, 4 AI symposiums

- c. Invited speakers included the 3 Editor-in-Chiefs (Nature Medicine, Nature Biomedical Engineering, Lancet Digital Health), Vice Chancellor of UCSF, Founding Dean of School of Medicine Tsinghua, Various Deans of Medical School in Duke-NUS, LKC School of Medicine, Regulators, Commercial, Industrial/Commercial Partners
- 8. Afro-Asian Council of Ophthalmology (AACO) 11/2023 China Zhongshan
  - a. The AI global trend in Ophthalmology
- 9. American Academy of Ophthalmology Nov 2023
- 10. Emerging trend for Diabetic Retinopathy
- 11. 23rd Euretina Congress Netherlands Oct 2023
  - a. Artificial Intelligence in DME
  - b. Imaging (as panellist)
- 12. Chang Gung Memorial General Hospital, Linkou Branch. AI Innovation in Health: Global Trend, May 2023.
- 13. Chang Gung Memorial General Hospital, Kee Long Branch. AI translation from bench to bedside. May 2023.
- 14. Taiwan Macula Society – Keynote Lecture, Taipei, 2023. AI Innovation in Ophthalmology: Opportunities and Challenges
- 15. Vision Summit May 2023, Manila, Philippines.
  - a. AI in Ophthalmology: Where are we now?
- 16. Byers Eye Institute, Stanford University 2023
  - a. Global AI Trend in Ophthalmology
  - b. 5 Rights in Ophthalmology
- 17. ARVO 2023, New Orleans
  - a. Chair, AI in Retina OCTs
  - b. Chair, AI in Retina Imaging
  - c. AI Educational Course organizer
- 18. Blockchain applications in ophthalmology
  - a. Explainability in ophthalmology
  - b. Federated learning in ophthalmology
- 19. Hokkaido University, April 2023, Sapporo Japan
  - a. Global Trend for AI in Ophthalmology
- 20. Kyoto University, April 2023, Kyoto, Japan
  - a. Global Trend for AI in Ophthalmology
- 21. Nihon University, April 2023, Tokyo, Japan
  - a. Will AI replace ophthalmologists?
- 22. Topcon Medical Inc, April 2023, Tokyo, Japan
  - a. Current trend for AI innovation in ophthalmology
  - b. Emerging trend for AI innovation in ophthalmology
  - c. Will AI replace ophthalmologists?
- 23. Fujiretina April 2023, Tokyo, Japan
  - a. Global Trend for AI Innovation in Ophthalmology
  - b. 5 Rights in AI Research in Ophthalmology
- 24. 38th Asia-Pacific Academy of Ophthalmology (APAO). Kuala Lumpur, Malaysia. Feb. 2023

- a. Chair, Improving Artificial Intelligence Trust in Ophthalmology: Imaging Standards, Ethics, Health Economics, and Emerging Domains
  - b. Chair, Artificial Intelligence and Deep Learning in Ocular Imaging for Posterior Segment Imaging
  - c. Chair speaker, AI in Retinal Diagnosis
25. Macular Society 2023. Miami, USA.
- a. Personalized Risk Scores for Prediction of Diabetic Retinopathy Progression Within 3 and 5 Years Using Multimodal Artificial Intelligence Algorithms
26. The International Diabetes Federation (IDF) Virtual Congress December 2022 Lisbon
27. Asia Pacific Vitreo Retinal Society. Taipei, 2022
- a. AI innovation in ophthalmology, Young Ophthalmologists Symposium
  - b. AI in retinal diseases
  - c. AI applications post COVID-19
  - d. Zeiss Imaging for Diabetic Retinopathy
28. 55th Annual Scientific Meeting, Retina Society. Pasadena, CA, US. 2022
- a. Bilateral Severe Intraocular Infiltration with Vitreous Haemorrhage in an Erdheim Chester Disease Patient Treated with Dual BRAF and MEK Inhibition
  - b. Blockchain application for deep learning system in detection of high myopia and myopic macular degeneration
29. Macula Society. Berlin, Germany. 2022
- a. Using AI in detecting one of the potentially blinding retina diseases, myopic macular degeneration, that could be detected among the population with diabetes
30. 22nd EURETINA Congress. Hamburg, Germany. 2022
- a. Management of Vitrectomy in High Myopia Patients
31. American Academy of Ophthalmology (AAO). Chicago, US. 2022
- a. The Future Practice of Ophthalmology: Integration of AI and Technology in Patient Care
  - b. Advances in Technology: Transforming Clinical and Surgical Ophthalmology
  - c. Artificial Intelligence – What You Need to Know as a Practicing Ophthalmologist
32. NSW RANZCO & Ophthalmology Updates. Sydney. 2022
33. Asia-Pacific Tele-Ophthalmology Society (APTOS). Shenyang, China. 2022
- a. The Future of Digital Ophthalmology & Eye Care
34. 36th Asia-Pacific Academy of Ophthalmology (APAO) Congress, Virtual. 2021
- a. AI and Digital Innovation during COVID-19
35. Asia-Pacific Tele-Ophthalmology Society (APTOS) Symposium. Virtual. 2021
- a. AI in Ophthalmology: What's next?
36. The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO). Virtual. May 2021
- a. Chair, AI in Retinal Application
37. 32nd Meeting of Japan Glaucoma Society Virtual Oct 2021
38. 2nd APOIS, Asia Pacific Ocular Imaging Society Korea Virtual Oct 2021
39. American Academy of Ophthalmology (AAO). Virtual. Nov 2020
- a. AI Beyond 2020: Opportunities and Challenges in Ophthalmology, Virtual
40. The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO). Nov Virtual. 2020

- a. AI Vision 2020: Global AI trends in medicine and ophthalmology – Co-Chair
- b. Bert Glazer Award for Innovation in Retina
- 41. AI for DR Screening: Where are we now? 34th Asia-Pacific Academy of Ophthalmology (APAO) Congress, March 6-9, 2019, Bangkok, Thailand
- 42. Asia Pacific Vitreo Retinal Society. Shanghai China. 2019
  - a. AI in Retinal Imaging 2019 – Invited speakers
  - b. AI application in Retina Diseases – Co-chair
  - c. Will AI replace Ophthalmologists? Topcon Lunch Symposium
- 43. AI instructional courses, American Academy of Ophthalmology (AAO), San Francisco, USA, 2019
  - a. Clinical Translation of DR Screening – Chair
  - b. The Clinical and Technical Approach in Building a Robust DLS – Chair
- 44. AI Symposiums, Euretina, Paris, France 2019
  - a. The State-of-art AI Technologies for Retinal Diseases - Chair
  - b. AI for DR Screening – Chair
  - c. Deep Learning Made Simple - Chair
- 45. AI in Ophthalmology, ARVO, Vancouver, Canada 2019
  - a. Educational course: Course Director
- 46. AI Educational Course organizer, ARVO, Vancouver, Canada. 2019
- 47. Chair, AI for DR Screening: Real World Deployment, Asia-Pacific Academy of Ophthalmology, Bangkok, Thailand 2019.
- 48. Co-chair, AI for Retinal Imaging Analysis (AIRIA), Asian Computing for Computer Vision (ACCV), Perth, Western Australia, Australia.
- 49. Chair, Special Interest Group (SIG) for AI in Ophthalmology and Telemedicine
  - a. Association of Research and Vision in Ophthalmology (ARVO), Hawaii, Honolulu, USA. May 2018
- 50. Moderator, AI Symposium for Mobile Devices in Tele-ophthalmology
  - a. Asia-Pacific Tele-Ophthalmology Society Meeting, Singapore. July 2018
- 51. Moderator, AI Symposium, Free Paper Sessions for AI Research
  - a. Asia-Pacific Tele-Ophthalmology Society Meeting, Singapore. July 2018
- 52. Asian Conference of Computer Vision (ACCV), Perth, Western Australia. Dec 2018
  - a. AI Workshop Organizer

### **(C) Teaching Activities in Local Institutions**

*(Optional for Faculty Candidates who are PhD Research Investigators)*

#### **(i) Undergraduate Education:**

*Inclusive of date, title of teaching, audience and evaluation (if available).*

1. SUTD-Duke NUS Medical Student Special Track Clinical Mentor (2022 - present)
2. NUS YLL & Duke-NUS Medical Student Teachings Clinical Mentor (2013 - present)
3. Singapore Fulbright Association ITE mentoring program/Mentor (2018 - present)
  - Mentor the top 1% ITE students, to help them to get onto polytechnic or university

4. SingHealth Residency Leadership Program (SRLP)/Core Executive Member (2017 - present)
  - To develop and shape the curriculum for the SRLP program
  
5. Singapore Chief Residency Program (SCRP)/Mentor (2016 - present)
  - Facilitating some of the workshops for SCRП program, dialogue with senior MOH directors
  
6. National University of Singapore/Clinical Lecturer (2015 - present)
  - Teaching the medical students
  
7. 3rd SingHealth Student Internship Program (SIP) Boot Camp/SingHealth Ophthalmology Chief Resident (2015)
  - Conducted medical student teaching for Ophthalmology
  
8. SNEC Surgical wet lab sessions/SNEC Wet-lab surgical tutor (2015)
  - Mentoring junior residents in various cataract wet-lab sessions
  
9. National Continuing Medical Education (CME) Sessions/SingHealth Ophthalmology Chief Resident (2015)
  - Planning for the national Ophthalmology CME sessions
  
10. SNEC Education Research Committee/Committee member (2015)
  - Leading and supervising 4 junior residents/medical students on medical education-related research projects in SNEC
  
11. Pre-residency orientation program/SingHealth Ophthalmology Chief Resident (2015)
  - Conducted orientation/ teaching programs for junior residents during the pre-residency year
  
12. 2nd SIP Boot Camp/SingHealth Residents' Committee Chairman (2014-2015)
  - Conducted medical student teaching for Ophthalmology
  
13. 1st SIP Boot Camp Organizing chairman (2012-2013)
  - Pioneered the large-scale nationwide residents'-led medical student teaching (SIP) boot camp, with support from GME office

**(ii) Postgraduate Education:**

*Inclusive of date, title of teaching, audience and evaluation (if available).*

1. Role: Clinical mentor

Program Title: SNEC Vitreo-retinal Fellowship

Audience: Retinal Fellows

Institution / Country: SNEC / Singapore

Date: 2020 till present

Evaluation: Mentoring retinal fellows in clinics and operating rooms for surgical retina cases

2. Role: Faculty member

Program Title: SNEC residency program

Audience: Residents

Institution / Country: SNEC / Singapore

Date: 2017 till present

Evaluation: Awarded the SNEC Pooh Bear Award – the near peer mentor who has the most influence on the residents' education

3. Role: Steering committee member

Program Title: Singapore Chief Residency Program

Audience: National Chief Residents

Institution / Country: Singapore

Date: 2018 till present

Evaluation: Invited to conduct AI and digital innovation workshop for the next generation of the healthcare leaders

4. Role: Steering committee member

Program Title: SingHealth Residency Leadership Program

Audience: SingHealth Chief Residents

Institution / Country: Singhealth / Singapore

Date: 2019 till present

Evaluation: Invited to design and mentor the SingHealth Chief residents

5. Role: SNEC Wet-lab surgical tutor

Program Title: SNEC Surgical wet lab sessions

Audience: Junior residents

Institution / Country: SNEC / Singapore

Date: 2015

Evaluation: Mentoring junior residents in various cataract wet-lab sessions

6. Role: SingHealth Ophthalmology Chief Resident

Program Title: Pre-residency orientation program

Audience: Junior Residents

Institution / Country: SingHealth / Singapore

Date: 2015

Evaluation: Conducted orientation/teaching programs for junior residents during the pre-residency year

7. Role: Committee member

Program Title: SNEC Education Research Committee

Audience: Junior residents/medical students

Institution / Country: SNEC / Singapore

Date: 2015

Evaluation: Leading and supervising 4 junior residents/medical students on medical education-related research projects in SNEC

8. Role: SingHealth Ophthalmology Chief Resident

Program Title: Pre-residency orientation program

Audience: Junior residents

Institution / Country: SingHealth / Singapore

Date: 2015

Evaluation: Conducted orientation/teaching programs for junior residents during the pre-residency year

**(D) Leadership Positions or Roles in Education / Clinical Innovation / Commercialisation / Industry (e.g Course Directorship, Curriculum Planning / Development Committees / Facilitation of Start-Ups, etc.)**

*Inclusive of the title, date / period, audience, a brief description and frequency conducted.*

2021

SingHealth Junior Doctors Well Being Committee: Initiated the SGH campus junior doctors' well being committee with different representatives to improve the educational and welfare for junior doctors working in SingHealth

2018

- Executive Committee (EXCO) Member, Singapore Fulbright Association
- Core EXCO Member, SingHealth Residency Leadership Program
- SNEC Eye ACP EXCO Member, Faculty and Professional Development
- Chairman, SNEC-Beijing Tongren Eye Summit

2017

- Mentor for Singapore Chief Residency Program
- Mentor for SingHealth Residency Leadership Program

2016

- Visiting Chief Resident to Duke University, Durham, North Carolina

2015

- Singapore Chief Residency Program (SCRCP): Participated in strategic planning of SingHealth/Duke-NUS to transform into an Academic Medical Centre
- SNEC IT Committee: Involved in the transformation of the paper documentation to the electronic medical record system
- SNEC Outpatient Committee: Involved in strategic planning of SNEC outpatient for all subspecialties

2014

- SingHealth Ophthalmology Chief Resident (Attended the Singapore National Chief Residency Program, National Healthcare Leadership College, Ministry of Health)
- SingHealth Student-Resident Buddy System: Pioneered the setting up of residents' educators database in SingHealth and linking the medical students to the respective resident educators
- 2nd SingHealth Residency Game: Oversaw the planning, development and organization of the SingHealth residency game, with the support from GME office
- Project Hope: Oversaw the planning, development and organization of the Project Hope (a local humanitarian initiative)
- Residents' clinical and surgical roster planning: 1. Planned and organized residents' clinical and surgical roster; 2. Helped with planning and running of the education activities with SNEC training and education department
- Graduate Medical Education Committee: Represented the SingHealth Residents to flag up residents-related issues regarding education and welfare issue to the GMEC

2013

- Chairman, SingHealth Residents' Committee (representing >1000 SingHealth residents)

**(E) Advisory / Mentoring Role:**

*Inclusive of date (range from - to, student name, student level (medical student, fellow, postgraduate, faculty, resident) and title of student work.*

<u>Family Name</u>	<u>Given Name</u>	<u>Programme</u>	<u>Title of Programme</u>	<u>From</u>	<u>To</u>	<u>Current Position</u>
Yuhe	Ke	Residency / PhD	Anesthesia and PhD	8/2022	Now	Senior Resident
Qianfeng	Jiang	Undergraduate FYP / Internship	Duke-NUS Research Attachment	10/07/2023	03/2024	Year 3 in NUS
Yutong	Gou	Internship	Master Computer Science	6/2024	12/2024	
Fan	Kai Jie	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Chua	Jeremy	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Lim	Shaun Lii	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Lim	Zhen Yong	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Hui	Yee Teo	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Yen Kin	Eldrick Sim	Capstone project	Business Analytics	8/2024	11/2024	Year 3 in NUS
Ng	Faye	Medical Student	Internship	05/2022	Present	Year 5 in Yong Loo Lin School of Medicine, NUS
Yang	Lily	Undergraduate FYP / Internship	NUS-YLL Research Attachment		Present	NUS-YLL Year 4 student - 2019
Hong	Dylan		Summer Internship	03/2023	Present	Junior College
Xie	Yuchen	PhD			Present	Research Fellow (2019)
Bellemo	Valentina	PhD			Present	Research Fellow (2019)
Li	Olivia	Residency	SNEC residency program		Present	Resident (Moorfields, 2019)
Foo	Lilian	Residency	SNEC residency program		Present	Resident (2019)
Foo	Valencia	Residency	SNEC residency program		Present	Resident (2018)
Tan	Tien En	Residency	SNEC residency program		Present	Resident (2018 till present)
Wong	Carina	Undergraduate FYP / Internship	Duke-NUS Research Attachment		Present	Duke-NUS Year 3 student - 2020
Sia	Josh	Undergraduate FYP / Internship	NUS-YLL Research Attachment		Present	NUS-YLL Year 4 student - 2019
Shakeel	Abdullah	MD	Summer Internship	06/2023	07/2023	Year 5 in University of Cambridge
Lien	Xavier		Summer Internship	04/2023	06/2023	Year 1 in Carnegie Mellon University
Poon	Phusangmook		Summer Internship	05/2023	06/2023	Junior College Student
Ong	Naomi		Winter Internship	12/2022	01/2023	Year 2 in NUS
Lee	Hern Ee	MBBS	Summer Internship	06/2022	08/2022	Year 3 in Lee Kong Chian



						School of Medicine, NTU
Cheng	Haoran	Undergraduate FYP / Internship	Summer Internship	07/2022	08/2022	Year 4 in Emory University
Thirunavuk arusu	Arun	MD	Summer Internship	07/2022	08/2022	Year 5 in University of Cambridge
Du	Melissa	Computer Science	Summer Internship	06/2022	08/2022	Year 2 in Massachusetts Institute of Technology
Wong	Mark	MD	Summer Internship	07/2022	07/2022	Year 5 in University of Cambridge
Su	Joanna		Summer Internship	05/2022	06/2022	Year 1 in NUS
Chua	Kai Jie		Winter Internship	11/2021	12/2021	Junior College Student
Heng	John		Winter Internship	11/2021	12/2021	Junior College Student
Yip	Michelle	Undergraduate FYP / Internship	Duke-NUS Research Attachment			Duke-NUS Year 3 student - 2019
Lim	Jane	Residency	SNEC residency			Associate Consultant (2019 - present)
Ng	Wei Yan	Residency	SNEC residency			Associate Consultant (2020 - 2022)
Soh	Yu Qiang	Residency	SNEC residency			Resident (2018 - 2019)
Teo	Zhen Ling	Residency	SNEC residency			Resident (2020 till present)
Jin	Liyuan	Undergraduate FYP / Internship	Duke-NUS Research Attachment			Duke-NUS Year 3 student - 2022
Li	Yong	PhD	Duke-NUS PhD			PhD candidate (2021 - 2024)
Yao	Jie	PhD	Duke-NUS PhD			PhD candidate (2022- 2025)
Gunasakran	Dinesh	PhD	NUS PhD			PhD candidate (2020 - 2023)
Hong	Merrellynn	Residency	SNEC MO			Medical officer (2022)
Tan	Ting Fang	Residency	SNEC residency program			Resident (2022 - present)
Poh	Stanley	Residency	SNEC residency program			Lead resident (2022 - present)
Kwee	Ann		SGH Endocrinology			Consultant Endocrinologist (2022 - present)
Ong	Jasmine		Clinician Innovator Award			Senior Inpatient Pharmacist (2022 - present)

Fenner	Beau	Residency	SNEC residency			Resident (2019)
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**(F) Educational Administration:**

*Inclusive of the period of engagement, organisation and your title / role.*

1. AI Educational Course organizer – Co-Chair  
Conference: The Association for Research in Vision and Ophthalmology (ARVO)  
Country: US  
Year: 2024
2. AI Educational Course organizer – Co-Chair  
Conference: The Association for Research in Vision and Ophthalmology (ARVO)  
Country: US  
Year: 2023
3. Organizing Chairman  
Conference: AI Health Summit  
Country: Singapore
4. Instructional Course – Expert Panelist  
Conference: American Academy of Ophthalmology (AAO)  
Country: USA  
Year: 2022
5. AI Educational Course organizer – Co-Chair  
Conference: The Association for Research in Vision and Ophthalmology (ARVO)  
Country: Canada  
Year: 2019
6. AI Special Interest Group - Chair  
Conference: The Association for Research in Vision and Ophthalmology (ARVO)  
Country: USA  
Year: 2017
7. SNEC Pooh Bear Award  
Program: SNEC residency program  
Country: Singapore  
Year: 2017
8. Inspiring Resident-Educator Award  
Program: RISE, Residency Program, SingHealth  
Country: Singapore  
Year: 2015
9. Inspiring Resident-Educator Award  
Program: RISE, Residency Program, SingHealth  
Country: Singapore  
Year: 2014
10. Young Educator Award  
Program: RISE, Residency Program, SingHealth  
Country: Singapore  
Year: 2013

**(G) Continuing Medical Education (date, title, certificate):**

*Inclusive of date, title and certificate with description on strategies implemented to improve teaching.*

Chaired:

- 1 CME Residents Teaching Session 17-Mar-21
- 2 Vitreo Retinal Journal Club 13-Sep-21
- 3 CME Residents Teaching Session 5-Jan-22

- 4 Vitreo Retinal Journal Club 10-Jan-22
- 5 CME Residents Teaching Session 29-Jun-22
- 6 Vitreo Retinal Journal Club 4-Jul-22
- 7 Guest Lecture by Prof Suber Huang, Prof Paul Chan & Prof Mineo Ozaki + Panel Discussion 27-Feb-23
- 8 Vitreo Retinal Journal Club 10-Jul-23
- 9 PRL Monthly Clinical Round - Research 26-Jul-23

Attended:

- 1 Vitreo Retinal Journal Club 8-Jan-18
- 2 Vitreo Retinal Round 25-Jan-18
- 3 Vitreo Retinal Round 22-Feb-18
- 4 [PRL] Monthly Clinical Round 28-Feb-18
- 5 Vitreo Retinal Journal Club 12-Mar-18
- 6 [PRL] Monthly Clinical Round 28-Mar-18
- 7 Vitreo Retinal Round 29-Mar-18
- 8 Vitreo Retinal Journal Club 14-May-18
- 9 Retinal Fluorescein Angiography Round 17-May-18
- 10 [PRL] Monthly Clinical Round 23-May-18
- 11 Vitreo Retinal Round 31-May-18
- 12 [PRL] Monthly Clinical Round 27-Jun-18
- 13 Vitreo Retinal Round 28-Jun-18
- 14 Vitreo Retinal Journal Club 9-Jul-18
- 15 Vitreo Retinal Journal Club 10-Jul-18
- 16 Grand Ward Round/Clinician Faculty Ward Round 18-Jul-18
- 17 Retinal Fluorescein Angiography Round 19-Jul-18
- 18 [PRL] Monthly Clinical Round 25-Jul-18
- 19 Vitreo Retinal Round 26-Jul-18
- 20 Grand Ward Round/Clinician Faculty Ward Round 8-Aug-18
- 21 Retinal Fluorescein Angiography Round 16-Aug-18
- 22 Grand Ward Round/Clinician Faculty Ward Round 5-Sep-18
- 23 Vitreo Retinal Journal Club 10-Sep-18
- 24 Vitreo Retinal Round 27-Sep-18
- 25 Vitreo Retinal Journal Club 5-Oct-18
- 26 [PRL] Monthly Clinical Round 24-Oct-18
- 27 Vitreo Retinal Round 25-Oct-18
- 28 Grand Ward Round/Clinician Faculty Ward Round 14-Nov-18
- 29 Vitreo Retinal Round 29-Nov-18
- 30 Grand Ward Round/Clinician Faculty Ward Round 9-Jan-19
- 31 [PRL] Monthly Clincial Round 23-Jan-19
- 32 Vitreo Retinal Round 31-Jan-19
- 33 [PRL] Monthly Clincial Round 27-Mar-19
- 34 Vitreo Retinal Round 28-Mar-19
- 35 Grand Ward Round/Clinician Faculty Ward Round 10-Apr-19
- 36 Vitreo Retinal Round 25-Apr-19
- 37 Grand Ward Round/Clinician Faculty Ward Round 8-May-19
- 38 Vitreo retinal Journal Club 13-May-19
- 39 [PRL] Monthly Clincial Round 22-May-19
- 40 Vitreo Retinal Round 30-May-19
- 41 [PRL] Monthly Clincial Round 26-Jun-19
- 42 [PRL] Monthly Clincial Round 24-Jul-19
- 43 Retinal Fluorescein Angiography Round 18-Jun-20
- 44 [PRL] Monthly Clinical Round - Cataract 24-Jun-20
- 45 Vitreo Retinal Round 25-Jun-20
- 46 [PRL] Monthly Clinical Round - Cornea 27-Jul-20
- 47 Vitreo Retinal Round 30-Jul-20
- 48 [PRL] Monthly Clinical Round - Research 26-Aug-20
- 49 Vitreo Retinal Round 27-Aug-20
- 50 Vitreo Retinal Journal Club 23-Sep-20
- 51 [PRL] Monthly Clinical Round - Surgical Retina 23-Sep-20
- 52 Vitreo Retinal Round 24-Sep-20
- 53 [PRL] Monthly Clinical Round - OII 28-Oct-20
- 54 Vitreo Retinal Round 29-Oct-20

55 Vitreo Retinal Journal Club 9-Nov-20  
56 Retinal Fluorescein Angiography Round 19-Nov-20  
57 [PRL] Monthly Clinical Round - Glaucoma 25-Nov-20  
58 Vitreo Retinal Round 26-Nov-20  
59 Retina Imaging Round 21-Jan-21  
60 PRL Monthly Clinical Round - Paediatrics 27-Jan-21  
61 Vitreo Retinal Round 28-Jan-21  
62 Retina Imaging Round 18-Feb-21  
63 PRL monthly Clinical Round - Medical Retina 24-Feb-21  
64 Vitreo Retinal Round 25-Feb-21  
65 Corneal & Refractive Specialist Conference 16-Mar-21  
66 CME Residents Teaching Session 17-Mar-21  
67 Retina Imaging Round 18-Mar-21  
68 PRL Monthly Clinical Round - Oculoplastics 24-Mar-21  
69 Vitreo Retinal Round 25-Mar-21  
70 Retina Imaging Round 15-Apr-21  
71 Vitreo Retinal Round 22-Apr-21  
72 Vitreo Retinal Journal Club 10-May-21  
73 PRL Monthly Clinical Round - Research 19-May-21  
74 Retina Imaging Round 20-May-21  
75 Vitreo Retinal Round 27-May-21  
76 Ocular Inflammation & Immunology Conference 7-Jun-21  
77 Retina Imaging Round 17-Jun-21  
78 PRL Monthly Clinical Round - Cataract 23-Jun-21  
79 Vitreo Retinal Round 24-Jun-21  
80 Corneal Clinico-Pathological Conference 6-Jul-21  
81 Vitreo Retinal Journal Club 12-Jul-21  
82 Retina Imaging Round 15-Jul-21  
83 Vitreo Retinal Round 22-Jul-21  
84 PRL Monthly Clinical Round - Cornea 28-Jul-21  
85 Retina Imaging Round 19-Aug-21  
86 PRL Monthly Clinical Round - Research 25-Aug-21  
87 Vitreo Retinal Round 26-Aug-21  
88 Vitreo Retinal Journal Club 13-Sep-21  
89 Retina Imaging Round 16-Sep-21  
90 PRL Monthly Clinical Round - Surgical Retina 23-Sep-21  
91 Vitreo Retinal Round 23-Sep-21  
92 Retina Imaging Round 21-Oct-21  
93 Vitreo Retinal Round 28-Oct-21  
94 Retina Imaging Round 18-Nov-21  
95 PRL Monthly Clinical Round - Glaucoma 24-Nov-21  
96 Vitreo Retinal Round 25-Nov-21  
97 Retina Imaging Round 16-Dec-21  
98 CME Residents Teaching Session 5-Jan-22  
99 Vitreo Retinal Journal Club 10-Jan-22  
100 Retina Imaging Round 20-Jan-22  
101 Vitreo Retinal Round 27-Jan-22  
102 Retina Imaging Round 17-Feb-22  
103 PRL Monthly Clinical Round - Medical Retina 23-Feb-22  
104 Vitreo Retinal Round 24-Feb-22  
105 Retina Imaging Round 17-Mar-22  
106 Vitreo Retinal Round 28-Apr-22  
107 Retina Imaging Round 19-May-22  
108 Vitreo Retinal Round 26-May-22  
109 PRL Monthly Clinical Round - Cataract 22-Jun-22  
110 Vitreo Retinal Round 23-Jun-22  
111 CME Residents Teaching Session 29-Jun-22  
112 Vitreo Retinal Journal Club 4-Jul-22  
113 Cataract Surgical Review Round 25-Jul-22  
114 Vitreo Retinal Round 28-Jul-22  
115 Vitreo Retinal Round 22-Sep-22  
116 PRL Monthly Clinical Round - Surgical Retina 28-Sep-22

- 117 PRL Monthly Clinical Round - OII 26-Oct-22
- 118 Vitreo Retinal Round 27-Oct-22
- 119 PRL Monthly Clinical Round - Glaucoma 23-Nov-22
- 120 Vitreo Retinal Round 24-Nov-22
- 121 PRL Monthly Clinical Round - Oculoplastics 22-Mar-23
- 122 Vitreo Retinal Round (Joint SNEC-Tsinghua-Tongren Forum) 23-Mar-23
- 123 PRL Monthly Clinical Round - Risk 24-May-23
- 124 Vitreo Retinal Round 25-May-23
- 125 Vitreo Retinal Round 22-Jun-23
- 126 PRL Monthly Clinical Round - Cataract 28-Jun-23
- 127 Vitreo Retinal Journal Club 10-Jul-23

### **(13) Clinical Activities**

*(Applicable to candidates with >50% FTE in Research or Medical Education)*

*List of previous and current year clinical activity - type of practice and estimate of time commitment: (list in order of % time commitment from highest to lowest %)*

<u>Type of Practice</u>	<u>Commitment %</u>	<u>From (DD/MM/YYYY)</u>	<u>To (DD/MM/YYYY)</u>
Research	50.00	01/08/2021	Present
Clinical	40.00	01/08/2021	Present
Education	10.00	01/08/2021	Present

### **(14) Conferences Attended and Speaking Invitations**

*Chronologically listed, beginning with the oldest.*

#### **(A) With Oral Presentations**

<u>Presentation Title</u>	<u>Conference Name</u>	<u>Country</u>	<u>Organiser</u>	<u>Conference Date</u>
Automated Diabetic Retinopathy Screening Program in Singapore	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	3/2016
Deep Learning System for Diabetic Retinopathy Screening	Asia-Pacific Vitreo-Retina Society Congress	Thailand	Asia-Pacific Vitreo-Retina Society	12/2016
Choroidal Vasculature Imaging for Polypoidal Choroidal Vasculopathy	International Polypoidal Choroidal Vasculopathy Conference	Thailand	International Polypoidal Choroidal Vasculopathy Conference	12/2016
Optical Coherence Tomography for Diabetes and Diabetic Retinopathy	Asia-Pacific Academy of Ophthalmology	Singapore	Asia-Pacific Academy of Ophthalmology	3/2017
A Novel Automated Technology for Diabetic Retinopathy Screening	Asia-Pacific Academy of Ophthalmology	Singapore	Asia-Pacific Academy of Ophthalmology	3/2017

Deep Learning System for Referable Diabetic Retinopathy, Glaucoma Suspect and Age-related Macular Degeneration in a National Diabetic Retinopathy Screening Program	American Academy of Ophthalmology Annual Meeting	United States	American Academy of Ophthalmology	5/2017
Artificial Intelligence in Screening for Diabetes-related Eye Diseases	Asia-Pacific Tele-Ophthalmology Society Conference	Hong Kong	Asia-Pacific Tele-Ophthalmology Society	7/2017
Classic Risk Factors for Diabetic Retinopathy: Deep Learning versus Human Graders	Association for Research in Vision and Ophthalmology Annual Meeting	United States	Association for Research in Vision and Ophthalmology	4/2018
Deep Learning System for Detection of Diabetic Macular Using Fundus Imaging and Optical Coherence Tomography	Association for Research in Vision and Ophthalmology Annual Meeting	United States	Association for Research in Vision and Ophthalmology	4/2018
Artificial Intelligence using Deep Learning System for Glaucoma Suspect Detection	Association for Research in Vision and Ophthalmology Annual Meeting	United States	Association for Research in Vision and Ophthalmology	4/2018
Deep Learning System for Myopic Macular Degeneration Using Fundus Images	Association for Research in Vision and Ophthalmology Annual Meeting	United States	Association for Research in Vision and Ophthalmology	4/2018
Moderator, AI Symposium	Asia-Pacific Tele-Ophthalmology Society Meeting	Singapore	AI Symposium for Mobile Devices in Tele-ophthalmology	7/2018
Deep Learning in Retina	Asia-Pacific Vitreo-retinal Society (APVRS)	Korea, Democratic People's Republic of	Asia-Pacific Vitreo-retinal Society (APVRS)	11/2018
How will AI Affect Ophthalmology?	Asia-Pacific Vitreo-retinal Society (APVRS)	Korea, Democratic People's Republic of	Asia-Pacific Vitreo-retinal Society (APVRS)	11/2018
How will AI Affect Ophthalmology?	Asia-Pacific Vitreo-retinal Society (APVRS)	Korea, Democratic People's Republic of	Asia-Pacific Vitreo-retinal Society (APVRS)	11/2018
AI in Ophthalmology: Where are we now? Where is next?	Macula Society Evangelos Gragoudas Award Lecture	United States	Macula Society	2/2019
Chair, AI for DR Screening: Real World Deployment	Asia-Pacific Academy of Ophthalmology	Thailand	Asia-Pacific Academy of Ophthalmology	2/2019

AI for DR Screening: Where are we now?	34th Asia-Pacific Academy of Ophthalmology (APAO)	Thailand	APAO	3/2019
Deep Learning System for Abnormal Optic Disc	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
Deep Learning System in Detecting Diabetes and HbA1c	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
Deep Learning System in Detecting Chronic Kidney Disease	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
Deep Learning System for Detection of Diabetic Macular Using Fundus Imaging and Optical Coherence Tomography	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
The Cost-effectiveness Analysis of Deep Learning-assisted National Tele-retinal Diabetic Retinopathy Screening Program	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
The Influence of the Number of Fields, Technical Architecture, Software Framework and Image Resolution on the Deep Learning System for Diabetic Retinopathy Screening	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
Artificial Intelligence using Deep Learning to Screen for Referable and Vision-threatening Diabetic Retinopathy in Africa	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
Development and Validation of a Deep Learning System for Prediction of Refractive Error and Detection of Myopic Macular Degeneration using Retinal Images: A Multi-ethnic Study	Association for Research in Vision and Ophthalmology Annual Meeting	Canada	Association for Research in Vision and Ophthalmology	4/2019
AI for Retinal Diseases: the state-of-art technologies	World Association of Eye Hospital	United Kingdom	World Association of Eye Hospital	6/2019
The Implementation of AI for DR Screening in Singapore	Euretina	France	Euretina	8/2019
The Clinical Consideration of AI Ophthalmology Research	Euretina	France	Euretina	8/2019
The Application of AI Screening for DR in Africa	Euretina	France	Euretina	8/2019

AI in Ophthalmology	Royal Society of Medicine	United Kingdom	Royal Society of Medicine	10/2019
The Clinical and Technical Approach in Building a Robust DLS – Chair	American Academy of Ophthalmology (AAO)	United States	American Academy of Ophthalmology (AAO)	10/2019
Clinical Translation of DR Screening	American Academy of Ophthalmology (AAO)	United States	American Academy of Ophthalmology (AAO)	10/2019
AI in Medicine	Singapore Malaysia Medical Society	United Kingdom	Singapore Malaysia Medical Society	10/2019
a. AI Vision 2020: Global AI trends in medicine and ophthalmology – Co-Chair b. Bert Glazer Award for Innovation in Retina c. Will AI replace Ophthalmologists? Topcon Lunch Symposium	Asia Pacific Vitreo Retinal Society	China	Asia Pacific Vitreo Retinal Society	11/2019
AI for DR Screening	American Academy Ophthalmology (AAO)	United States	American Academy Ophthalmology (AAO)	11/2019
The Impact of Ocular Imaging for AI research in Ophthalmology	Chang Gung Memorial Hospital AI Medical Conference	Taiwan	Chang Gung Memorial Hospital	11/2019
Co-chair, AI for Retinal Imaging Analysis (AIRIA)	Asian Computing for Computer Vision (ACCV)	Australia	Asian Computing for Computer Vision (ACCV)	12/2019
How to Read an AI paper in Ophthalmology?	Moorfields Eye Hospital, London, UK	United Kingdom	Moorfields Eye Hospital, London, UK	12/2019
The Role of AI in Ophthalmology	Peking Union Medical College Hospital, Beijing, China	China	Peking Union Medical College Hospital, Beijing, China	12/2019
Will AI replace ophthalmologists?	Korean Retinal Society	Korea, Republic of	Korean Retinal Society	12/2019
The Technical and Clinical Consideration of AI in Ophthalmology	Seoul National University	Korea, Republic of	Seoul National University	12/2019
AI Integration into a National DR Screening Program	APVRS, Shanghai, China	China	APVRS	12/2019
a. AI in Retinal Imaging 2019 – Invited speakers b. AI application in Retina Diseases – Co-chair c. Will AI	APVRS, Shanghai, China	China	APVRS	12/2019



replace Ophthalmologists? Topcon Lunch Symposium				
Will AI Replace Ophthalmologists?	Topcon symposium, APVRS, Shanghai, China	China	APVRS	12/2019
How is AI Changing the Current Medical Education?	Trinity College, Cambridge	United Kingdom	Trinity College, Cambridge	1/2020
AI for Diabetic Retinopathy	Atlantic Coast Retina Club (ACRC)	United States	Atlantic Coast Retina Club (ACRC)	1/2020
The Clinical and Technical Consideration in Ophthalmology	Oxford University	United Kingdom	Oxford University	3/2020
AI applications in Ophthalmology	Allergan Global Symposium	Singapore	Allergan	5/2020
a. AI Vision 2020: Global AI trends in medicine and ophthalmology – Co-Chair b. Bert Glazer Award for Innovation in Retina	The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO). Virtual	United States	ARVO	5/2020
Explainable AI	SGInnovate	Singapore	SGInnovate	7/2020
Smart City – Tapping on Tech for COVID-19	Smart City	Singapore	Smart City	7/2020
Explainable AI in Healthcare	SGinnovate	Singapore	SGinnovate	7/2020
Artificial Intelligence and Digital Innovation in Eye: insights from Google AI and Eye Experts	SGInnovate	Singapore	SGInnovate	9/2020
AI Beyond 2020: Opportunities and Challenges in Ophthalmology	American Academy of Ophthalmology (AAO). Virtual	United States	AAO	10/2020
Retina Master Class 2020: AI and big data in retina	32nd Annual Scientific Meeting Hong Kong Ophthalmological Symposium (ASMHK2020)	Hong Kong	The Hong Kong Ophthalmological Society	12/2020
In the Spotlight : How the Pandemic Changed the use of Blockchain, AI & Cloud in Healthcare	Medical Fair Asia	Singapore	Messe Dusseldorf Asia	12/2020
Adaptation and Innovation across the Pacific in Response to the COVID-19 Pandemic: Part 3 - Technology-driven Innovation for Education and Population Health	Duke Health & SingHealth – Duke-NUS AMC	Singapore	Duke Health & SingHealth – Duke-NUS AMC	3/2021
Chair, AI in Retinal Application	The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO). Virtual.	Singapore	ARVO	5/2021
AI in Ophthalmology: What's next?	Asia-Pacific Tele-Ophthalmology Society (APTOS) Symposium (Virtual)	Singapore	APTOS	9/2021
AI and Digital Innovation during COVID-19	36th Asia-Pacific Academy of Ophthalmology (APAO) Congress (Virtual)	Singapore	APAO	2/2022
Management of Vitrectomy in High Myopia Patients	22nd EURETINA Congress	Germany	EURETINA	3/2022

Using AI in detecting one of the potentially blinding retina diseases, myopic macular degeneration, that could be detected among the population with diabetes	Macula Society	Germany	Macula Society	3/2022
INTEGRATE: Technology & Innovation = Access & Impact. International Agency for the Prevention of Blindness	IAPB	Singapore	IAPB	3/2022
Artificial Intelligence Part 1 webinar	The Asian Oceanian Society of Radiology	Korea, Democratic People's Republic of	The Asian Oceanian Society of Radiology (ASOR)	5/2022
Ophthalmic Artificial Intelligence Summit.	iVista Medical Education	United States	iVista Medical Education	6/2022
Artificial Intelligence in Ophthalmology	The Foundation for the Development of Ophthalmology	United States	The Foundation for the Development of Ophthalmology	6/2022
The Future of Digital Ophthalmology & Eye Care	Asia-Pacific Tele-Ophthalmology Society (APTOS)	China	Asia-Pacific Tele-Ophthalmology Society (APTOS)	9/2022
a. The Future Practice of Ophthalmology: Integration of AI and Technology in Patient Care b. Advances in Technology: Transforming Clinical and Surgical Ophthalmology c. Artificial Intelligence – What You Need to Know as a Practicing Ophthalmologist	American Academy of Ophthalmology	United States	American Academy of Ophthalmology	10/2022
a. Bilateral Severe Intraocular Infiltration with Vitreous Haemorrhage in an Erdheim Chester Disease Patient Treated with Dual BRAF and MEK Inhibition b. Blockchain application for deep learning system in detection of high myopia and myopic macular degeneration	55th Annual Scientific Meeting, Retina Society	United States	Retina Society	10/2022
a. AI innovation in ophthalmology, Young Ophthalmologists Symposium b. AI in retinal diseases c. AI applications post COVID-19 d. Zeiss Imaging for Diabetic Retinopathy	Asia Pacific Vitreo Retinal Society	Taiwan	Asia Pacific Vitreo Retinal Society	11/2022
a. Global AI Trend in Ophthalmology b. 5 Rights in Ophthalmology	NA	United States	Byers Eye Institute, Stanford University	2/2023
Personalized Risk Scores for Prediction of Diabetic Retinopathy	Macular Society	United States	Macular Society	2/2023

Progression Within 3 and 5 Years Using Multimodal Artificial Intelligence Algorithms				
a. Chair, Improving Artificial Intelligence Trust in Ophthalmology: Imaging Standards, Ethics, Health Economics, and Emerging Domains; b. Chair, Artificial Intelligence and Deep Learning in Ocular Imaging for Posterior Segment Imaging; c. Chair speaker, AI in Retinal Diagnosis	38th Asia-Pacific Academy of Ophthalmology (APAO)	Malaysia	APAO	2/2023
a. Current trend for AI innovation in ophthalmology b. Emerging trend for AI innovation in ophthalmology c. Will AI replace ophthalmologists?	NA	Japan	Topcon Medical Inc	4/2023
Will AI replace ophthalmologists?	NA	Japan	Nihon University	4/2023
Global Trend for AI in Ophthalmology	NA	Japan	Kyoto University	4/2023
Global Trend for AI in Ophthalmology	NA	Japan	Hokkaido University	4/2023
a. Chair, AI in Retina OCTs b. Chair, AI in Retina Imaging c. AI Educational Course organizer i. Blockchain applications in ophthalmology ii. Explainability in ophthalmology iii. Federated learning in ophthalmology	ARVO	United States	ARVO	4/2023
a. Global Trend for AI Innovation in Ophthalmology; b. 5 Rights in AI Research in Ophthalmology; C. Emerging AI Trend in Ophthalmology	Fujiretina	Japan	Fujiretina	4/2023
AI translation from bench to bedside	NA	Taiwan	Chang Gung Memorial General Hospital, Kee Long Branch	5/2023
AI Innovation in Health: Global Trend	NA	Taiwan	Chang Gung Memorial General Hospital, Linkou Branch	5/2023
AI in Ophthalmology: Where are we now?	Vision Summit	Philippines	Vision Summit	5/2023
AI Innovation in Ophthalmology: Opportunities and Challenges	Taiwan Macula Society	Taiwan	Taiwan Macula Society	5/2023
AI in Ophthalmology: What's new in 2023? 1-day event	The Associate for Research in Vision and Ophthalmology (ARVO) 2023	United States	The Associate for Research in Vision and Ophthalmology (ARVO)	5/2023

The AI global trend in Ophthalmology	AI + Health Conference	United States	Stanford University School of Medicine	11/2023
Emerging trend for Diabetic Retinopathy	American Academy of Ophthalmology 2023	United States	American Academy of Ophthalmology	11/2023
a. AI for Retinal Diseases; b. Emerging technology for retinal diseases	Asia-Pacific Vitreo-Retinal Society 2023	Hong Kong	Asia-Pacific Vitreo-Retinal Society	11/2023
The AI global trend in Ophthalmology	Afro-Asian Council of Ophthalmology (AACO)	China	Zhongshan Ophthalmic Centre	11/2023
The role of AI in Healthcare and the fast tracking of affordable and accessible care	Annual TVM Healthcare Institute Tank Dinner	Singapore	TVM Capital	11/2023
What's new for diabetic retinopathy in 2023?	Floretina ICOOR 2023	Italy	Floretina	12/2023
Expanding datasets for digitally enhanced management of eye diseases: patient-generated data, generative AI, 4D imaging, and other alternate data streams	Collaborative Community on Ophthalmic Imaging (CCOI) 2024	United States	CCOI	1/2024
Expanding datasets for digitally enhanced management of eye diseases: patient-generated data, generative AI, 4D imaging, and other alternate data streams	Collaborative Community on Ophthalmic Imaging (CCOI) 2024	United States	CCOI	1/2024
a. Safe and Responsible AI; b. AI and Robotics in Ophthalmology; c. AI in Posterior Segment Imaging	Asia-Pacific Academy Ophthalmology 2024	Indonesia	Asia-Pacific Academy Ophthalmology	2/2024
The indispensable role of AI in Ophthalmology care Transforming eye health and the vital role in clinical decision with Artificial Intelligence (AI)	APAC Ophthalmology Symposium	Thailand	Horizon ZEISS	4/2024
AI in Ophthalmology: What's new in 2024? 1-day event	The Associate for Research in Vision and Ophthalmology (ARVO) 2024	United States	The Associate for Research in Vision and Ophthalmology (ARVO)	5/2024
Life as a Clinician AI Scientist and Innovator Bringing An Idea from Bench to Bedside	NMRC Awards Ceremony and Research Symposium 2024 (Innovative Technologies and Medical Entrepreneurship)	Singapore	NMRC	5/2024

Digital innovations for retinal care – now and the future	Asia Module in Medical Retina	Singapore	ESASO European School for Advanced Studies in Ophthalmology	6/2024
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**(B) With Poster Presentations**

<u>Presentation Title</u>	<u>Conference Name</u>	<u>Country</u>	<u>Organiser</u>	<u>Conference Date</u>
Are We Neglecting Visual Neglect?	Ads World Ophthalmology Congress	Germany	International Council of Ophthalmology	6/2010
Australian National Survey of Diabetic Retinopathy Management among General Practitioners and Optometrists	World Ophthalmology Congress	Germany	International Council of Ophthalmology	6/2010
An Economical Portable Device for Diabetic Retinopathy Screening	American Academy of Ophthalmology Conference	United States	American Academy of Ophthalmology	10/2010
Mechanism of Visual Neglect: Are We There Yet?	Association for Research in Vision and Ophthalmology - Asia	Singapore	Association for Research in Vision and Ophthalmology	1/2011
A Novel Foldable Retina Camera for Tele-Ophthalmology Screening for Diabetic Retinopathy	Australian E-Health Research Centre Annual Scientific Congress	Australia	Commonwealth Scientific Industrial and Research Organization	3/2011
The Eye is the Window into the Status of Diabetes	Australian E-Health Research Centre Annual Scientific Congress	Australia	Commonwealth Scientific Industrial and Research Organization	3/2011
Evaluation of the Optimal Compression Level for Retinal Video Recording in the Setting of Diabetic Retinopathy Screening	Asia Pacific Academy of Ophthalmology Conference	Australia	Asia Pacific Academy of Ophthalmology	3/2011
Validation of a New Alternative Diabetic Retinopathy Screening Method: Retinal Video Recording	Asia Pacific Academy of Ophthalmology Conference	Australia	Asia Pacific Academy of Ophthalmology	3/2011
Low Cost Technology with Video Recording for the Telemedicine Based Screening of Diabetic Retinopathy	American Telemedicine Association Annual International Meeting.	United States	American Telemedicine Association	5/2011

Video-based Imaging Technology: A Novel Method for Diabetic Retinopathy Screening	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
Australian National Survey: Diabetic Retinopathy Screening by General Practitioners	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
Australian National Survey: Diabetic Retinopathy Screening by Community	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
A Portable Multipurpose Ophthalmic Imaging Device for Diabetic Retinopathy	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
Retinal Digital Videos at Different Compression Levels for Diabetic Retinopathy	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
The Optimal Screen Sizes of Reading Devices for Diabetic Retinopathy Screening	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Singapore	Malaysia-Singapore Joint Ophthalmology	7/2011
The Use of Quantiferon Gold in Tuberculosis Diagnosis	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	2/2012
A Novel Video-based Imaging Technology for Diabetic Retinopathy Screening	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	2/2012
Thyroid Eye Disease in Singapore	Asia Pacific Oculoplastic Conference	Singapore	Asia-Pacific Society of Ophthalmic Plastic and Reconstructive	3/2012
Severe Fibrin Block Angle Closure Secondary to Retinal Detachment Surgery	SingHealth Duke-NUS Scientific Congress	Singapore	SingHealth and Duke-NUS	8/2012
Deep Range Imaging Optical Coherence Tomography (DRI-OCT): A Novel Imaging Technique for Polypoidal Choroidal Vasculopathy	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	3/2013

Resident-led Large Group Teaching Bootcamp to Complement Student Internship Program	ACGME Annual Educational Conference	United States	Accreditation Council for Graduate Medical Education	2/2014
Deep Range Imaging Optical Coherence Tomography (DRI-OCT): A Novel Imaging Technique for Polypoidal Choroidal Vasculopathy	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	3/2014
Extracapsular Cataract Extraction Training for Junior Ophthalmology Residents in Singapore	Malaysia-Singapore Joint Ophthalmology Scientific Congress	Malaysia	Malaysia-Singapore Joint Ophthalmology	3/2014
Resident-led Large Group Teaching Bootcamp to Complement Student Internship Program	SingHealth Duke-NUS Scientific Congress	Singapore	SingHealth and Duke-NUS	9/2014
The Implementation of Cataract Simulator To Improve Junior Ophthalmology Residents' Confidence In Cataract Training	Association for Research in Vision and Ophthalmology Annual Meeting	United States	Association for Research in Vision and Ophthalmology	5/2015
The Surgical Outcomes, Complications and Predictive Surgical Factors of Diabetic Retinopathy Vitrectomy in A Large Asian Tertiary Eye Center	Singapore National Eye Center 25th Anniversary International Meeting	Singapore	Singapore National Eye Center	5/2015
The Effect of Anti-Vascular Endothelial Growth Factor in Choroidal Thickness of Patients with Age-Related Macular Degeneration	Asia-Pacific Vitreo-retina Society Congress	Australia	Asia-Pacific Vitreo-retina Society	7/2015
The Visual and Anatomical Outcome of Vitrectomy for Proliferative Diabetic Retinopathy	Asia-Pacific Vitreo retina Society Congress	Australia	Asia-Pacific Vitreo-retina Society	7/2015
The Implementation of Cataract Simulator to Improve Junior Ophthalmology Residents' Confidence in Cataract Training	Asia-Pacific Cataract and Refractive Surgery Conference	Malaysia	Asia Pacific Association of Cataract and Refractive Surgeons	8/2015
Swept-Source Optical Coherence Tomography for Polypoidal Choroidal Vasculopathy	Asean Ophthalmology Society Congress	Viet Nam	Asean Ophthalmology Society	10/2015

**(C) Without Presentations (Optional for PhD Research Investigators)**

*Conferences attended (without abstract / poster presentation).*

Course Directors/Coordinators/Moderators:

1. The Associate for Research in Vision and Ophthalmology (ARVO) May 2024, Seattle, USA
  - a. AI Educational Course organizer: AI in Ophthalmology: What's new in 2024? 1-day event
2. AI Health Summit November 2023, W Hotel, Sentosa
  - a. Organizing chairperson for a 2-day event
  - b. 8 expert panels discussions, 4 AI symposiums

c. Invited speakers included the 3 Editor-in-Chiefs (Nature Medicine, Nature Biomedical Engineering, Lancet Digital Health), Vice Chancellor of UCSF, Founding Dean of School of Medicine Tsinghua, Various Deans of Medical School in Duke-NUS, LKC School of Medicine, Regulators, Commercial, Industrial/Commercial Partners

3. ARVO 2023, New Orleans

- a. Chair, AI in Retina OCTs
- b. Chair, AI in Retina Imaging
- c. AI Educational Course organizer
- i. Blockchain applications in ophthalmology
- ii. Explainability in ophthalmology
- iii. Federated learning in ophthalmology

4. 38th Asia-Pacific Academy of Ophthalmology (APAO). Kuala Lumpur, Malaysia. 2023

- a. Chair, Improving Artificial Intelligence Trust in Ophthalmology: Imaging Standards, Ethics, Health Economics, and Emerging Domains
- b. Chair, Artificial Intelligence and Deep Learning in Ocular Imaging for Posterior Segment Imaging
- c. Chair speaker, AI in Retinal Diagnosis

5. AI Health Summit 2022

- a. Organizing Chairperson
- b. days AI event held at Fullerton Hotel Singapore
- c. 8 expert panel discussions

6. The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO). Virtual. 2021

- a. Chair, AI in Retinal Application

7. AI instructional courses, American Academy of Ophthalmology (AAO), San Francisco, USA, 2019

- a. Clinical Translation of DR Screening – Chair
- b. The Clinical and Technical Approach in Building a Robust DLS – Chair

8. AI Symposiums, Euretina, Paris, France 2019

- a. The State-of-art AI Technologies for Retinal Diseases - Chair
- b. AI for DR Screening – Chair
- c. Deep Learning Made Simple - Chair

9. AI in Ophthalmology, ARVO, Vancouver, Canada 2019

- a. Educational course: Course Director

10. Chair, AI for DR Screening: Real World Deployment, Asia-Pacific Academy of Ophthalmology, Bangkok, Thailand 2019.

11. Co-chair, AI for Retinal Imaging Analysis (AIRIA), Asian Computing for Computer Vision (ACCV), Perth, Western Australia, Australia.

12. Chair, Special Interest Group (SIG) for AI in Ophthalmology and Telemedicine

- a. Association of Research and Vision in Ophthalmology (ARVO), Hawaii, Honolulu, USA. May 2018

13. Moderator, AI Symposium for Mobile Devices in Tele-ophthalmology

- a. Asia-Pacific Tele-Ophthalmology Society Meeting, Singapore. July 2018

14. Moderator, AI Symposium, Free Paper Sessions for AI Research

- a. Asia-Pacific Tele-Ophthalmology Society Meeting, Singapore. July 2018

15. AI Workshop Organiser, Asian Conference of Computer Vision (ACCV), Perth, Western Australia. Dec 2018.

16. AI Educational course organiser, ARVO, Vancouver, Canada. 2019

## **(15) Research & Innovation Activities**



## (A) Research & Commercialization Funding Support

### (i) Current Funding

<u>Project Title or Startup Name</u>	<u>Role (eg. PI, Co-I, Founder etc)</u>	<u>Origin</u>	<u>Name of Grant (if applicable)</u>	<u>Funding Agency</u>	<u>Project or Startup Funding Start Date</u>	<u>Duration (if applicable)</u>	<u>Amount</u>	<u>Currency</u>
EYE ACP AI Platform - SERI - IHPC Joint Lab	P.I.	Singapore	AM/ACP-Designated Philanthropic Fund	Duke-NUS	01/01/2023	5 Year(s) 0 Month(s)	500,000.00	SGD
Artificial Intelligence (AI) and Digital Health	P.I.	Singapore	Duke-NUS Research Support Fund	Duke-NUS	01/09/2021	5 Year(s) 0 Month(s)	200,000.00	SGD
Personalizing Diabetic Retinopathy Screening Intervals via Risk Stratification using an Artificial Intelligence-Enabled Multi-modal Machine Learning Approach	P.I.	Singapore	NMRC CSA	National Medical Research Council	01/08/2021	4 Year(s) 0 Month(s)	1,109,994.00	SGD
Eye ACP Artificial Intelligence (AI) and Digital Innovations	P.I.	Singapore	SingHealth Duke-NUS Eye ACP	SingHealth Duke-NUS Eye ACP	01/08/2020	5 Year(s) 0 Month(s)	200,000.00	SGD
Artificial Intelligence in Medicine Transformation (AIMx) Program	P.I.	Singapore	A*STAR IAF-PP	A*star	30/06/2020	4 Year(s) 0 Month(s)	4,999,920.00	SGD
INTEgRating bRain, Eye And Cardiac Research (INTER-REACH)	Co-P.I.	Singapore	NMRC CCG	National Medical Research Council	01/01/2022	4 Year(s) 0 Month(s)	4,000,000.00	SGD
Novel Multimodal Imaging in Moderate Diabetic Retinopathy to Predict Vision-threatening Stages of Retinopathy	Co-I.		NMRC CSA	National Medical Research Council	01/04/2022	3 Year(s) 0 Month(s)	1,125,000.00	SGD
MARIO: Multimodal AI-Driven Decision Making for Ophthalmology (MARIO)	Co-I.	Singapore	A*STAR AME	A*star	01/04/2021	3 Year(s) 09 Month(s)	9,925,920.00	SGD
Jarvis DHL in predicting hypertension, hyperlipidemia and hyperglycemia	Collaborator	Singapore	AI Singapore	AI Singapore	01/08/2020	2 Year(s) 0 Month(s)	25,000,000.00	SGD
Diabetes Study in Nephropathy and Other	Collaborator	Singapore	Open Fund Large Collaborative Grant	National Medical	01/01/2018	5 Year(s) 0 Month(s)	25,000,000.00	SGD

Microvascular Complications				Research Council				
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**(ii) Past Funding**

<u>Project Title or Startup Name</u>	<u>Role (eg. PI, Co-I, Founder etc)</u>	<u>Origin</u>	<u>Name of Grant (if applicable)</u>	<u>Funding Agency</u>	<u>Project or Startup Funding Start Date</u>	<u>Duration (if applicable)</u>	<u>Amount</u>	<u>Currency</u>
DR COVID – A Multi-lingual Artificial Intelligence Virtual System with Audio-Visual Technology for COVID-19	P.I.	Singapore	Gap Grant	NHIC	29/07/2020	1 Year(s) 0 Month(s)	1,178,400.00	SGD
Clinical and Cost-effectiveness Analysis on Artificial Intelligence using Deep Learning System for Diabetic Retinopathy Screening: A Retrospective Analysis	P.I.	Singapore	Health Service Research Grant	SingHealth Research Foundation	01/05/2018	3 Year(s) 0 Month(s)	150,000.00	SGD
Application and Evaluation of an Artificial Intelligence Deep Learning System to Detect Referable and Sight-threatening Retinal Diseases in the Singapore Integrated Diabetic Retinopathy Screening Programme (SiDRP): Screening Performance and Cost-effective	P.I.	Singapore	Health Service Research Grant	National Medical Research Council	01/04/2018	3 Year(s) 0 Month(s)	1,300,000.00	SGD
Novel Vascular Imaging in Diabetic Retinopathy: An Optical Coherence Tomography Angiogram (OCT-A) Study	P.I.	Singapore	Clinician Scientist Salary Support Programme	National Medical Research Council	01/06/2017	1 Year(s) 0 Month(s)	75,000.00	SGD
Singapore Eye Lesion Analyzer (SELENA): A Novel Automated Imaging Technology for Diabetic Retinopathy Screening	P.I.	Singapore	Innovation to Develop Grant	National Health Innovation Centre	01/05/2016	1 Year(s) 6 Month(s)	50,000.00	SGD
Multi-modal Machine Learning	Co-P.I.	Singapore	Science and Engineering	A*STAR	01/02/2018	1 Year(s) 0 Month(s)	1,000,000.00	SGD

for Cardiovascular Disease using Clinical and Imaging Data			Research Council Grant					
Identifying ocular and systemic biomarkers for response to Aflibercept in Asian patients with centre involving diabetic macular edema: A prospective interventional trial	Co-I.	Singapore	A*STAR IAF-ICP	A*star	04/04/2017	5 Year(s) 0 Month(s)	50,000.00	SGD
Optimization of SELENA – An Automated, Real Time Detection Tool for Early Detection of Diabetic Retinopathy	Co-I.		Foundation Grant	SingHealth Research Foundation	01/12/2015	1 Year(s) 0 Month(s)	250,000.00	SGD

### (iii) Pending Proposals

*Listing of submitted proposals which are under consideration only.*

<u>Project Title or Startup Name</u>	<u>Role (eg. PI, Co-I, Founder etc)</u>	<u>Origin</u>	<u>Name of Grant (if applicable)</u>	<u>Funding Agency</u>	<u>Project or Startup Funding Start Date</u>	<u>Duration (if applicable)</u>	<u>Amount</u>	<u>Currency</u>
Development, Validation, and Testing of DR-GPT – A Multi-modal Generative AI Agent for Diabetes Eye Care in Primary and Tertiary Eye Care Settings	PI	Singapore	NMRC CSASI	National Medical Research Council	07/2025	5 years	3,325,000.00	SGD
Heart Failure Screening in Primary Care Using Digital Tools	Co-I	Singapore	NMRC CSASI	National Medical Research Council	07/2025	5 years	3,115,000.00	SGD
The evaluation of an artificial intelligence clinical assistance programme (AI-CAP), compared to standard care, to improve retinal specialists' clinical management of patients with neovascular age-related macular degeneration (nAMD)	Co-I	Singapore	NMRC HCSAINV	National Medical Research Council	07/2025	4 years	1,280,000.00	SGD

Addressing barriers to data in ophthalmology with generative artificial intelligence	Co-I	Singapore	OFIRG	National Medical Research Council	07/2025	4 years	1,625,000.00	SGD
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## (B) Collaboration with Local and Overseas Institution

<u>Name of Collaboration</u>	<u>From</u>	<u>To</u>	<u>Name of Collaborator(s)</u>	<u>Institution / Organisation</u>
Personalizing Diabetic Retinopathy Screening Intervals via Risk Stratification using an Artificial Intelligence-Enabled Multi-modal Machine Learning Approach	8/2021	Present	Prof Jakob Grauslund  Prof Paisan Ruamviboonsuk	University of Southern Denmark  Rajavithi Hospital, Bangkok, Thailand
AI OCT in DME, HRD	8/2021	Present	Prof Vujosevic Stela  Prof Jennifer K. Sun	University of Milan  DRCR Retina Network
Methodological Challenges of Deep Learning in Optical Coherence Tomography for Retinal Diseases: A Review.	1/2019	2/2020	Dr Aaron Y. Lee	University of Washington School of Medicine
Development and Validation of a Deep Learning System to Detect Glaucomatous Optic Neuropathy Using Fundus Photographs	1/2019	12/2019	Prof Wang Ningli  Dr Liu Hanruo	Beijing Tongren Hospital and Beijing Ophthalmology and Visual Science Key Lab Beijing Tongren Hospital and Beijing Ophthalmology and Visual Science Key Lab
Artificial Intelligence, the Internet of Things and Virtual Clinics: Ophthalmology at the Digital Translation Forefront	1/2019	12/2019	Prof Haotian Lin  A/Prof Dawn Sim	Zhongshan Ophthalmic Center, Sun Yat-sen University National Institutes of Health Research Biomedical Research Centre Biomedical Centre, Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology
Deep Learning in Ophthalmology: Clinical and Technical Considerations	1/2019	9/2019	Prof Michael F Chiang  Dr John Peter Campbell  Dr Avinash V Varadarajan Dr Lily Peng	Casey Eye Institute, Oregon Health and Science University Casey Eye Institute, Oregon Health and Science University Google AI Healthcare Google AI Healthcare Moorfields Eye Hospital Mt Sinai Hospital University of Iowa

			Dr Pearse A Keane  Prof Louis R Pasquale Prof Michael D. Abràmoff A/Prof Philippe M Burlina	Wilmer Eye Institute, Johns Hopkins University
Observations and Lessons Learned from the Artificial Intelligence Studies for Diabetic Retinopathy Screening	1/2019	6/2019	Prof Lawrence Carin	Duke University
Deep Learning for Retinopathy of Prematurity Screening	1/2018	11/2018	Dr Wu Wei-Chi Dr Cynthia Toth	Chang Gung Memorial Hospital Duke University
Clinical Applicability of Deep Learning System in Detecting Tuberculosis using Chest Radiography	1/2017	2/2018	A/Prof Ferdinand Hui  Dr Paul H Yi	Wilmer Eye Institute, Johns Hopkins University Wilmer Eye Institute, Johns Hopkins University
Deep Eye Study	1/2017	1/2018	Prof Wynne Hsu  Dr Stuart Keel Dr Carol Cheung A/Prof Wang Yaxing  Dr Mo Dirani Prof Lee Mong Li  Prof Geeta Menon  Prof Sobha Sivaprasad  Prof Eric Finkelstein  Dr Steve Cook Dr Renata García Franco  Prof Paisan Ruamviboonsuk Dr Rajiv Raman  Prof Ian Wong  Prof Zhou	School of Computing, National University of Singapore Centre for Eye Research Australia Chinese University of Hong Kong Beijing Tongren Hospital and Beijing Institute of Ophthalmology Centre for Eye Research Australia School of Computing, National University of Singapore Frimley Health NHS Foundation Trust Moorfields Eye Hospital National Health Service Foundation Trust Duke-NUS Graduate Medical School Eye Centre Instituto Mexicano De Oftalmologia Rajavithi Hospital Sankara Nethralaya Chennai The University of Hong Kong Shanghai First People's Hospital Ruprecht-Karls University of Heidelberg The Westmead Institute for Medical Research, University of Sydney

			Haidong Prof Jost Jonas Prof Paul Mitchell Prof Rohit Varma Prof Andrzej Grzybowski Prof He Mingguang A/Prof Bamini Gopinath Prof Neil M Bressler	University of Southern California Gayle and Edward Roski Eye Institute University of Warmia and Mazury Zhongshan Ophthalmic Centre, Sun Yatsen University The Westmead Institute for Medical Research, University of Sydney Wilmer Eye Institute, Johns Hopkins University
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**(C) Research Interests**

<u>Description</u>	<u>Related Clinical Skill / Experience</u>	<u>Years of Experience</u>
Clinical and imaging research on retinal detachment, age-related macular degeneration, and diabetic retinopathy	12 years of clinical training in ophthalmology. Ranked as the Top 100 Ophthalmologists Power list by the Ophthalmologists; and by the Asia-Pacific Journal of Ophthalmology in 2023.	12.00
Medical and Health Technology Innovation	Started my Ph.D. in health technology innovation 10 years ago on a portable retinal camera. Ranked as top 0.001% (Top 100 in the clinical domain) in the World's Top 2% Scientists by the Stanford University world ranking.	10.00
Big data analytics	Started being involved in big data research about 10 years ago during my Ph.D. period. Trained in data analysis techniques and data governance to ensure responsible and ethical use of patient information. Developed a deep understanding of big data requirements for artificial intelligence in healthcare.	10.00
Telemedicine, Internet of Things, and related health economic research	Started running telemedicine and the Internet of Things about 10 years ago. Published	10.00

	high-impact papers on telemedicine for ophthalmology and diabetic retinopathy screening, as well as their cost-effectiveness in Lancet Global Health, Lancet Digital Health, and Ophthalmology. Described the role of digital technology in managing and mitigating the effects of the COVID-19 pandemic in Nature Medicine.	
Artificial Intelligence, Machine Learning and Deep Learning	Started leading the AI group 8 years ago, with a focus on AI and digital health-related applications for eye and other diseases that span across machine learning, and deep learning. Ranked as the Top 10 world's most influential deep learning, machine learning, and AI researchers across all domains over the past 10 years (2010-2021, 2011-2022, and 2012-2023) by ExpertScape.	8.00
Digital and privacy-preserving technology such as blockchain technology, federated machine learning, and generative adversarial network	Started the blockchain technology, federated machine learning, and generative adversarial network research about 4 years ago, and has published reviews and original research findings using these technologies in Nature Medicine, Lancet Digital Health, Frontiers in Medicine, and Asia Pac J Ophthalmol.	4.00
Nature Language Processing, Large Language Models, conversational AI chatbot	Co-led a multi-disciplinary team and applied for NHIC COVID-19 Gap funding to rapidly develop Doctor Covid, a multi-lingual chatbot in tackling several of these issues, published the study on Frontiers in public health. Published a a review paper on Large language models in medicine in Nature Medicine recently.	2.00

## (16) Committee Work

### (A) Hospital

2022 - Present

Committee Name: Academic Medicine Advisory Committee

Role: Committee Member

Organisation / Country: SingHealth / Singapore

2022 - Present

Committee Name: Digital transformation strategy retreat

Role: Committee Member

Organisation / Country: SingHealth / Singapore

2022 - Present

Committee Name: AMC Research Retreat  
Role: Committee Member  
Organisation / Country: SingHealth / Singapore

2022 - Present  
Committee Name: AMC Innovation Retreat  
Role: Committee Member  
Organisation / Country: SingHealth / Singapore

2022 - Present  
Committee Name: AMII Emerging Technology  
Role: Co-lead  
Organisation / Country: SingHealth / Singapore

2022 - Present  
Committee Name: Cluster AI EXCO  
Role: Director  
Organisation / Country: SingHealth / Singapore

2021- 2022  
Committee Name: Junior Doctors' Well-Being Committee  
Role: Co-chair, SGH Campus  
Organisation / Country: SingHealth / Singapore

2022 - Present  
Committee Name: Innovation Council  
Role: Committee member  
Organisation / Country: SingHealth / Singapore

#### **(B) Ministry of Health**

2022 to Present, AI in Health Task Force Committee Member Singapore

#### **(C) University / Medical School**

2022 - present  
Committee Name: SUTD-DUKE NUS Special Track  
Role: Clinical Mentor  
Organisation / Country: Singapore

2021 - present  
Committee Name: SingHealth Duke-NUS Global Health Institute  
Role: Faculty  
Organisation / Country: Singapore

2021 - present  
Committee Name: Duke-NUS Center of Regulatory Excellence (CORE)  
Role: Faculty  
Organisation / Country: Singapore

2021 - present  
Committee Name: NUS Biomedical Engineering  
Role: Faculty  
Organisation / Country: Singapore

2021 - present  
Committee Name: Singapore University of Technology and Design  
Role: Faculty  
Organisation / Country: Singapore

#### **(D) Professional Bodies**



2022 – 2023	AI Convener, Asia-Pacific Academy of Ophthalmology 2023, Kuala Lumpur, Malaysia
2021 till present	Chair, AI and Digital Innovation Standing Committee, Asia-Pacific Academy of Ophthalmology
2021 till present	Executive Committee, Technology Taskforce, The International Agency of Prevention of Blindness (IAPB)
2021 till present	Executive Committee, Diabetic Retinopathy Work Group, The International Agency of Prevention of Blindness (IAPB)
2021 till present	Director, AI Office, Singapore Health Service (consisting of >30,000 staff)
2020 till present	Executive Committee, Standards for Reporting of Diagnostic Accuracy Studies Artificial Intelligence extension (STARD-AI) Task Force
2020 till present	Executive Committee, DECIDE-AI Task Force, Oxford, UK
2020 till present	Executive Committee, QUADAS-AI Task Force, Imperial, UK
2019 till present	Executive Committee, Artificial Intelligence Task Force, American Academy of Ophthalmology
2018	Executive Committee (EXCO) Member, Singapore Fulbright Association Core EXCO Member, SingHealth Residency Leadership Program SNEC Eye ACP EXCO Member, Faculty and Professional Development Chairman, SNEC-Beijing Tongren Eye Summit
2017	Mentor for Singapore Chief Residency Program Mentor for SingHealth Residency Leadership Program
2016	Visiting Chief Resident to Duke University, Durham, North Carolina
2014	SingHealth Ophthalmology Chief Resident (Attended the Singapore National Chief Residency Program, National Healthcare Leadership College, Ministry of Health)
2013	Chairman, SingHealth Residents' Committee (representing >1000 SingHealth residents)

**(E) Others**

2018 to Present, Singapore Fulbright Association Committee Member Singapore

**(17) Awards & Honours**

**(A) Academic / Clinical / Research / Innovation Awards**

<u>Honours / Awards / Distinctions</u>	<u>Conference Title</u>	<u>Award Entity</u>	<u>Country of Award Entity</u>	<u>Award Type</u>	<u>Year Awarded</u>
World's Top 2% Scientists 2024	N.A.	Elsevier-Stanford List	United States	Research	2024
Young Scientist Award	N.A.	President's Science and Technology Awards	Singapore	Research	2024

Top 100 Ophthalmology Power List by the Ophthalmologist	N.A.	The Ophthalmologist	United Kingdom	Clinical	2024
Ranked 1st Most Cited Articles for Asia-Pacific Journal of Ophthalmology	39th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2024	APAO	Indonesia	Research	2024
SingHealth Excellence Awards 2024	N.A.	SingHealth	Singapore		2024
Ranked 14th ScholarGPS' Highly Ranked Scholars in Ophthalmology	N.A.	ScholarGPS	United States	Research	2024
World's Top 2% Scientists 2023	N.A.	Elsevier-Stanford List	United States	Research	2023
Innovator Award	Spark Asia 200 Digital Leaders Awards	CIO Academy Asia	Singapore		2023
The Ophthalmologist Power List 2023	N.A.	Texere Publishing	United Kingdom		2023
100 Most Influential Ophthalmologists 2022	N.A.	Asia Pacific Eye 100	Hong Kong		2023
Top 10 for AI, Machine Learning and Deep Learning	N.A.	Expertscape	United Kingdom		2023
Stanford University Elsevier World's Top 2% Scientists	N.A.	Stanford University Elsevier	United States		2022
The Ophthalmologist Power List 2022	The Ophthalmologist	Texere Publishing	United States		2022
1st globally in deep learning		Expertscape	United Kingdom		2022
Top 100 Ophthalmologists	Top 100 Ophthalmologists Power List	The Ophthalmologists	United Kingdom		2022
1st Prize, SingHealth Duke-NUS Research Team Award	N.A.	Duke-NUS Medical School	Singapore		2022
Generation T Award	N.A.	Tatler Asia	Singapore		2021
Asia Pacific Vitreo-Retinal Society Ian Constable Award	APAO	APAO	Singapore		2021
Asia-Pacific Academy of Ophthalmology Nakajima Award	APAO	APAO	Singapore		2021
NMRC Clinician Scientist Award	N.A.	Ministry of Health	Singapore		2021
OMIA Prestigious Achievement Award of Ophthalmic Image Analysis	MICCAI	MICCAI	United States		2020
Bert M Glaser Award, Innovative Research for Retina	Association for Research in Vision and	Association for Research in	United States	Research	2020

	Ophthalmology Annual Meeting	Vision and Ophthalmology			
Evangelos S Gragoudas Award	Macula Society Annual Meeting	Macula Society	United States	Research	2019
APAO Achievement Award	Asia-Pacific Academy of Ophthalmology Congress	Asia-Pacific Academy of Ophthalmology	Thailand	Research	2019
Travel Grant Award	Korean Ophthalmology Society Annual Meeting	Korean Ophthalmology Society	Korea, Republic of	Research	2019
Pooh Bear Award	N.A.	Singapore National Eye Center	Singapore	Clinical	2019
Finalist (Singapore representative), Asia-Pacific Economy Cooperation (APEC) Science Prize for Innovation, Research and Education	N.A.	Asia-Pacific Economy Cooperation		Research	2018
Finalist, Singapore National Academy of Science Young Scientist Award	N.A.	Singapore National Academy of Science	Singapore	Research	2018
Asia-Pacific Academy of Ophthalmology Young Ophthalmologists' Award	Asia-Pacific Academy of Ophthalmology Congress	Asia-Pacific Academy of Ophthalmology	Hong Kong	Research	2018
SingHealth Service Quality Silver Award	N.A.	SingHealth	Singapore	Clinical	2018
SingHealth Excellence Distinguished Young Researcher Award	N.A.	SingHealth	Singapore	Research	2018
Fulbrighter of the month (June)	N.A.	SingHealth	Singapore	Clinical	2018
SingHealth Publish Award	N.A.	SingHealth	Singapore	Research	2018
US-ASEAN Fulbright Scholar to Johns Hopkins University	N.A.	US Fulbright Association	United States		2017
Young Investigator Award	Singapore General Hospital Annual Scientific Meeting	Singapore General Hospital	Singapore	Research	2017
Best Poster Presentation Award	Macula Symposium	Macular Society	Singapore	Research	2017
Young Innovator Award	Asia-Pacific Tele-Ophthalmology Conference	Asia-Pacific Tele-Ophthalmology	Hong Kong	Research	2017
SingHealth Service Quality "You Shine" Award	N.A.	SingHealth	Singapore	Clinical	2017

Valedictorian, SingHealth Residency	N.A.	SingHealth	Singapore	Clinical	2016
SingHealth Outstanding Chief Resident Award	N.A.	SingHealth	Singapore	Clinical	2016
SingHealth Inspiring Resident-Educator RISE Award	N.A.	SingHealth	Singapore	Clinical	2015
Doctor of Philosophy	N.A.	University of Western Australia	Australia		2015
SingHealth Outstanding Resident RISE Award	N.A.	SingHealth	Singapore	Clinical	2015
Richard Fan Gold Medal Award	N.A.	Singapore National Eye Centre	Singapore	Clinical	2014
Khoo Scholar Award, AMRI, DUKE-NUS	N.A.	DUKE-NUS	Singapore	Research	2014
1st ranking nationally in Intermediate Training Exam (ITE) – OKAPI	N.A.	Intermediate Training Exam (ITE)	United States		2014
SingHealth Outstanding Resident RISE Award	N.A.	SingHealth	Singapore	Clinical	2014
SingHealth Intermediate/In-training Exam RISE Award	N.A.	SingHealth	Singapore	Clinical	2014
SingHealth Inspiring Resident-Educator RISE Award	N.A.	SingHealth	Singapore	Clinical	2014
SingHealth Residents' Committee RISE Award	N.A.	SingHealth	Singapore	Clinical	2014
McCartney Prize, FRCOphth	N.A.	The Royal College of Ophthalmologists	United Kingdom	Clinical	2013
1st ranking nationally in Intermediate Training Exam (ITE) – OKAPI	Intermediate Training Exam (ITE)		United States		2013
SingHealth In-training Examination (ITE) RISE Award	N.A.	SingHealth	Singapore	Clinical	2013
SingHealth Young Educator RISE Award	N.A.	SingHealth	Singapore	Clinical	2013
SingHealth Residents' Committee RISE Award	N.A.	SingHealth	Singapore	Clinical	2013
1st ranking nationally in Intermediate Training Exam (ITE) – OKAPI	N.A.	Intermediate Training Exam (ITE)	United States	Clinical	2012

## **(B) Others**

## (18) Top 10 Contributions (Optional for PhD Research Investigators)

List of contributions beginning with the most significant. Committee work and editorship of journals, etc. may be listed here.

Rank	Description of Contribution	Year of Contribution
1	Chair, SingHealth AI EXCO and Director, AI Office, Singapore Health Service. Drive research and development, commercialization, AI implementation and education for SingHealth Duke-NUS Academic Medical Center. The AI office is coordinating >100 million dollars research grants across different clinical and technical domains, ranging from image segmentation, classification, prediction, natural language processing, privacy preserving technology, synthetic AI and etc. The cluster AI office was set up in 2021 to align with the RIE 2025 and Smart Nation vision and mission. This program has also established the AI executive committee, consisting of representatives from different institutions, clinical specialties (including nursing, pharmacy and allied health professionals) and expertise (clinical, technical, regulatory and commercial). The formation of such committee is to strategize, coordinate and scale the SingHealth AI initiatives, in partnership with other sponsoring institutions (NUHS and NHG), and also institutes of higher learnings to enable and facilitate AI R&D collaboration, deployment, commercialization, and education.	2022
2	Co-invented and published a deep learning system using a customized convolutional neural network (CNN) and approximately 500,000 retinal images, in detecting 3 major blinding retinal conditions, namely the diabetic retinopathy (DR), glaucoma and age-related macular degenerations. In the study, he and colleagues utilized a total of 10 external validation datasets to further validate the generalizability of this system, using varying reference standards, retinal cameras, races, age groups, gender and glycemic controls. Results were published in JAMA (Impact Factor: 187, with a citation of >872 and >48,000 times) and the deep learning system has now obtained regulatory approvals from 6 countries (Singapore, Brazil, Indonesia, Malaysia and European CE) and has gained commercial access into more than 20 countries.	2017
3	One of his COVID-19 articles, co-authored with Lawrence Carin and Victor Dzau – who is also the current President of National Academy of Medicine, was published in Nature Medicine (1st author), entitled “Digital Technology and COVID-19” has so far been cited for >1100 times with >110,000 views, and also been referenced by the US Center for Disease Control and Prevention (URL: <a href="https://blogs.cdc.gov/genomics/2020/04/06/using-digital/">https://blogs.cdc.gov/genomics/2020/04/06/using-digital/</a> ). This article described the 4 big categories of digital technologies,	2020
4	Co-led a multi-disciplinary team, including the SingHealth Innovation, Digital Strategy team and A STAR, and applied for NHIC COVID-19 Gap funding to rapidly develop Doctor Covid, a multi-lingual chatbot in tackling several of these issues. Doctor Covid was deployed in 5 languages, with >800K messages sent to >3000 users in 2020 with satisfactory feedback received from the migrant workers.	2020
5	Led the SERI and A STAR team in developing a deep learning system for detecting of high myopia and myopic macular degeneration (MMD), a potentially blinding condition; also explored the use of the emerging blockchain technology within healthcare to act as a trusted platform to regulate data and AI model management. This is one of the first high impact original research articles that demonstrated the scientific use of blockchain in improving AI trust for a deep learning system, highlighting the Singapore’s AI research capabilities at the forefront globally. The result findings were published in the Lancet Digital Health, ranked #1 of the digital medical journals (Impact Factor: 34.2).	2021
6	Plays pivotal role in serving at several international AI task forces that aims to drive the AI reporting guidelines in health, including STARD-AI, QUADAS-AI and DECIDE-AI. These guidelines provide the consensus, standardize and streamline the AI innovation in health globally.	2018
7	American Academy of Ophthalmology AI Taskforce Founding EXCO	2018
8	Section Editor, AI and digital innovation, British Journal of Ophthalmology; Editor (AI and digital innovation), Ophthalmology, Ophthalmology Retina, Ophthalmology Science; Associate Editor, npj Digital Medicine	2019

9	US-ASEAN J William Fulbright to Johns Hopkins University (AI and big data analytics) – represented Singapore to visit Johns Hopkins University to exchange AI and deep learning expertise in healthcare in 2017/2018	2017
10	AI lead for Clinical Implementation of automated deep learning system into the Singapore Diabetic Retinopathy Screening Program	2018

**(19) Hobbies / Special Interests (Optional for PhD Research Investigators)**

Basketball, Fitness Training, Travelling