SINGAPORE EYE RESEARCH INSTITUTE

# SIGHT MATTERS

*Annual Report FY2022/2023*

SINGAPORE EYE RESEARCH INSTITUTE

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# ABOUT US

Established in 1997, the Singapore Eye Research Institute (SERI) is Singapore's national research institute for ophthalmic and vision research. It is the research arm of the Singapore National Eye Centre (SNEC), and affiliated to the National University of Singapore (NUS) and the Duke-NUS Medical School. In two decades, SERI has grown from a team of 5 to over 243 staff, encompassing clinician scientists, scientists, fellows, students, support staff, as well as more than 248 distinguished adjunct faculty members to become the largest eye research institute in the Asia-Pacific region. As of Mar 2023, SERI has published 5,235 peer-reviewed papers supported by S$419 million in competitive research grants. SERI has trained more than 225 current and past graduate students; and has been conferred over 1,158 national & international awards and 159 patents. SERI further undertakes eye research in collaboration with local & international ophthalmic medical centres and research institutions, which has ensured a high level of research competency & skills transfer. Notably, SERI's research has translated to actual patient success stories & significant improvements in eye care delivery. Today, SERI is recognized as a pioneering center for high quality eye research in Asia, with breakthrough discoveries that has translated to significant paradigm shift in eye care delivery.

# CHAIRMAN'S MESSAGE

2022 has been a remarkable year for SERI research marked by an impressive array of paper publications, grants, licenses and accolades for our staff. We secured external peer-reviewed competitive grant funding worth approximately S$29.77 million this year including the S$25 million LCG grant for Glaucoma research known as TARGET, aiming to reduce glaucoma blindness in Singapore by 30% over a decade.

Two important licensing deals were inked with technologies developed by SERI. RetiCAC, a pioneering method developed jointly by SERI's Ocular Epidemiology Group and MediWhale Inc., employs retinal images and deep learning to predict coronary artery calcium (CAC) scores, a pre-clinical marker of atherosclerosis linked to cardiovascular disease risk. MediWhale has secured an exclusive global license for RetiCAC's commercialisation, signed in April 2022. This breakthrough approach leverages non-invasive retinal images to enable health screening and extract insights beyond diabetic retinopathy.

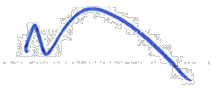
Secondly, the diabetic retinopathy and glaucoma computerised adaptive tests (CATs) developed by a collaboration involving SERI's Population Health Group, Centre for Eye Research Australia (CERA), University of Melbourne (UoM), Flinders University, and National University of Singapore (NUS), provide precise estimates of the impact of these eye diseases and associated treatments on several important domains of quality of life. The CATs have been shown to be efficient and low-burden for participants, taking only 90 seconds on average to answer each quality of life domain. The GlauCAT (Glaucoma) and RetCAT (diabetic retinopathy) are available on a secure cloud-based platform in 5 languages. They are licensed to various organizations, including the PROMinsight Pte Ltd start-up.

In a triumphant return, The Eye Ball 2022 graced us after a two-year hiatus. Held at the prestigious venue of The Ritz-Carlton, Millenia Singapore, the gala event unfolded under the captivating theme "Metamorphosis: Vision and Transformation." I am thrilled to share that our collective efforts bore fruit as SNEC/SERI raised an impressive sum of approximately $1.24 million through *The Eye Ball*.

This achievement exemplifies the unwavering support and commitment of the community. Funds generated through auctions and pledges will significantly advance eye care through clinical innovations, education, and research.

Furthermore, the recent study by *Acta Ophthalmologica* reaffirms Singapore's leadership in ophthalmology paper publication and SNEC/SERI's significant role in this domain. Your dedication to high-quality research and consistently high impact factor points reflects your expertise and broader impact.

As we celebrate these milestones, we're reminded that accolades stem from our relentless pursuit and unwavering commitment to enhancing patients' lives through eye and vision research. Congratulations and continued success!



**Professor Aung Tin**
**Chairman**

# EXECUTIVE DIRECTOR'S MESSAGE

In 2022, the Singapore Eye Research Institute (SERI) achieved remarkable milestones, publishing over 431 scientific papers and securing approximately $29.77 million in peer-reviewed grant funding.

A significant achievement was the acquisition of a $25 million LCG grant for the "TAckling & Reducing Glaucoma Blindness with Emerging Technologies (TARGET)" program. This initiative follows a comprehensive "bench to bedside" approach, fostering collaboration across Singaporean ophthalmology departments and esteemed academic partners. The TARGET program aims to address unmet clinical needs in glaucoma treatment through technology-driven advancements.

A Swedish study published in *Acta Ophthlamologica* highlighted Singapore's global prominence, ranking 1st in both the number of peer-reviewed Ophthalmology papers and impact factor points per million inhabitants per year. This recognition places Singapore's scientific articles in influential journals, with approximately 90% originating from SNEC/SERI.

The inception of the SERI-SNEC ophthalmic technologies incubator in 2014 has yielded promising research for start-up commercialisation. The 4th Advisory board and 2nd VC advisory panel meetings on February 6th-7th, 2023, reviewed project progress, development plans, and collaborations. The board lauded the progress across diverse domains, the well-defined incubator model, and the positive evolution in entrepreneurial culture that's attracting investors and partners.

I'm happy to share that fifteen awardees from SNEC and SERI, including Prof Wong Tien Yin and Prof Gemmy Cheung, were honoured as the "Most Influential Ophthalmologists 2022." Presented by the Asia-Pacific Journal of Ophthalmology, this accolade celebrates their contributions to ophthalmology in the Asia-Pacific region and globally.

Collaboratively, SERI's partnership with Roche led to Singapore's Health Sciences Authority approving Vabysmo® (faricimab) for neovascular Age-related Macular Degeneration (nAMD) and Diabetic Macular Edema (DME). This breakthrough, achieved in June 2022, resulted from Roche scientists' discovery and development, with crucial support from SERI's research team in gathering necessary evidence for clinical trials. With over 20 million individuals globally affected by nAMD, Vabysmo® addresses a significant challenge in vision loss for those aged 60 and above. Developed over a decade, Vabysmo® is a pioneering bispecific ocular medicine, exemplifying the power of collaboration and innovation in advancing eye care.

Thank you for your dedication, your passion, and your tireless efforts. Together, we can continue to shape the future of eye research, drive positive change, and create a lasting impact on the lives of countless individuals. Cheers!

**Prof Jodhbir S Mehta**
**Executive Director**

# INSTITUTIONAL REPORT

## BACKGROUND

The Singapore Eye Research Institute (SERI), affiliated to the Singapore National Eye Centre, the National University of Singapore, and the Duke-NUS Medical School is a non-profit charitable organization tasked to lead and conduct research into vision and eye diseases based in Singapore and focused on Asia. It further works in collaboration with Ophthalmology departments of the various public healthcare entities and biomedical research institutions, as well as major eye centers and research institutes throughout the world. SERI has developed a world-leading reputation in broad-based clinical translational research and epidemiological programs for many eye diseases, specifically eye diseases endemic to Asia, such as myopia, angle closure glaucoma, and corneal diseases.

## KEY PERFORMANCE INDICATORS

- SERI is one of the largest research institutes in Singapore and the largest eye research institute in the Asia-Pacific, with a faculty of 243, encompassing clinician scientists, scientists, fellows, students, and support staff.

- SERI has successfully secured external peer-reviewed competitive grant funding worth approximately S$29.77 million this year, and a cumulative quantum of approximately S$419 million.

- SERI continues its leading performance in publication, with 431 scientific papers this year, and with a cumulative publication quantum of 5,235 scientific papers.

- As of March 2023, the SERI faculty has received 1,158 national and international awards with 159 patent applications being filed during the same period.

- Since 1997, SERI has conducted 1,992 studies, encompassing the entire spectrum of eye research, from basic laboratory research, pre-clinical animal research, translational clinical research, and population health research. There are currently 563 ongoing research projects at SERI, of which approximately 70% cover clinical/translational research, 14% basic research and 16% epidemiology, imaging and health service research.

- SERI has further contributed to the training of research manpower, including over 225 Masters, PhD and post-doctoral students, many of whom are now working in hospitals, biomedical sciences industry, academic institutions and research institutes locally and overseas.

## ACHIEVEMENTS & INNOVATIONS

- **S$25 Million Open-Fund Large Collaborative Programme for Glaucoma Research**

  SERI was successful in securing a S$25 million LCG grant on Glaucoma for 5 years. The programme, i.e. ***TAckling & Reducing Glaucoma Blindness with Emerging Technologies (TARGET)***, is aimed to address the specific unmet clinical needs in glaucoma treatment through a broad-based interlinked “bench to bedside” approach. This is a broad multi-institution multi-disciplinary programme, spanning all ophthalmology departments in Singapore with major academic partners.

  The programme will develop improved technology-driven approaches, identify earlier and more effectively treat individuals most at risk of vision loss from glaucoma and thus promote a precision medicine approach to glaucoma management. The overriding long-term goal for this work is to reduce glaucoma blindness in Singapore by 30% in 10 years.

- **License Deal- Reticac to Mediwhale Inc**
  This novel way of using retinal images to predict the probability of the presence of coronary artery calcium (CAC) score using deep learning technology, also known as RetiCAC, was co-developed between SERI's Ocular Epidemiology Group and MediWhale Inc (MediWhale).

  CAC is a pre-clinical marker of atherosclerosis and has strong association with risk of clinical cardiovascular disease (CVD). The prediction of probability of presence CAC score using readily available retinal images has shown some promising results, harnessing from the information-rich, non-invasive retinal images paves a new way of health screening and unlocking additional insights from retinal images beyond diabetic retinopathy.

  This technology has been licensed to MediWhale, South Korea for the downstream commercialization of the product. The license deal with MediWhale was concluded in April 2022. MediWhale hold the global exclusive license for RetiCAC using retinal images.

- **License Deal - Multiple Licenses for IVI**
  The RetCAT and GlauCAT instruments developed by SERI Population Health Group are able to generate precise estimates of vision-related quality of life using very few questions due to their AI-driven algorithms. Research by the SERI developers have found them to be valid, reliable, and responsive tools for assessing the impact of these eye conditions and their treatments on daily living activities and psychosocial well-being.

  The RetCAT and GlauCAT instruments were jointly developed through collaborative research efforts between SERI (Prof. Ecosse Lamoureux), Centre for Eye Research Australia (CERA), University of Melbourne (UoM), Flinders University, and the National University of Singapore (NUS).

  To date, the RetCAT and GlauCAT instruments have been translated into over 5 languages, and are available on a secure cloud-based platform to support various global research and clinical needs. Our current GlauCAT and RetCAT collaborations include commercial organizations and funded research institutions worldwide, and we have also licensing this portfolio to a new start-up (PROMinsight Pte Ltd) that will be dedicated to commercializing it.

- **SERI Strategic Review**
  SERI held its 4th SERI Strategic Review Meeting on Friday, 14 October 2022 and Saturday, 15 October 2022, with the aim to review SERI's strategic direction for the next 5 years. This two-day meeting will serve as a precursor leading to the development of a SERI Strategic Plan for the next 5 years i.e. 2023-2028 as well as an Operational Plan for 2022 to 2023.

  SERI has engaged two international reviewers and two local reviewers to review, brainstorm and conceptualize SERI's strategic direction for the next 5 years.

- **Singapore Ranks No. 1 World-wide in Ophthalmological Papers Published, based on Impact Points Per Million Inhabitants Per Year**

  We are pleased to report that Singapore is a global leader in scientific peer-reviewed articles in the field of Ophthalmology.

A peer-reviewed paper by a Swedish scientist analysed scientific articles related to eye disease published between 2000 and 2020 in 20 top-ranked ophthalmology journals. Based on 65,220 articles from PubMed, the most frequently occurring keywords were calculated worldwide and the number of articles and impact points were measured per country for each year. Population-adjusted productivity revealed that Singapore ranked 2nd globally in Ophthalmological papers published, with 10 articles per million inhabitants/year.

**Quantity:** Singapore ranked **2nd globally** and **1st in Asia-Pacific** in terms of number of peer-reviewed scientific articles per capita, ahead of USA, UK, Japan and China. In terms of absolute number of articles, Singapore ranked 14th globally and 6th in Asia-Pacific.

**Impact:** Singapore ranked **1st globally** and **1st in Asia-Pacific** in terms of impact factor points per million inhabitants per year, ahead of USA, China and UK. Impact factor points, is a metric that measures a researcher's published articles multiplied by the journal's impact factor at the time of publication and reflects the impact of these scientific articles. The Journal's Impact factor is an objective measure of influence of a scientific article; the higher the impact factor, the greater number of times a paper in a particular journal is cited in the preceding 2 years. Thus, the analysis shows Singapore's scientific articles, on average, are published in high numbers and in the most impactful journals.

This new study offers another objective assessment of the scientific impact of Singapore's eye research in terms of both quantity and quality. It also re-affirms an earlier study that showed Singapore was ranked 1st in number of ophthalmology papers published, and 90% of the ophthalmology papers from Singapore come from SNEC/SERI.

- **SNEC/SERI Researchers Listed Among the 100 "Most Influential Ophthalmologists 2022"**
  Fifteen awardees from SNEC and SERI were listed among the 100 "Most Influential Ophthalmologists 2022." Prof Wong Tien Yin and Prof Gemmy Cheung were among the Top 10 on the list.

  Organised by the Asia-Pacific Journal of Ophthalmology, the inaugural "Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022" aims to honour and celebrate the top 100 most influential and inspiring ophthalmologists who have made significant contributions to ophthalmology in the Asia-Pacific region and beyond.

- **SERI-SNEC Incubator Advisory Board Meeting & VC Advisory Panel Meeting**
  The SERI-SNEC ophthalmic technologies incubator was set up in 2014 to nurture promising research projects and to accelerate their momentum towards commercialization and medical deployment via spinning off start-up companies.

  The 4th Advisory board meeting and 2nd VC advisory panel meeting was held on 6th & 7th February 2023 to review all incubator projects as well as assess overall incubator progress, future development plan and potential collaborations.

  The overall comments from all board members and VC advisory panel members had been very positive and they had given high comments to the team in terms of (1) significant progress in terms of quality of the technology across all domains and advancing translational research and commercialization; (2) mature incubator model with a clear framework and process; (3) positive changes in the entrepreneurial culture and attracting entrepreneurs, institutional investors and strategic partners.

- **New Sight-saving Ophthalmic Drug - A Culmination of Decade-long Collaboration between Singapore Eye Research Institute and Roche**

  SERI and Roche announced Vabysmo® (faricimab) was approved for use by Singapore's Health Sciences Authority for the treatment of neovascular Age-related Macular Degeneration (nAMD)1 and Diabetic Macular Edema (DME)2 in June. Vabysmo was discovered by Roche scientists and is developed and manufactured by the company. The process was supported by SERI's research team, who gathered evidence required to facilitate clinical trials.

  nAMD affects about 20 million people worldwide, and is the leading cause of vision loss in people above age 60. As the global population ages, nAMD will affect even more people. DME affects around 21 million people globally, and this number is also expected to grow as the prevalence of diabetes increases. When left untreated, DME is associated with blindness and decreased quality of life. There remains a significant unmet need for more effective, longer-lasting therapies for people with DME.

  Vabysmo was developed with the expertise of the SERI research team over a span of 10 years. It is the first bispecific medicine for the eye. The medicine targets and inhibits two pathways – angiopoietin 2 (Ang-2) and vascular endothelial growth factor-A (VEGF-A) – that are activated in retinal diseases which can lead to vision loss. By inhibiting both pathways, the medicine enables blood vessels to become more stable, and thereby reduces vessel leakage and inflammation in the eye.

- **EYE Ball 2022**

  The Eye Ball 2022 made a return after a hiatus of two years on Friday, 4th November 2022, at The Ritz-Carlton, Millenia Singapore. The gala event was themed Metamorphosis: Vision and Transformation.

  This year, SNEC/SERI managed to raise approximately $1.24 million, for this annual fund raising event with silent auction, live auction and power pledge as part of the programme for the evening. The fund raised will provide a valuable means to strengthen our efforts in advancing eye care through clinical innovations, education and research.

**PERFORMANCE OVER THE PAST TWENTY-FIVE YEARS** *(as of March 2023)*

- SERI has amassed an impressive array of publications over the years.

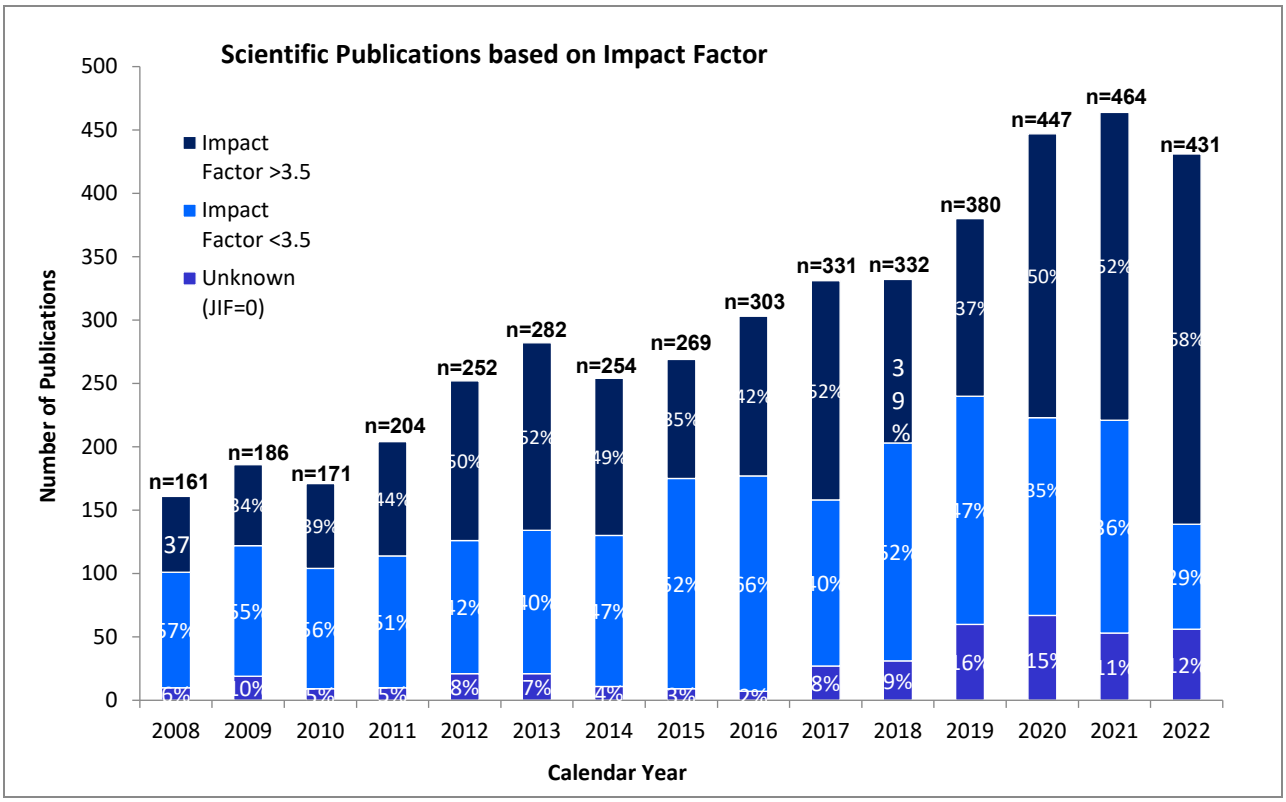



*Figure 1: Number of yearly publications published at SERI*

- SERI stands out as one of the most productive institutions and well holds up against global heavyweights in the field.

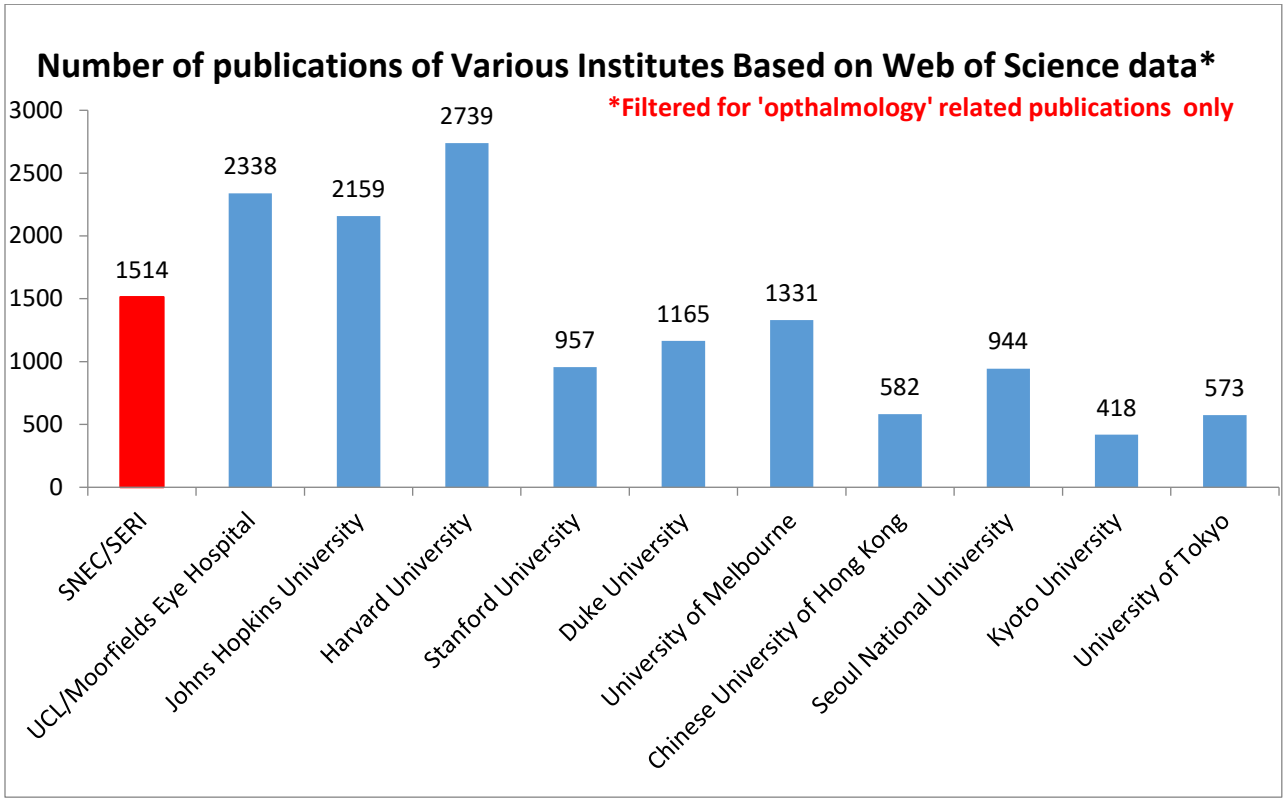



*Figure 2: Number of publications by SERI and other institutions around the world, during the period of 2012 – 2022*

- SERI's staff strength over the years.

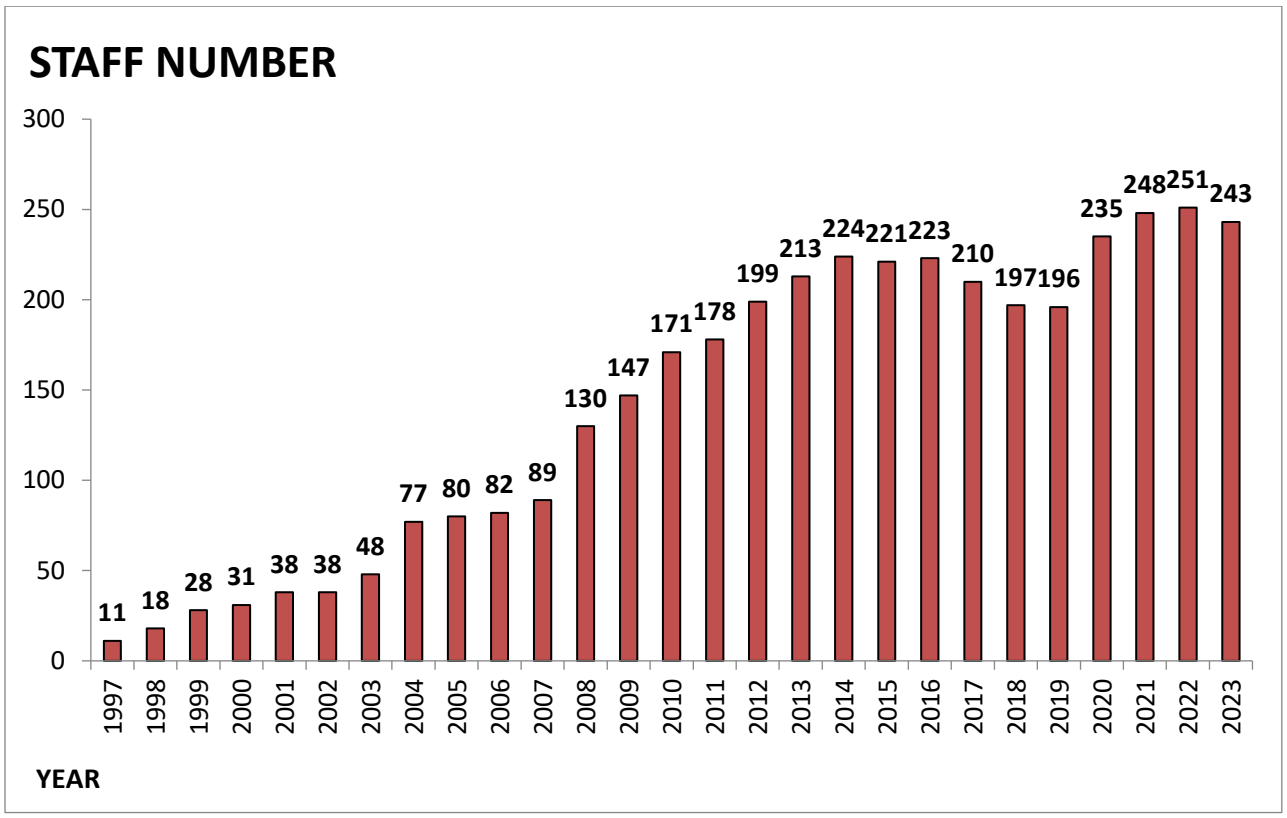



*Figure 3: Number of staff members at SERI*

- SERI boost of a diverse and global faculty that serves as melting pot of ideas that propels innovation.


*Figure 4: Nationalities of staff members at SERI*

- The stellar achievements of SERI have been well endorsed with numerous international and local awards.

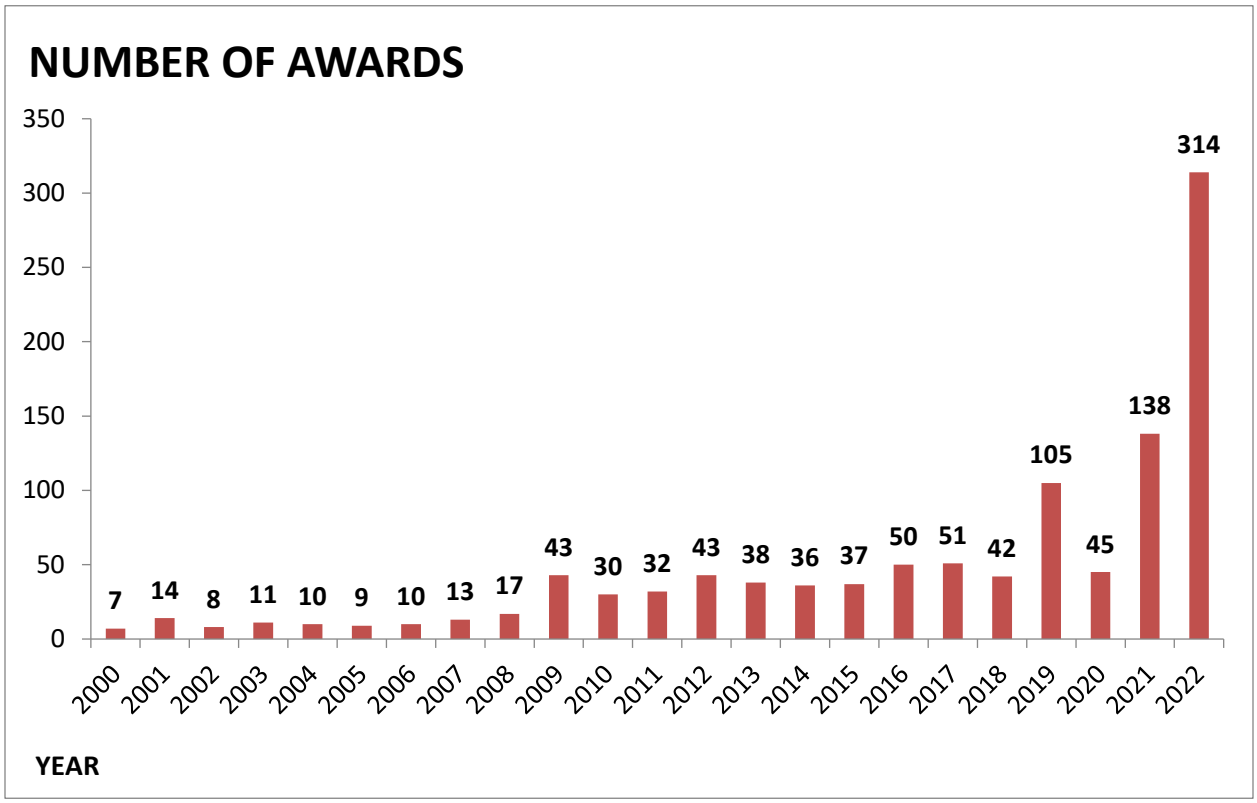



*Figure 5: Number of awards received by SERI and its staff (Data from 1997-1999 are not available)*

**APPRECIATION & ACKNOWLEDGEMENT**

SERI owes its success to its people – the honorable SERI Board of Directors, our eminent academic collaborators, the senior management, and clinicians of the Singapore National Eye Centre (SNEC), as well as, very importantly, the SERI faculty and staff members.

However, our greatest gratitude is reserved for our patients and their families. They are the driving force behind all that we do. Indeed, their journey and courage spur us on in our research endeavors and make us determined to make a positive difference to their vision and their lives.

SERI would also like to extend our appreciation to the National Medical Research Council, the Biomedical Research Council, the National Research Foundation, as well as our industry collaborators for their generous funding and support. It enables us to continue in our pursuit of impactful research with the ultimate aim to alleviate vision loss and blinding eye diseases.

# OUR PEOPLE

## SERI'S BOARD OF DIRECTORS

SERI's Memorandum and Articles of Association stipulates that the SERI Board of Directors shall have at least one representative each from the Ministry of Health, the National University of Singapore and the Singapore National Eye Centre. Today, besides representation from the above three organizations, SERI's Board additionally has Directors from the Duke-NUS Medical School, as well as other external organisations.

**Prof Aung Tin**
*Medical Director,*
Singapore National Eye Centre

*Chairman,*
Singapore Eye Research Institute

**Prof Chong Yap Seng**
*Dean,*
*Yong Loo Lin School of Medicine*
National University of Singapore

**Prof Vernon Lee**
*Senior Director (Communicable Diseases),*
Ministry of Health

**Prof Tan Sze Wee**
*Assistant Chief Executive,*
Agency For Science, Technology and Research

**Prof Benjamin Seet**
*Deputy Group CEO (Education & Research),*
*Group Chief Research Officer,*
National Healthcare Group

**Prof Thomas Coffman**
*Dean*,
Duke-NUS Medical School

**Mr Tan Shong Ye**
*Partner,*
PricewaterhouseCoopers LLP

**Ms Eileen Yeo**
*CEO,*
Mornington Services Pte Ltd

**Ms Poh Mui Hoon**
*Co-Founder,*
Esseplore Pte Ltd

**Prof Joseph Sung**
*Dean,*
Lee Kong Chian School of Medicine
Nanyang Technological University

**Mr Esmond Choo**
*Non-Executive Non-Independent Director,*
UOB-Kay Hian Holdings Limited

## SERI'S DIRECTORS / STRATEGIC PLANNING COMMITTEE

The SERI Directors/Strategic Planning Committee serves as the highest governing body at SERI, working closely with the Executive Director, SERI to ensure the overall stewardship of the Institute, including setting a strategic vision for the Institute; leading and promoting research within the Institute; ensuring sufficient funding to ensure its future viability; safeguarding overall governance and integrity of the Institute; and proactively increasing the visibility and broadening of research collaborations with national and international agencies.

The Committee's purview includes:

- Review of promotion/performance award recommendations
- Approval for overseas conference travel funded via core funding
- Approval for unbudgeted expenses

**Prof Jodhbir Mehta**
*Executive Director*

**Prof Leopold Schmetterer**
*Scientific Director*

**Prof Ecosse Lamoureux**
*Director, Population Health and Epidemiology*

**Prof Tina Wong**
*Director, Clinical Translational Research*

**Assoc Prof Wang Xiaomeng**
*Director, Laboratory Translational Research*

**Dr Zhou Ting**
*Deputy Director, Research & Academic Affairs*

**Dr Danny Belkin**
*Director, Technology Development & Commercialisation*

## SERI'S RESEARCH HEADS

The SERI Research Heads Committee serves as a principle body actively engaged in the review and implementation of SERI's research policies and strategies, as well as is the team conceptualizing SERI's research framework, in consultation with the SERI Senior Leadership, as the Institute moves onwards to face new challenges in its strive for continued research excellence.

**Prof Jodhbir Mehta**
*Executive Director*
*Head, Cornea & Refractive & Tissue Engineering & Cell Therapy Research Groups*

**Prof Leopold Schmetterer**
*Scientific Director*
*Head, Ocular Imaging Research Group*

**Prof Eccosse Lamoureux**
*Director, Population Health and Epidemiology*
*Head, Population Health Research Group*

**Assoc Prof Wang Xiaomeng**
*Director, Laboratory Translational Research*
*Head, Experimental & Basic Sciences, Proteomics & Experimental Microscopy, Molecular & Cell Biology Research Platforms*
*Co-Head, Ocular Therapeutics & Drug Delivery Research Group*

**Prof Tina Wong**
*Director, Clinical Translational Research*
*Head, Glaucoma Research Group*
*Co-Head, Ocular Therapeutics & Drug Delivery Research Group*

**Dr Zhou Ting**
*Deputy Director, Research & Academic Affairs*

**Dr Danny Belkin**
*Director, Technology Development & Commercialisation*

**Dr Kelvin Teo**
*Director, Research Clinic*
*Head, Clinical Research/Trials Research Platform*

**Prof Cheng Ching-Yu**
*Head, Ocular Epidemiology Research Group & Data Science Research Platform*

**Prof Dan Milea**
*Head, Visual Neuroscience Research Group*

**Prof Louis Tong**
*Head, Ocular Surface Research Group*

**Prof Saw Seang Mei**
*Co-Head, Myopia Reearch Group*

**Prof Gemmy Cheung**
*Head, Retina Research Group*

**Assoc Prof Audrey Chia**
*Co-Head, Myopia Research Group*

## SERI'S RESEARCH HEADS (*continued*)

**Assoc Prof Lakshminarayanan Rajamani**
*Co-Head, Ocular Anti Infective & Inflammation Research Group*

**Assoc Prof Shamira Perera**
*Head, Cataract Research Group*

**Assoc Prof Michael Girard**
*Head, Bioengineering & Devices Research Group*

**Assoc Prof Amutha Barathi**
*Head, Translational Pre-Clinical Model Research Platform*

**Dr Anita Chan**
*Head, Translational Ophthalmic Pathology Research Platform*

**Assoc Prof Daniel Ting**
*Head, AI & Digital Innovations Research Group*

**Adj Assoc Prof Rupesh Agrawal**
*Co-Head, Ocular Anti Infective & Inflammation Research Group*

**Ms Sangeetha Nagarajan**
*Head, Data Management Research Platform*

## SNEC'S RESEARCH & INNOVATIVE COMMITTEE

Terms of reference:

- Plays a pivotal role in the review of research budgets, as well as the evaluation and endorsement of the appropriateness of research projects, including the scientific merit of such projects.
- Oversight over the review/ approval of the SNEC Health Research Endowment Fund (HREF) / SingHealth Foundation (SHF)-SNEC Fund / SERI-Lee Foundation Grant / Heroes Fund / Lee Foundation Donation Fund for research projects.
- Provides directions for the development of SERI's translational and clinical research capabilities.

**Prof Jodhbir Mehta**
*Head & Senior Consultant,*
*Corneal & External Eye Disease Dept,* SNEC

*Executive Director*, SERI

**Prof Tina Wong**
*Head & Senior Consultant, Glaucoma Dept,* SNEC

*Director, Clinical Translational Research,* SERI

**Prof Louis Tong**
*Senior Consultant, Corneal & External Eye Disease Dept,* SNEC

*Head, Ocular Surface Research Group,* SERI

**Prof Dan Milea**
*Senior Consultant, Neuro-Ophthalmology Dept,* SNEC

*Head, Visual Neuroscience Research Group,* SERI

**Prof Gemmy Cheung**
*Head & Senior Consultant, Medical Retina Dept,* SNEC

*Head, Retina Research Group,* SERI

**Assoc Prof Shamira Perera**
*Senior Consultant, Glaucoma Dept,* SNEC

*Head, Cataract Research Group,* SERI

**Clin Assoc Prof Lee Shu Yen**
*Head & Senior Consultant,*
*Surgical Retina Dept, SNEC*

**Clin Assoc Prof Sharon Tow**
*Senior Consultant,*
*Neuro-Ophthalmology Dept,* SNEC

**Assoc Prof Gavin Tan Siew Wei**
*Senior Consultant, Surgical Retina Dept, SNEC*

*Clinician Scientist,* SERI

**Assoc Prof Wang Xiaomeng**
*Director, Laboratory Translational Research*
*Head, Experimental & Basic Sciences, Proteomics & Experimental Microscopy, Molecular & Cell Biology Research Platforms*
*Co-Head, Ocular Therapeutics & Drug Delivery Research Group*

**Assoc Prof Michael Girard**
*Head, Bioengineering & Devices Research Group*

## TEACHING & TRAINING

SERI has been actively hosting research seminars, courses and talks which serve as a platform for information transfer and idea sharing, as well as networking conduit between the internal and external research communities. Besides serving as a fertile platform for the incubation of research ideas and generation of collaborative initiatives between the SERI faculty and external academics/ researchers, these activities further promote research-related talent development within SERI that is high value-added and knowledge-based.

The talks presented via these channels at SERI offer discourse on scientific ideas and discoveries in ophthalmology and vision research, as well as in other biomedical disciplines, including bioengineering, genomics, tissue engineering, stem cell therapy and therapeutics, etc.; blending clinical, epidemiological, translational and basic approaches within specific disciplines. These seminars have certainly led to the launch of many new projects and successful collaborative partnership between SERI and local as well as international academic/ research entities.

This initiative serves as an ideal teaching platform for our junior faculty, paving the way for immense synergies as they work together to tackle emerging challenges in the field of ophthalmology.

| DATE | TOPIC | SPEAKER |
|---|---|---|
| 23 May 2022 | **Biomimetic Scaffolds For Tissue Regeneration** | Dr. Chew Sing Yian<br><br>*Associate Professor at School of Chemical and Biomedical Engineering, Lee Kong Chian School of Medicine and School of Materials Science and Engineering at Nanyang Technological University (NTU), Singapore* |
| 29 Jul 2022 | **Biosimilars of anti-VEGF Agents in the Field of Ophthalmology** | Professor Se Joon Woo<br><br>*Professor in Seoul National University Bundang Hospital, Korea and Director Medical Device Research and Development Center, Seoul National University Bundang Hospital* |
| 9 Jan 2023 | **Pathologic Myopia** | Prof Kyoko Ohno-Matsui<br><br>*Professor and Chairperson of the Department of Ophthalmology and Visual Science at Tokyo Medical and Dental University (TMDU) and Chief of the Advanced Clinical Center for Myopia at TMDU* |
| 8 Feb 2023 | **The Challenge of Developing Effective Therapies for Inherited Retinal Dystrophies** | Prof Anthony Moore<br><br>*Emeritus Professor of Ophthalmology at both the UCL Institute of Ophthalmology in London, and the University of California, San Francisco (UCSF)* |
| 27 Feb 2023 | **Artificial Intelligence (AI) and Deep Learning in Ophthalmology and Translating AI Research into Clinical Practice** | Dr. Aaron Y. Lee<br><br>*Associate professor and vitreoretinal surgeon at University of Washington, Department of Ophthalmology* |

## OUR COLLABORATIONS

### Local Institutions

- Bioinformatics Institute (BII)
- Bioprocessing Technology Institute (BTI)
- Changi General Hospital Pte Ltd
- Duke-NUS Medical School
- Experimental Drug Development Centre, A*STAR (EDDC)
- Genome Institute of Singapore (GIS)
- Health Science Authority (HSA)
- Institute for Infocomm Research (I2R)
- Institute of High Performance Computing (IHPC)
- Khoo Teck Huat Hospital
- KK Women's and Children's Hospital
- Nanyang Polytechnic
- National Cancer Centre (NCC) Singapore
- National Dental Centre of Singapore Pte Ltd
- National Heart Centre of Singapore Pte Ltd
- National Healthcare Group Pte Ltd
- National Kidney Foundation (NKF)
- National Neuroscience Institute of Singapore (NNI)
- Nanyang Technological University (NTU)
- National University Hospital (Singapore) Pte Ltd
- National University of Singapore (NUS)
- Ngee Ann Polytechnic (NP)
- Sengkang General Hospital (SKH)
- Singapore Clinical Research Institute
- Singapore Chung Hwa Medical Institution
- Singapore General Hospital Pte Ltd (SGH)
- Singapore Health Services Pte Ltd (SHS)
- Singapore Management University
- Singapore-MIT Alliciance for Research and Technology
- Singapore National Eye Centre (SNEC)
- SingHealth Polyclinics (SHP)
- Singapore Translational Immunology and Inflammation Centre (STIIC)
- Tan Tock Seng Hospital (TTSH)

### Overseas Institutions (Academic)

- Affiliated Hospital of Inner Mongolia Medical University
- Aravind Eye Hospital
- Asian Eye Institute, Inc
- Asahikawa Medical University
- Beijing Tongren Hospital
- Cardiff University
- Columbia University
- Duke University
- Harvard Medical School
- Hyderabad Eye Research Foundation
- IBM TJ Watson Research Centre
- Imperial College London Diabetes Centre
- Institute for Biomechanics, ETH Zurich
- Institute for Innovative Ocular Surgery
- Johns Hopkins University
- King Khaled Eye Specialist Hospital (KKESH)
- LV Prasad Eye Institute
- Maastricht University
- Medical University of Vienna
- Monash University
- Moorfields Eye Hospital
- Narayana Nethralaya Foundation (NNF)
- New York University, USA
- Ningbo Institute of Materials Technology and Engineering
- Ohio State University
- Riverside Research Institute
- Save Sight Institute, University of Sydney
- Shinchon Severance Hospital
- The Chinese University of Hong Kong
- The First Affiliated Hospital of Kunming Medical University
- The Queen's University of Belfast
- The Regents of the University of California (UCSF)
- The University Court of the University of Edinburgh
- The University of Liverpool
- The University of Tokyo
- Tianjin Medical University Eye Hospital
- Universiti Putra Malaysia (UPM)
- University of Auckland
- University of Copenhagen in Denmark
- University of Lublin
- University of Sheffield

- University of Southern Denmark
- University of Newcastle
- Vietnam National Institute of Ophthalmology
- Wenzhou Medical University
- Yonsei Medical Centre
- Yonsei University

## Industry Collaborations

- AceVision
- Acufocus Inc
- Advanced Eye Centre
- Aier Eye Hospital Group Cop. Ltd
- AKSO Technologies Pte Ltd
- Alcon Pte Ltd
- Aldropika Therapeutics
- Allergan Singapore Pte Ltd
- ASAN Medical Center
- Astatine Ventures Pty Ltd
- Bayer (South East Asia) Pte Ltd
- Belle Healthcare Medical Technology Co. Ltd
- BELKIN Vision Ltd
- Biolight Life Sciences Ltd
- Boehringer Ingelheim International GmbH (BI)
- Boehringer Ingelheim Singapore Pte Ltd
- BSI Group Singapore
- CapaBio Pte Ltd
- Carl Zeiss Pte Ltd
- Chiltern International Pte. Ltd
- CLINREG Consulting Services
- Cordlife Group Limited
- Cylite Pte Ltd
- D.O.R.C. Dutch Ophthalmic Research Center (International) B.V.
- Dompe
- Experimental Biotherapeutics Centre
- Exonate Limited
- EyeYon Medical Ltd
- EyRIS Pte Ltd
- Financiere De L'ombree (EOLANE)
- Formugenix Pte Ltd
- Gemini Therapeutics, Inc
- Geuder AG
- Gilead Sciences, Inc
- Gobiquity Inc
- Graybug Vision Inc
- Johnson and Johnson Vision Care, Inc.
- Kowa Company Ltd
- Lars Nelleman Consulting
- L'occitane Singapore Pte Ltd
- Leave a Nest Singapore Private Ltd
- Leica Microsystems (Schweiz) AG
- Life Bridge Partners Pte Ltd
- Matrix Medical Consulting, Inc
- Medi Whale Inc
- Menarini Biomarkers Singapore Pte Ltd
- Merck Sharp & Dohme Corp
- Microsoft
- Molecular Targeting Technologies Inc (MTTI)
- MSD International GmbH (Singapore Branch)
- MultiMedica Spa
- MuPharma Pty Ltd
- Nidek Co., Ltd
- Novartis (Singapore) Pte Ltd
- NOXXON Pharma AG
- O.D. Ocular Discovery Ltd
- OliX Pharmaceuticals, Inc
- ONL Therapeutics, Inc.
- Optomed Oy
- Parexel International (Singapore) Pte Ltd
- Pharmaceutical Research Associates Singapore Pte Ltd
- Physio-Logic Ltd
- Pixium Vision
- Quark Pharmaceuticals, Inc.
- Reopia Optics
- RetiMark Co.
- Roche Singapore Pte Ltd
- Samie Intellab Pte Ltd
- Sanofi- Aventis Singapore Pte Ltd
- Santen Pharmaceutical Asia Pte Ltd
- Santen Pharmaceutical Co. Ltd
- Seoul Semiconductor Co. Ltd

- Grey Innovation Pty Ltd
- Heidelberg Engineering GmbH
- HistoIndex Pte Ltd
- Hogan Lovells US LLP
- HOYA Medical Singapore Pte Ltd
- INC Research LLC
- InnoVealth Pte Ltd
- Integrated Decision Systems Consultancy Pte Ltd
- Inteq Communications Pte Ltd
- Interactive Micro-organisms Laboratories Pte Ltd
- International Agency for the Prevention of Blindness (IAPB)
- SGVector Pte Ltd
- SinSA Labs Inc
- Taggle Pte Ltd
- Thesis Pte Ltd
- Topcon Corporation
- Ushio Asia Pacific Pte Ltd
- Verily Life Sciences LLC
- VISRE Pte Ltd
- Yukti Bioscience Pte Ltd
- Zicom Medtacc Pte Ltd
- Zig Ventures Limited

# EVENTS

## INTERNATIONAL & LOCAL ACTIVITIES

SERI staff and associates participated actively in both overseas and local conferences during the year to establish links with overseas institutes, meet up with overseas collaborators and to promote and enhance SERI's presence in the international scene.

Conferences / meetings participated includes:

| INTERNATIONAL ACTIVITIES | | |
|---|---|---|
| **TOPIC** | **DATE** | **VENUE** |
| Biophotonics Congress: Biomedical Optics | 24 – 27 Apr 2022 | Virtual conference |
| ARVO 2022 | 1 – 4 May 2022 | Virtual conference |
| All India Ophthalmological Society (AIOC) conference | 2 – 4 Jun 2022 | Virtual conference |
| 15th European Glaucoma Society Meeting | 4 – 8 Jun 2022 | Athens, Greece |
| 34th Macula Society Meeting | 8 – 11 Jun 2022 | Berlin, Germany |
| 34th APACRS Annual Meeting | 11 – 12 Jun 2022 | Seoul, South Korea |
| 2nd ACS-Santen Masterclass | 25 Jun 2022 | Virtual conference |
| XX S.I.C.S.S.O. Congress 2022 | 30 Jun – 2 Jul 2022 | Florence, Italy |
| World Eye Bank Symposium 2022 | 21 – 22 Jul 2022 | Virtual conference |
| 6th Asia-Pacific Glaucoma Congress and 36th Malaysia-Singapore Joint Ophthalmic Congress (MSJOC) | 4 – 7 Aug 2022 | Kuala Lumpur, Malaysia |
| Glaucoma Research Society 2022 | 24 – 27 Aug 2022 | Halifax, California, USA |
| 18th International Myopia Conference 2022 | 4 – 7 Sep 2022 | Rotterdam, The Netherlands |
| XV Congress of the International Strabismological Association | 8 – 11 Sep 2022 | Cancun, Mexico |
| World Ophthalmology Congress 2022 | 9 – 12 Sep 2022 | Virtual conference |
| 40th European Society of Ophthalmic Reconstructive Surgery (ESOPRS) Meeting 2022 | 15 – 17 Sep 2022 | Nice, France |
| European Society of Cataract and Refractive Surgeons (ESCRS) 2022 | 16 – 20 Sep 2022 | Milan, Italy |
| International Association for Computerized Adaptive Testing (IACAT) | 20 – 22 Sep 2022 | Frankfurt, Germany |
| 3rd Asia-Pacific Myopia Society (APMS) Congress 2022 | 24 Sep 2022 | Virtual conference |
| DOG (German Ophthalmology Society Meeting) | 29 Sep – 2 Oct 2022 | Berlin, Germany |
| American Academy of Ophthalmology Annual Conference 2022 | 30 Sep – 3 Oct 2022 | Chicago, USA |
| EURETINA 2022 | 1 – 6 Oct 2022 | Hamburg, Germany |
| 23rd EVER Congress 2022 | 13 – 15 Oct 2022 | Valencia, Spain |
| ISOQOL 29th Annual Conference | 19 – 22 Oct 2022 | Prague, Czech Republic |
| Academy 2022 (American Academy of Optometry) | 26 – 29 Oct 2022 | San Diego, USA |
| American Society of Nephrology (ASN) Kidney Week | 3 – 6 Nov 2022 | Florida, USA |
| 15th Congress of the Asia-Pacific Vitreo-Retina Society | 18 – 20 Nov 2022 | Taipei, Taiwan |
| 8th Asia Cornea Society Biennial Scientific Meeting (ACS 2022) | 23 – 25 Nov 2022 | Bangkok, Thailand |
| 4th International Orbit Society Symposium 2022 | 2 – 3 Dec 2022 | Seoul, South Korea |
| John Hopkins University Retina Festival 2022 | 2 – 3 Dec 2022 | Baltimore, USA |
| Optic Nerve Meeting 2022 | 13 – 15 Dec 2022 | Obergugl, Austria |
| SPIE Photonics West 2023 | 28 Jan – 2 Feb 2023 | San Francisco, USA |
| Macula Society 2023 | 15 – 18 Feb 2023 | Miami, USA |

| INTERNATIONAL ACTIVITIES (CONT'D) | | |
|---|---|---|
| **TOPIC** | **TOPIC** | **TOPIC** |
| XXV Biennial Meeting of the International Society for Eye Research | 19 – 23 Feb 2023 | Gold Coast, Australia |
| 38th Asia-Pacific Academy of Ophthalmology (APAO) Congress | 23 – 26 Feb 2023 | Kuala Lumpur, Malaysia |
| 15th Asia Oceania ORL-HNS Congress | 8 – 12 Mar 2023 | Brisbane, Australia |
| 9th Annual Duke Fellows Advanced Vitreous Surgery Course and 22nd Duke Advanced Vitreous Surgery Course | 23 – 25 Mar 2023 | North Carolina, USA |
| **LOCAL ACTIVITIES** | | |
| **TOPIC** | **DATE** | **VENUE** |
| Presbyopia "Lau Hua": What Causes it, How to Treat it? | 7 Apr 2022 | Webinar |
| Diabetes and Hypertension: How They Can Affect Your Vision and What You Can Do About It | 23 Apr 2022 | Webinar |
| SKH Community Health Talk | 26 Apr 2022 | Virtual conference |
| Childhood Myopia: What Parents Need to Know | 24 May 2022 | Webinar |
| SNEC@Digital for Life Festival 2022 | 13 Jun 2022 | Singapore |
| Common Corneal Concerns – What You Need to Know | 25 Jun 2022 | Webinar |
| Common Childhood Eye Conditions: Myopia and Amblyopia (Lazy Eye) | 2 Jul 2022 | Webinar |
| Stroke and the Eye | 23 Jul 2022 | Webinar |
| All You Need to Know about Eyelid and Tear Gland Disorders | 17 Sep 2022 | Webinar |
| 16th Public Health and Occupational Medicine Conference | 9 Sep 2022 | Singapore |
| AAC & Lion World Sight Day | 9 Oct 2022 | Singapore |
| Common Retinal Conditions: What You Need to Know | 15 Oct 2022 | Webinar |
| Workshop on Eye Health for All in the Western Pacific Region: Planning for Action | 3 – 4 Nov 2022 | Singapore |
| Asia-Pacific Myopia Management Symposium | 11 Nov 2022 | Singapore |
| 23rd National Eye Care Day | 19 Nov 2022 | Singapore |
| Inherited Retinal Disease: Prospects for Treatment | 4 Feb 2023 | Webinar |
| Healthy and Lovely in Your Golden Years – What to Expect in your 50s and Beyond | 4 Mar 2023 | Webinar |

## THE EYE RUN/CYCLE 2022

Over 680 staff and friends of the Singapore National Eye Centre (SNEC) came together to walk, run or cycle for The Eye Run/Cycle 2022, a virtual event held in July and August this year.

Together they raised close to $800,000 for SNEC's VisionSave fund which supports initiatives to advance eye health and the fight against blindness in Singapore.

A/Prof Ho Ching Lin

Visionary Pedal Pushers

## GALA FUND-RAISING DINNER, THE EYE BALL 2022

The SNEC/SERI's annual Gala Dinner i.e. "The EYE Ball" was started with the aim of creating awareness of eye diseases and the fragility of vision, while raising funds to help needy patients and support the development of novel sight saving treatments at SNEC and SERI. Through the Eye Ball and the VisionSave campaign, SNEC/SERI has been able to improve the quality of life of many patients.

Following a two-year hiatus caused by the COVID-19 pandemic, The Eye Ball 2022 made its long-awaited reappearance. Though the pandemic has declined over time, donors' and supporters' generosity did not wane. With their help, more Singaporeans have been able to access sight saving treatments and quality eye care.

The Eye Ball 2022 held on 4 November 2022 saw 566 guests. This year's theme—Metamorphosis: Vision & Transformation—not only highlighted VisionSave's mission but also appealed to participants for the continued generosity and support. The signature fund-raising gala and the VisionSave initiative has helped needy patients and advance research and development in ophthalmology.

As the 10th Eye Ball, it was especially exciting for organisers and guests alike. Aside from the visually stunning theme selected by the organisers, guests could look forward to an elegant variety of culinary creations and beverage selections. An array of exquisite items and experiences were also generously donated by sponsors and held for auction, raising $1.24 million for this event.



# ACHIEVEMENTS

## OUR AWARDS

### Local Awards

- **Singapore Lymphoma Scientific Symposium 2023: Abstract Achievement Award** [Mar 2023]
  "Using a Multi-omics Approach to Delineate Mechanisms of Rituximab Resistance in Vitreoretinal Lymphoma"
  Dr Wu Meihui

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Dr Chung Hsi-Wei Yvonne

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Ms Chan Sze Lin

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Ms Zainorah Alias

- **Singapore Health Quality Service Awards 2023 – GOLD** [Feb 2023]
  Dr Woo Jyh Haur

- **Singapore Health Quality Service Awards 2023 – GOLD** [Feb 2023]
  Ms Zalina Binte Sa'at

- **Singapore Health Quality Service Awards 2023 – SILVER** [Feb 2023]
  Dr Sharifah Alsagoff

- **Singapore Health Quality Service Awards 2023 – SILVER** [Feb 2023]
  Mr Aloysius Tay

- **SingHealth Publish! Award** [Dec 2022]
  "Retinal Photograph-Based Deep Learning Algorithms for Myopia and a Blockchain Platform to Facilitate Artificial Intelligence Medical Research: A Retrospective Multicohort Study"

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Dr Jay Siak Jyh Kuen

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Ms K Komala

- **Singapore Health Quality Service Awards 2023 – STAR** [Feb 2023]
  Ms Thiri Mya San

- **Singapore Health Quality Service Awards 2023 – GOLD** [Feb 2023]
  Prof Jodhbir Mehta

- **Singapore Health Quality Service Awards 2023 – GOLD** [Feb 2023]
  Ms Liew Sieh Yin

- **Singapore Health Quality Service Awards 2023 – SILVER** [Feb 2023]
  Assoc Prof Donny Hoang

- **Singapore Health Quality Service Awards 2023 – SILVER** [Feb 2023]
  Ms Lim Su Li

- **Singapore Health Quality Service Awards 2023 – SILVER** [Feb 2023]
  Ms Gao Fei

- **SingHealth Duke-NUS Research Team Award 2022 – 1st Prize** [Nov 2022]
  "Multi-modal AI Systems for Eye Diseases"
  Assoc Prof Daniel Ting

- **SingHealth Duke-NUS Research Team Award 2022 – 1st Prize** [Nov 2022]
  "Multi-modal AI Systems for Eye Diseases"
  Prof Cheng Ching-Yu

Dr Tan Tien-En

- **SingHealth Duke-NUS Research Team Award 2022 – 1st Prize** [Nov 2022]
  "Multi-modal AI Systems for Eye Diseases"
  Prof Leopold Schmetterer

- **SingHealth Duke-NUS Research Team Award 2022 – 1st Prize** [Nov 2022]
  "Multi-modal AI Systems for Eye Diseases"
  Prof Dan Milea

- **Eye and Vision Health Awards 2022 – Distinguished Service Award** [Oct 2022]
  Clin Assoc Prof Anna Tan

- **AMEI Golden Apple Awards 2022: Generativity Award for Educators** [Sep 2022]
  Prof Ian Yeo

- **Residency in SingHealth Excels (RiSE) Awards 2022 – Partners-in-Education Award** [Aug 2022]
  Ms Ng Lei Yee Catherine

- **Residency in SingHealth Excels (RiSE) Awards 2022 – Partners-in-Education Award** [Aug 2022]
  Ms Zhang Kailin Karen

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Clin Assoc Prof Ho Ching Lin

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Jasmine Gan Lay Choo

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Mdm Jumaiah Bte Mohtar

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Ng Lai Heong

- **National Day Awards 2022: Long Service Medal** [Aug 2022]

- **Eye and Vision Health Awards 2022 – Visionary Award** [Oct 2022]
  Prof Jodhbir Mehta
- **SingHealth Family Target Zero Harm Award 2022 – Individual Award** [Oct 2022]
  Ms Hamalatha A/p Vishnu

- **Residency in SingHealth Excels (RiSE) Awards 2022 – Inspiring Resident-Educator Award** [Aug 2022]
  Dr Tan Tien-En

- **Residency in SingHealth Excels (RiSE) Awards 2022 – Partners-in-Education Award** [Aug 2022]
  Ms Ong Lisa

- **National Day Awards 2022: Public Administration Medal (Bronze)** [Aug 2022]
  Dr Loh Huey Peng

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Rachel Chua Li Hong

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Lam Bee Chan

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Eileen Neo

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Sharon Ong Chua Choo

- **National Day Awards 2022: Long Service Medal** [Aug 2022]
  Ms Teong Soh Keng

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Candice Ho

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Mr Jackson Kwok

Ms Jess Tan Sock Ting

- **National Day Awards 2022: Commendation Medal** [Aug 2022]
  Ms Priscilla Lim

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Koh Siew Kwan

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Mdm Raudhah Hanim Binte Mohamed Yusof

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Mr Kasi Sandhanam

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Celina Tian

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Mdm Julia Lily Wong

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Jenny Zeng

- **SingHealth Excellence Awards 2022: Distinguished Mentor Award** [Jun 2022]
  Assoc Prof Audrey Chia

- **SingHealth Excellence Awards 2022: GCEO Outstanding Clinician Award** [Jun 2022]
  Assoc Prof Shamira Perera

- **SingHealth Doctors and Dentists Long Service Award 2022: 30 Years of Service** [May 2022]
  Dr Wee Tze Lin

- **SingHealth Doctors and Dentists Long Service Award 2022: 20 Years of Service** [May 2022]
  Dr Ranjana Mathur

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Linda Ooi

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Soh Wee Wee

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Toh Li Zhen

- **National Day Awards 2022: Efficiency Medal** [Aug 2022]
  Ms Yeo Sia Wey

- **Clinical Investigator Advancement Programme: Master Clinical Trialist Development Award** [Aug 2022]
  Prof Gemmy Cheung

- **SingHealth Excellence Awards 2022: Distinguished Visionary Leader Award** [Jun 2022]
  Prof Tina Wong

- **SingHealth Doctors and Dentists Long Service Award 2022: Distinguished Senior Clinician Award** [May 2022]
  Assoc Prof Sharon Tow

- **SingHealth Doctors and Dentists Long Service Award 2022: 20 Years of Service** [May 2022]
  Clin Assoc Prof Khor Wei Boon

- **SingHealth Doctors and Dentists Long Service Award 2022: 20 Years of Service** [May 2022]
  Dr Ranjana Mathur

- **SingHealth Doctors and Dentists Long Service Award 2022: 10 Years of Service** [May 2022]
  Dr Ng Wei Yan

- **SingHealth Doctors and Dentists Long Service Award 2022: 10 Years of Service** [May 2022]
  Dr Yap Zhu Li

- **SingHealth Doctors and Dentists Long Service Award 2022: 10 Years of Service** [May 2022]
  Dr Fiona Lim

- **SingHealth Doctors and Dentists Long Service Award 2022: 10 Years of Service** [May 2022]
  Assoc Prof Daniel Ting

## International Awards

- **23rd Annual Bowman Club Meeting: The David Easty Award Lecture** [Mar 2023]
  "Are kids missing out on the lamellar revolution?"
  Prof Jodhbir Mehta

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Distinguished Service Award** [Feb 2023]
  Clin Assoc Prof Sharon Tow

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Senior Achievement Award** [Feb 2023]
  Prof Jodhbir Mehta

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Achievement Award** [Feb 2023]
  Dr Ong Hon Shing

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Best Scientific Paper Award** [Feb 2023]
  Dr Zheng Feihui

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Malaysian Society Of Ophthalmology-Malaysia Convention & Exhibition Bureau (MSO-MyCEB) Travel Grant** [Feb 2023]
  Dr Leong Yuan Yuh

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: International Fellowship Program (IFP)** [Feb 2023]
  Dr Kanchalika Sathianvichitr

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Assoc Prof Marcus Ang

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  "Top 10, no. 9"
  Prof Gemmy Cheung

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Clin Assoc Prof Lee Shu Yen

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Outstanding Service in Prevention of Blindness Award** [Feb 2023]
  Clin Assoc Prof Lee Shu Yen

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Senior Achievement Award** [Feb 2023]
  Adj Prof Chee Soon Phaik

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Achievement Award** [Feb 2023]
  Clin Assoc Prof Lee Shu Yen

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Achievement Award** [Feb 2023]
  Clin Assoc Prof Sunny Shen

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Malaysian Society Of Ophthalmology-Malaysia Convention & Exhibition Bureau (MSO-MyCEB) Travel Grant** [Feb 2023]
  Dr Farah Ibrahim

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Malaysian Society Of Ophthalmology-Malaysia Convention & Exhibition Bureau (MSO-MyCEB) Travel Grant** [Feb 2023]
  Dr Tan Ting Fang

- **38th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2023: Best Poster Discussion** [Feb 2023]
  Ms Angeline Toh

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Aung Tin

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Cheng Ching-Yu

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Jodhbir Mehta

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Dan Milea

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Assoc Prof Chelvin Sng

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Assoc Prof Gavin Tan

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Louis Tong

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Tina Wong

- **International Society for Eye Research (ISER) 2023: Travel Fellowship Award** [Feb 2023]
  Dr Wu Meihui

- **37th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2022: Distinguished Service Award** [Sep 2022]
  Assoc Prof Shamira Perera

- **3rd Asia-Pacific Myopia Society (APMS) Congress: APMS International Award Lecture** [Sep 2022]
  "An Update on the Prevention and Prediction of High Myopia"
  Prof Saw Seang Mei

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Dr Rachel Chong

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Dr Sayantan Biswas

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Assoc Prof Shamira Perera

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Clin Prof Donald Tan

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Assoc Prof Daniel Ting

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  "Top 10, no. 3"
  **Prof Wong Tien Yin**

- **Asia-Pacific Eye 100: 100 Most Influential Ophthalmologists 2022** [Feb 2023]
  Prof Ian Yeo

- **XXIII European Vision & Eye Research (EVER) Congress: Best Poster in the NSPH Section** [Oct 2022]
  "Combining Retinal Neuronal and Microvascular Measurements Improves Discriminative Power for Multiple Sclerosis Patients Without Previous Optic Neuritis"
  Dr Jacqueline Chua

- **37th Asia-Pacific Academy of Ophthalmology (APAO) Congress 2022: Outstanding Service in Prevention of Blindness Award** [Sep 2022]
  Prof Tina Wong

- **11th College of Ophthalmologists Lectureship 2022: College of Ophthalmologists Lectureship** [Aug 2022]
  "Selective Tissue to Selective Cell Corneal Transplantation"
  Prof Jodhbir Mehta

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Dr Arumugam Ramachandran Muralidharan

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Ms Isabella Loh

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: BrightFocus Foundation Travel Grant** [Apr 2022]
  Dr Fabian Braeu

- **The Ophthalmologist: The Ophthalmologist Power List 2022** [Apr 2022]
  Prof Wong Tien Yin

- **The Ophthalmologist: The Ophthalmologist Power List 2022** [Apr 2022]
  Assoc Prof Daniel Ting

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Ms Wong Qiu Ying

- **Association for Research in Vision and Ophthalmology (ARVO) 2022: ARVO International Travel Grant** [Apr 2022]
  Ms Calesta Teo

- **The Ophthalmologist: The Ophthalmologist Power List 2022** [Apr 2022]
  Prof Jodhbir Mehta

- **The Ophthalmologist: The Ophthalmologist Power List 2022** [Apr 2022]
  Prof Gemmy Cheung

- **The Ophthalmologist: The Ophthalmologist Power List 2022** [Apr 2022]
  Clin Prof Donald Tan

## OUR GRANTS

### NMRC

- **"Development of a SPARC Silencing Delivery System: A Targeted Approach for Treating Fibrosis Following Glaucoma Filtration Surgery"**
  Prof Tina Wong; S$208,333.00

- **"Evaluation of an Intraocular Delivery System for VEGF siRNA in Treating Retinal Disorders"**
  Assoc Prof Wang Xiaomeng; S$229,420.58

- **"TAckling & Reducing Glaucoma Blindness with Emerging Technologies (TARGET)"**
  Prof Aung Tin; S$19,230,769.00

- **"AI-Assisted Visual Impairment Screening Model: Community-based Implementation and Evaluation of Performance, Feasibility and Costs"**
  Dr Tham Yih Chung; S$500,000.00

- **"Dopamine Treatment of Myopia (DTOM): Assessing the Efficacy of Levodopa Eye Drops in the Control of Childhood Myopia"**
  Assoc Prof Audrey Chia; S$1,215,487.69

- **"Simple Non-cultured Endothelial Cell (SNEC) Replacement Therapy for the Treatment of Corneal Endothelial Dysfunction"**
  Prof Jodhbir Mehta; S$1,432,359.26

- **"Prognostic Significance of Novel Multimodal Imaging for Diabetic Retinopathy: Can we Improve Diabetic Retinopathy Staging?"**
  Assoc Prof Gavin Tan; S$675,000.00

- **"Testing the Role of Peripheral Scleral and Choroidal Remodelling in Low, High and Pathologic Myopia"**
  Assoc Prof Donny Hoang; S$674,995.00

- **"Tackling Fibrosis in Glaucoma Surgery (FiGS)"**
  Prof Tina Wong; S$1,726,000.00

- **"Investigation of Drug Induced Toxic Optic Neuropathy using Human Stem Cell Derived Retinal Ganglion Cells"**
  Dr Shweta Singhal; S$675,000.00

- **"Evaluating the REal-World PAtient-ReporteD and Economic Impact of Combined PHACO-MIGS Surgery (REWARD)"**
  Dr Ryan Man; S$499,999.99

- **"The SenseHealth Research Programme: Untangling the Complex Relationship Between the Severity/Laterality of Age-Related Sensory Decline, and Frailty in Elderly Singaporeans Through Novel Risk Factors, Non-invasive Biomarkers, Patient-centred Impact, and Potential Intervention Targets to Improve Frailty Outcomes"**
  Prof Ecosse Lamoureux; S$1,749,903.48

## A*Star/ Duke-NUS/ MOH/ Others

- **"Development of Antifungal Contact Lenses for Fusarium Keratitis"**
  Dr Venkatesh Mayandi; S$150,000.00

- **"Evaluate a Novel Therapeutic Molecule for the Treatment of Ocular Angiogenic Diseases"**
  Assoc Prof Wang Xiaomeng; S$624,030.00

- **"Development of Nanocarrier Platform for siRNA/mRNA Therapeutics"**
  Assoc Prof Tina Wong; S$74,930.00

- **"Promoting Neurorecovery in Mouse Retail Ganglion Cells"**
  Prof Jonathan Crowston; S$150,000.00

- **"Development of an Artificial Intelligence-Enabled Digital Platform for The Prediction of High Myopia in Singapore Children"**
  Assoc Prof Marcus Ang; S$464,464.00

- **"Development of a Personalized Medicine Strategy for Age-related Macular Degeneration (AMD) Therapeutic"**
  Dr Simon Nusinovici; S$58,000.00

- **"Optic Nerve Head Perfusion in a Murine Model of Pathological Myopia"**
  Dr Rachel Chong; US$60,000.00

## SingHealth

- **"Tools to Improve Psychological Symptoms for Patients with Dry Eye Disease (TIPS-DED) in Primary Care"**
  Dr Leong Yuan Yuh; S$65,000.00

## Commercial

- **"A Phase IIIb/IV, Multicenter, Open-label, Single-Arm Study to Investigate the Efficacy and Safety of Faricimab (RO6867461) in Patients with Polypoidal Choroidal Vasculopathy - SALWEEN"**
  Prof Gemmy Cheung; S$163,855.44

- **"Randomized Allocation, Single Blindness, Retrospective Clinical Trial of "iDMas-DR" and "iDMas-AMD"**
  Prof Gemmy Cheung; S$40,950.21

- **"PSVue®, A Molecular Apoptosis Marker For In-vivo Imaging in Retinal Diseases"**
  Assoc Prof Amutha Barathi; S$76,662.61

- **"Clinical Investigation of a Small Aperture Extended Depth of Focus Intraocular Lens in Patients with Complex Corneas"**
  Prof Jodhbir Mehta; S$193,676.97

- **"Anti-scarring Agent Phase II: The Anti-fibrotic Agent Valproic Acid For Bleb Maintenance for Microshunt"**
  Prof Tina Wong; S$260,468.50

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# FINANCIAL REPORT

## Directors' statement

The directors are pleased to present their statement to the member together with the audited financial statements of Singapore Eye Research Institute (the "Company") for the financial year ended 31 March 2023.

**Opinion of the directors**

In the opinion of the directors,

(i) the financial statements of the Company are drawn up so as to give a true and fair view of the financial position of the Company as at 31 March 2023 and the financial performance, changes in funds and cash flows of the Company for the year ended on that date in accordance with the provisions of the Companies Act 1967, the Charities Act 1994 and other relevant regulations and Financial Reporting Standards in Singapore; and

(ii) at the date of this statement, having regards to the financial support from the immediate holding company, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they fall due.

## Directors

The directors of the Company in office at the date of this statement are:

Prof. Aung Tin
Prof. Seet Hun Yew Benjamin
Prof. Thomas M Coffman
Prof. Vernon Lee Jian Ming
Prof. Chong Yap Seng
Prof. Tan Sze Wee
Mr. Tan Shong Ye
Ms. Eileen Yeo Hwee Leng
Ms. Poh Mui Hoon
Prof. Joseph Sung Jao Yiu
Mr. Esmond Choo Liong Gee

## Directors' Interests

The Company has no share capital and debentures and its members' liability is limited by guarantee.

Neither at the end of, nor at any time during the financial year, was the Company a party to any arrangement whose objects are, or one of whose objects is, to enable the directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

## Options

The Company does not have any share capital and accordingly has not issued any share options.

## Auditor

Ernst & Young LLP have expressed their willingness to accept re-appointment as auditor.

On behalf of the board of directors,

Prof. Aung Tin
Director

Mr. Tan Shong Ye
Director

Singapore
21 June 2023

## INDEPENDENT AUDITORS' REPORT
**For the financial year ended 31 March 2023**

**Independent auditor's report to the member of Singapore Eye Research Institute**

### Report on the audit of the financial statements

***Opinion***

We have audited the financial statements of Singapore Eye Research Institute (the "Company"), which comprise the balance sheet as at 31 March 2023, statement of comprehensive income, statement of changes in funds and statement of cash flows of the Company for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements are properly drawn up in accordance with the provisions of the Companies Act 1967 (the "Act"), the Charities Act 1994 and other relevant regulations (the "Charities Act and "Regulations") and Financial Reporting Standards in Singapore (FRS) so as to give a true and fair view of the financial position of the Company as at 31 March 2023 and of the financial performance, changes in funds and cash flows of the Company for the year ended on that date.

***Basis for opinion***

We conducted our audit in accordance with Singapore Standards on Auditing (SSAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the Accounting and Corporate Regulatory Authority (ACRA) Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities (ACRA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

***Other information***

Management is responsible for the other information. Other information comprises directors' statement set out on pages 1 and 2, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

**Independent auditor's report to the member of Singapore Eye Research Institute**

***Responsibilities of management and directors for the financial statements***

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act, the Charities Act and Regulations and FRSs, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Company's financial reporting process.

***Auditors' responsibilities for the audit of the financial statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

**Independent auditor's report to the member of Singapore Eye Research Institute**

***Auditors' responsibilities for the audit of the financial statements (cont'd)***

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

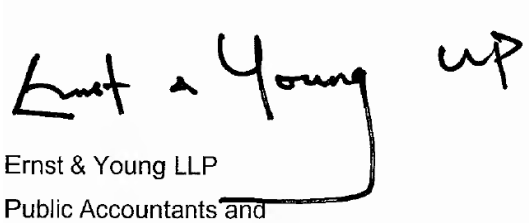
***Report on other legal and regulatory requirements***

In our opinion, the accounting and other records required to be kept by the Company have been properly kept in accordance with the provisions of the Act, and the Charities Act and Regulations.

During the course of our audit, nothing has come to our attention that causes us to believe that during the year:

(a) the Company has not used the donation moneys in accordance with its objectives as required under Regulation 11 of the Charities (Institutions of a Public Character) Regulations; an

(b) the Company has not complied with the requirements of Regulation 15 of the Charities (Institutions of a Public Character) Regulations.



Ernst & Young LLP
Public Accountants and
Chartered Accountants
Singapore
21 June 2023

## Balance sheet
## As at 31 March 2023

| | Note | 2023 | 2022 |
|---|---|---|---|
| | | $ | $ |
| **Assets** | | | |
| Property, plant and equipment | 4 | 9,068,893 | 10,371,681 |
| Intangible assets | 5 | 136,007 | 40,520 |
| Trade and other receivables | 6 | 57,075 | 56,916 |
| **Non-current assets** | | 9,261,975 | 10,469,117 |
| Trade and other receivables | 6 | 28,148,473 | 24,448,167 |
| Prepayments | | 144,598 | 50,647 |
| Cash and cash equivalents | 8 | 14,710,545 | 12,076,761 |
| **Current assets** | | 43,003,616 | 36,575,575 |
| **Total assets** | | 52,265,591 | 47,044,692 |
| **Accumulated fund** | 9 | 148,572 | 136,832 |
| **Liabilities** | | | |
| Deferred income | 10 | 4,813,966 | 3,624,278 |
| Other payables | 12 | 769,584 | 1,627,668 |
| **Non-current liabilities** | | 5,583,550 | 5,251,946 |
| Trade payables | 11 | 7,951,793 | 5,975,240 |
| Other payables | 12 | 35,909,236 | 32,998,335 |
| Deferred income | 10 | 1,405,507 | 1,415,406 |
| Employee benefits | 13 | 1,266,933 | 1,266,933 |
| **Current liabilities** | | 46,533,469 | 41,655,914 |
| **Total liabilities** | | 52,117,019 | 46,907,860 |
| **Total accumulated fund and liabilities** | | 52,265,591 | 47,044,692 |

*The accompanying accounting policies and explanatory notes form an integral part of the financial statements.*

**Statement of comprehensive income**

**For the financial year ended 31 March 2023**

| | Note | 2023<br>$ | 2022<br>$ |
|---|---|---|---|
| Operating expenditure grants | 15 | 39,220,221 | 41,169,480 |
| Amortisation of deferred income | 10 | 1,998,402 | 2,153,625 |
| Government subvention | 18 | 1,887,288 | 835,658 |
| Other income | 16 | 5,143,849 | 4,149,836 |
| | | 48,249,760 | 48,308,599 |
| Staff costs | | (21,014,718) | (22,477,618) |
| Supplies and consumables | | (3,980,452) | (4,207,845) |
| Depreciation of property, plant and equipment | 4 | (2,914,171) | (3,049,389) |
| Amortisation of intangible assets | 5 | (43,919) | (68,405) |
| Rental and utilities | | (864,717) | (639,332) |
| Purchased and contracted services | | (13,218,579) | (11,647,903) |
| Repairs and maintenance | | (1,987,049) | (1,989,229) |
| Impairment loss on trade and other receivables | | (18,200) | (31,327) |
| Other operating expenses | | (4,072,411) | (2,119,290) |
| **Results from operating activities** | | 135,544 | 2,078,261 |
| Net finance costs | 17 | (123,804) | (47,417) |
| **Surplus before tax** | | 11,740 | 2,030,844 |
| Tax expense | 19 | – | – |
| **Surplus for the year, representing total comprehensive income for the year** | 20 | 11,740 | 2,030,844 |

*The accompanying accounting policies and explanatory notes form an integral part of the financial statements.*

**Statement of changes in funds**
**For the financial year ended 31 March 2023**

| | Accumulated funds<br>$ |
|---|---|
| **Balance at 1 April 2021** | (1,894,012) |
| Net surplus, representing total comprehensive income for the year | 2,030,844 |
| **Balance at 31 March 2022** | 136,832 |
| | |
| **Balance at 1 April 2022** | 136,832 |
| Net surplus, representing total comprehensive income for the year | 11,740 |
| **Balance at 31 March 2023** | 148,572 |

*The accompanying accounting policies and explanatory notes form an integral part of the financial statements.*

**Statement of cash flows**
**For the financial year ended 31 March 2023**

| | Note | 2023 | 2022 |
|---|---|---|---|
| | | $ | $ |
| **Cash flows from operating activities** | | | |
| Surplus before tax | | 11,740 | 2,030,844 |
| Adjustments for: | | | |
| Depreciation of property, plant and equipment | 4 | 2,914,171 | 3,049,389 |
| Loss on disposal of property, plant and equipment | 20 | 158,694 | 93,590 |
| Interest expense | | 118,926 | 42,958 |
| Amortisation of intangible assets | 5 | 43,919 | 68,405 |
| Impairment loss on trade and other receivables | | 18,200 | 31,327 |
| Amortisation of deferred income | 10 | (1,998,402) | (2,153,625) |
| **Operating cash flows before changes in working capital** | | 1,267,248 | 3,162,888 |
| Changes in working capital: | | | |
| Increase in trade and other receivables | | (3,718,665) | (3,252,370) |
| (Increase)/decrease in prepayments | | (93,951) | 111,097 |
| (Decrease)/increase in deferred income | | – | (3,216,855) |
| Increase in trade and other payables | | 4,839,272 | 4,257,060 |
| Increase in employee benefits | | – | 188,269 |
| **Net cash generated from operating activities** | | 2,293,904 | 1,250,089 |
| **Cash flows from investing activities** | | | |
| Purchase of property, plant and equipment | | (1,770,077) | (1,040,291) |
| Purchase of intangible assets | | (139,406) | (16,058) |
| Grants for capital expenditure | | 3,178,191 | 1,214,396 |
| **Net cash generated from investing activities** | | 1,268,708 | 158,047 |
| **Cash flows from financing activities** | | | |
| Interest paid | | (118,926) | (42,958) |
| Payment of principal portion of lease liabilities | | (809,902) | (936,081) |
| **Net cash used in financing activities** | | (928,828) | (979,039) |
| **Net increase in cash and cash equivalents** | | 2,633,784 | 429,097 |
| Cash and cash equivalents at beginning of the year | | 12,076,761 | 11,647,664 |
| **Cash and cash equivalents at end of the year** | 8 | 14,710,545 | 12,076,761 |

*The accompanying accounting policies and explanatory notes form an integral part of the financial statements.*

**NOTES TO THE FINANCIAL STATEMENTS**

**For the financial year ended 31 March 2023**

## 1. Corporate information

Singapore Eye Research Institute ('the Company') is incorporated in the Republic of Singapore. The address of the Company's registered office is at 10 Hospital Boulevard #19-01, Singapore 168582.

The principal activities of the Company are to carry out eye-related medical research projects.

The immediate, intermediate holding companies and ultimate controlling party during the financial year are Singapore National Eye Centre Pte Ltd, Singapore Health Services Pte Ltd and MOH Holdings Pte Ltd, and Minister for Finance1 respectively. These companies were incorporated in the Republic of Singapore.

The Company, limited by guarantee, has been registered as a Charity, under the Charities Act 1994 with effect from 27 November 2002.

## 2. Basis of preparation

### 2.1 Going Concern

As at 31 March 2023, the Company is in a net current liability position of $3,529,853 (2022: $5,080,339). Notwithstanding this, the directors of the Company consider that it is appropriate for the Company to prepare its financial statements on a going concern basis as the immediate holding company has agreed to provide financial support as is necessary for the next twelve months to enable the Company to continue its operations and to meet its liabilities as and when they fall due.

### 2.2 Statement of compliance

The financial statements have been prepared in accordance with the Singapore Financial Reporting Standards ("FRS").

### 2.3 Basis of measurement

The financial statements have been prepared on the historical cost basis except as otherwise described in the notes below.

### 2.4 Functional and presentation currency

These financial statements are presented in Singapore dollars ($), which is the Company's functional currency.

[1] *Under the Singapore Minister for Finance (Incorporation) Act 1959, the Minister for Finance is a body corporate*

## 2. Basis of preparation (cont'd)

### 2.5 Use of estimates and judgements

The preparation of the financial statements in conformity with FRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgements in applying accounting policies that have the most significant effect on the amount recognised in the financial statements and assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included below:

***Useful lives of property, plant and equipment and intangible assets***

Property, plant and equipment and intangible assets, are stated at cost and depreciated/amortised on a straight-line basis over their estimated useful lives. The estimated useful lives represent the estimate of the periods that management expects to derive economic benefits from these assets. In estimating these useful lives and in determining whether subsequent revisions to useful lives are necessary, management considers the likelihood of technical obsolescence arising from changes in technology and intended use.

***Valuation of trade receivables – measurement of expected credit losses ("ECL") allowance***

The Company applies the simplified approach to provide for ECLs for all trade receivables. Loss rates are based on actual credit loss experience over the past one to five years. These rates are adjusted by scalar factors to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Company's view of economic conditions over the expected lives of the receivables. These scalar factors are calculated using statistical models that determine numeric co-relation of loss rates with relevant economic variables.

### 2.6 Measurement of fair values

Information about the measurement of fair values and the assumptions made in measuring fair values is described in Note 21.

### 2.7 Adoption of new standards

The accounting policies adopted are consistent with those of the previous financial year except that in the current financial year, the Company has adopted all the new and revised standards which are effective for annual financial years beginning on or after 1 April 2022.

The adoption of these standards did not have any material effect on the financial performance or position of the Company.

## 3. Significant accounting policies

### 3.1 Foreign currency

***Foreign currency transactions***

Transactions in foreign currencies are measured in the functional currency of the Company and recorded on initial recognition in the functional currency at exchange rates approximating those ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange ruling at the end of the reporting period. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured.

Exchange differences arising on the settlement of monetary items or on translating monetary items at the end of the reporting period are recognised in surplus or deficit.

### 3.2 Financial instruments

**(i) Recognition and initial measurement**

***Non-derivative financial assets and financial liabilities***

Trade receivables are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Company becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) is initially measured at fair value plus, for an item not at fair value through profit or loss ("FVTPL"), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

Financial liabilities are initially recognised when the Company becomes a party to the contractual provisions of the instrument. The Company determines the classification of its financial liabilities at initial recognition. All financial liabilities are recognised initially at fair value plus in the case of financial liabilities not at fair value through profit or loss, directly attributable transaction costs.

**(ii) Classification and subsequent measurement**

***Non-derivative financial assets***

On initial recognition, a financial asset is classified as measured at amortised cost.

Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

## 3. Significant accounting policies (cont'd)

### 3.2 Financial instruments (cont'd)

**(ii) Classification and subsequent measurement (cont'd)**

***Subsequent measurement and gains and losses***

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in surplus or deficit. Any gain or loss on derecognition is recognised in surplus or deficit.

*Non-derivative financial liabilities*

Such financial liabilities are subsequently measured at amortised cost using the effective interest method.

**(iii) Derecognition**

***Financial assets***

The Company derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

***Financial liabilities***

The Company derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Company also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in surplus or deficit.

## 3. Significant accounting policies (cont'd)

### 3.2 Financial instruments (cont'd)

#### (iv) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the balance sheet when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

The Company does not have any financial assets and financial liabilities that:

- are offset in the balance sheet; or
- are subject to an enforceable master netting arrangement, irrespective of whether they are offset in the balance sheet.

#### (v) Cash and cash equivalents

Cash and cash equivalents comprise cash and bank balances and deposits with financial institutions that are subject to an insignificant risk of changes in their fair value, and are used by the Company in the management of its short-term commitments.

### 3.3 Property, plant and equipment

***Recognition and measurement***

Items of property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes:

- the cost of materials and direct labour;
- any other costs directly attributable to bringing the assets to a working condition for their intended uses;
- when the Company has an obligation to remove the asset or restore the site, an estimate of the costs of dismantling and removing the items and restoring the site on which they are located; and
- capitalised borrowing costs, if any.

Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Construction-in-progress comprises the capitalised costs of on-going capital projects.

Low value assets costing less than $1,000 individually are written off in the period of outlay.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The gain or loss on disposal of an item of property, plant and equipment is recognised in surplus or deficit.

## 3. Significant accounting policies (cont'd)

### 3.3 Property, plant and equipment (cont'd)

***Subsequent costs***

The cost of replacing a component of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to the Company, and its cost can be measured reliably. The carrying amount of the replaced component is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in surplus or deficit as incurred.

***Depreciation***

Depreciation is calculated based on the cost of an asset, less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognised as an expense in surplus or deficit on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment, unless it is included in the carrying amount of another asset.

Construction-in-progress is not depreciated.

Depreciation is recognised from the date that the property, plant and equipment are installed and are ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use.

The estimated useful lives for the current and comparative years are as follows:

| | |
|---|---|
| Medical and laboratory equipment | 8 years |
| Computers | 3 years |
| Office equipment | 5 years |
| Furniture and fittings | 8 years |
| Motor vehicles | 5 years |

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting period and adjusted if appropriate.

### 3.4 Leases

The Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

***Company as a lessee***

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

## 3. Significant accounting policies (cont'd)

### 3.4 Leases (cont'd)

***Company as a lessee (cont'd)***

**a. Right-of-use assets**

The Company recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

| | |
|---|---|
| Building and office space | 3 years |

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Refer to accounting policies in Note 3.6 (ii). The Company's right-of-use assets are included in property, plant and equipment (Note 4).

**b. Lease liabilities**

At the commencement date of the lease, the Company recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The Company's lease liabilities are included in other payables (Note 12).

## 3. Significant accounting policies (cont'd)

### 3.4 Leases (cont'd)

***Company as a lessee (cont'd)***

**c. Short-term leases and leases of low-value assets**

The Company applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Leases in which the Company does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in income in surplus or deficit due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as income in the period in which they are earned.

### 3.5 Intangible assets

Computer software, which is not an integral part of the related hardware, is accounted for as an intangible asset and is stated at cost less accumulated amortisation and accumulated impairment losses.

No amortisation is provided on software development-in-progress.

***Research***

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in surplus or deficit as incurred.

***Subsequent expenditure***

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in surplus or deficit as incurred.

***Amortisation***

Amortisation is calculated based on the cost of asset, less its residual value.

Amortisation of computer software is recognised in surplus or deficit on a straight-line basis over its estimated useful life of 3-5 years, from the date that they are available for use.

Amortisation methods, useful lives and residual values are reviewed at the end of each reporting period and adjusted if appropriate.

## 3. Significant accounting policies (cont'd)

### 3.6 Impairment

**(i) Non-derivative financial assets**

The Company recognises loss allowances for ECLs on financial assets measured at amortised cost.

Loss allowances of the Company are measured on either of the following bases:

- 12-month ECLs: these are ECLs that result from default events that are possible within the 12 months after the reporting date (or for a shorter period if the expected life of the instrument is less than 12 months); or
- Lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument.

*Measurement of ECLs*

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

*Credit-impaired financial assets*

At each reporting date, the Company assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 1 to 3 years, taking into consideration historical payment track records, current macroeconomics situation as well as the general industry trend;
- the restructuring of a loan or advance by the Company on terms that the Company would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for a security because of financial difficulties.

However, financial assets that are considered as 'credit-impaired' would still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

*Presentation of allowance for ECLs in the balance sheet*

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of these assets.

## 3. Significant accounting policies (cont'd)

### 3.6 Impairment (cont'd)

### (i) Non-derivative financial assets (cont'd)

*Write-off*

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Company determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

*Simplified approach*

The Company applies the simplified approach to provide for ECLs for all trade receivables. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs.

*General approach*

The Company applies the general approach to provide for ECLs on all other financial instruments. Under the general approach, the loss allowance is measured at an amount equal to 12-month ECLs at initial recognition.

At each reporting date, the Company assesses whether the credit risk of a financial instrument has increased significantly since initial recognition. When credit risk has increased significantly since initial recognition, loss allowance is measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information.

If credit risk has not increased significantly since initial recognition or if the credit quality of the financial instruments improve such that there is no longer a significant increase in credit risk since initial recognition, loss allowance is measured at an amount equal to 12-month ECLs.

The Company considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Company in full, without recourse by the Group to actions such as realising security (if any is held); or
- the financial asset is more than 1 to 3 years past due, taking into consideration historical payment track records, current macroeconomics situation as well as the general industry trend.

The maximum period considered when estimating ECLs is the maximum contractual period over which the Company is exposed to credit risk.

## 3. Significant accounting policies (cont'd)

### 3.6 Impairment (cont'd)

**(i) Non-financial assets**

The carrying amounts of the Company's non-financial assets, other than inventories, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit ("CGU") exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGU.

The Company's corporate assets do not generate separate cash inflows and are utilised by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of the testing of the CGU to which the corporate asset is allocated.

Impairment losses are recognised in surplus or deficit. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU (group of CGUs), and then to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a pro rata basis.

Impairment loss recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

### 3.7 Employee benefits

***Defined contribution plans***

A defined contribution plan is a benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognised as an expense in surplus or deficit during which services are rendered by employees.

***Short-term employee benefits***

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

## 3. Significant accounting policies (cont'd)

### 3.8 Provisions

A provision is recognised if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

### 3.9 Income recognition

**Grant income**

Grant income designated for research purposes is recognised in surplus or deficit when the relevant qualifying costs are incurred. The deferral of certain grant income is described in note 3.10.

Grants which are designated for property, plant and equipment, and intangible assets purchases whose individual value of more than $1,000 and $10,000 respectively are taken to deferred income in the period of receipt. The deferred income is amortised over the useful life of the property, plant and equipment and intangible assets by crediting to the surplus or deficit an amount so as to match the related depreciation and amortisation expense.

**Programme fees**

Programme fees relate to fees or income which the Company receives when it carries out activities through direct service provision to undertake the work that contributes to its objectives. Programme fees are recognised in surplus or deficit when the relevant milestone is achieved.

### 3.10 Government grants

Government grants related to property, plant and equipment and intangible assets are taken to deferred income or to the surplus or deficit for assets which are written off in the year of purchase. Such government grant recognised in deferred income is recognised in the surplus or deficit over the periods necessary to match the depreciation/amortisation and write off of the property, plant and equipment and intangible assets purchased with the related grants. Upon the disposal of the property, plant and equipment and intangible assets, the balance of the related deferred income is recognised in the surplus or deficit to reflect the net book value of the assets disposed.

***Government subvention***

Government subvention is accounted for on an accrual basis in the surplus or deficit when there is reasonable assurance that the Company has complied with all the terms and conditions attached to the subvention and that there is reasonable certainty that the subvention will be received. Government subvention is a subsidy from the Ministry of Health for expenses incurred in relation to the Temporary occupation licence.

## 3. Significant accounting policies (cont'd)

### 3.11 Finance income and finance costs

The Company's finance income and finance costs include foreign currency gain or loss on financial assets and financial liabilities.

Foreign currency gains and losses on financial assets and financial liabilities are reported on a net basis as either finance income or finance cost depending on whether foreign currency movements are in a net gain or net loss position.

### 3.12 Tax

The Company has been registered as a Charity, under Charities Act 1994 with effect from 27 November 2002. No provision for taxation has been made in the financial statements as the Company is a registered charity with income tax exemption.

### 3.13 New standards and interpretations issued but not yet effective

The Company has not adopted the following standards that have been issued but not yet effective:

| ***Description*** | ***Effective for annual periods beginning on or after*** |
|---|---|
| Amendments to FRS110 and FRS27: *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture* | To be determined |
| Amendments to FRS 1 and FRS Practice Statement 2: *Disclosure of Accounting Policies* | 1 January 2023 |
| Amendments to FRS 8: *Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates* | 1 January 2023 |
| Amendments to FRS 1: *Classification of Liabilities as Current or Non-current* | 1 January 2024 |
| Amendments to FRS116: *Lease liability in a Sale and Leaseback* | 1 January 2024 |
| Amendments to FRS 1: *Non-current Liabilities with Covenants* | 1 January 2024 |

The directors expect that the adoption of the standards above will have no material impact on the financial statements in the year of initial application.

## 4. Property, plant and equipment

| | Medical and laboratory equipment $ | Computers $ | Office equipment $ | Furniture and fittings $ | Motor vehicle $ | Right-of-use assets (Note 14) $ | Construction-in-progress $ | Total $ |
|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | |
| At 1 April 2021 | 17,045,817 | 1,709,022 | 52,874 | 180,630 | 204,781 | 2,548,221 | 2,760,907 | 24,502,252 |
| Additions | 532,559 | 65,681 | 3,433 | 42,254 | – | 2,602,001 | 396,364 | 3,642,292 |
| Disposals | (497,331) | (74,159) | – | – | – | (2,548,221) | (71,619) | (3,191,330) |
| Reclassifications | 315,078 | 236,848 | – | – | – | – | (551,926) | – |
| At 31 March 2022 and 1 April 2022 | 17,396,123 | 1,937,392 | 56,307 | 222,884 | 204,781 | 2,602,001 | 2,533,726 | 24,953,214 |
| Additions | 1,285,766 | 106,623 | – | – | – | – | 377,688 | 1,770,077 |
| Disposals | (1,009,846) | (98,405) | – | – | (204,781) | – | (102,639) | (1,415,671) |
| Reclassifications | 1,668,536 | 99,097 | – | – | – | – | (1,767,633) | – |
| At 31 March 2023 | 19,340,579 | 2,044,707 | 56,307 | 222,884 | – | 2,602,001 | 1,041,142 | 25,307,620 |
| **Accumulated depreciation** | | | | | | | | |
| At 1 April 2021 | 11,455,614 | 1,103,257 | 27,493 | 101,429 | 143,347 | 1,798,744 | – | 14,629,884 |
| Depreciation charge for the year | 1,477,605 | 599,851 | 11,505 | 25,440 | 40,955 | 894,033 | – | 3,049,389 |
| Disposals | (475,640) | (73,879) | – | – | – | (2,548,221) | – | (3,097,740) |
| At 31 March 2022 and 1 April 2022 | 12,457,579 | 1,629,229 | 38,998 | 126,869 | 184,302 | 144,556 | – | 14,581,533 |
| Depreciation charge for the year | 1,681,963 | 311,737 | 10,487 | 25,584 | 17,066 | 867,334 | – | 2,914,171 |
| Disposals | (957,204) | (98,405) | – | – | (201,368) | – | – | (1,256,977) |
| At 31 March 2023 | 13,182,338 | 1,842,561 | 49,485 | 152,453 | – | 1,011,890 | – | 16,238,727 |
| **Carrying amounts** | | | | | | | | |
| At 31 March 2022 | 4,938,544 | 308,163 | 17,309 | 96,015 | 20,479 | 2,457,445 | 2,533,726 | 10,371,681 |
| At 31 March 2023 | 6,158,241 | 202,146 | 6,822 | 70,431 | – | 1,590,111 | 1,041,142 | 9,068,893 |

## 5. Intangible assets

| | Computer software $ |
|---|---|
| **Cost** | |
| At 1 April 2021 | 1,116,007 |
| Additions | 16,058 |
| At 31 March 2022 and 1 April 2022 | 1,132,065 |
| Additions | 139,406 |
| At 31 March 2023 | 1,271,471 |
| **Accumulated amortisation** | |
| At 1 April 2021 | 1,023,140 |
| Amortisation charge for the year | 68,405 |
| At 31 March 2022 and 1 April 2022 | 1,091,545 |
| Amortisation charge for the year | 43,919 |
| At 31 March 2023 | 1,135,464 |
| **Carrying amounts** | |
| At 31 March 2022 | 40,520 |
| At 31 March 2023 | 136,007 |

## 6. Trade and other receivables

| | Note | 2023 $ | 2022 $ |
|---|---|---|---|
| Deposits and other receivables | 7 | 24,529,798 | 22,023,707 |
| Trade amounts due from: | | | |
| - Immediate holding company | | 2,247,226 | 1,617,321 |
| - Intermediate holding company | | 514,215 | 254,639 |
| - Related corporations | | 857,234 | 552,500 |
| | | 28,148,473 | 24,448,167 |
| Deferred expenses | | 57,075 | 56,916 |
| | | 28,205,548 | 24,505,083 |
| Non-current | | 57,075 | 56,916 |
| Current | | 28,148,473 | 24,448,167 |
| | | 28,205,548 | 24,505,083 |

Outstanding balances with related parties are unsecured. There is no allowance for doubtful debts arising from these outstanding balances.

Information about the Company's exposures to credit risks and impairment losses for trade and other receivables are included in note 21.

## 7. Deposits and other receivables

| | Note | 2023<br>$ | 2022<br>$ |
|---|---|---|---|
| Deposits | | 117,818 | 84,027 |
| Receivables from funding bodies | | 23,372,942 | 19,967,116 |
| Grant receivables from third parties | | 1,068,415 | 1,974,674 |
| Sundry receivables | | 31,697 | 40,764 |
| | | 24,590,872 | 22,066,581 |
| Less: Impairment loss | | (61,074) | (42,874) |
| | 6 | 24,529,798 | 22,023,707 |

Receivables from funding bodies are non-interest bearing and have no credit terms.

## 8. Cash and cash equivalents

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Cash at bank and in hand | 14,710,545 | 12,076,761 |

## 9. Accumulated fund

The Company is limited by guarantee and has no share capital. In the event of a winding up of the Company, the liability of each member of the Company is limited to such amount as may be required, but not exceeding the sum of one hundred dollars ($100). The accumulated fund represents the cumulative surplus or deficit of the Company.

The Company's reserve policy is to maintain funds at a minimum sufficient to cover budgeted operating and capital cost for the current fiscal year. In the event of an operating deficit or a shortfall of current assets over current liabilities, the Company will obtain appropriate financial support from its immediate holding company to pay liabilities, as and when they fall due.

***Capital management***

Capital comprises the accumulated fund of the Company. The Company's operation is funded primarily from grants from various funding bodies and loans from immediate holding company. There was no change in the Company's approach to capital management during the year. The Company is not subject to externally imposed capital requirements.

## 10. Deferred income

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Capital expenditure grants | 6,219,473 | 5,039,684 |
| Non-current | 4,813,966 | 3,624,278 |
| Current | 1,405,507 | 1,415,406 |
| | 6,219,473 | 5,039,684 |

*Capital expenditure grants*

Capital expenditure grants comprised grants received for the purchase of property, plant and equipment ("PPE") and intangible assets ("IA"). Income received is deferred and amortised over the periods necessary to match the depreciation of the PPE and amortisation of the IA purchased with the related grants.

Included in other grants are grants provided by the government to support the salary costs incurred for the period of economic uncertainty due to the global pandemic outbreak.

Movement in deferred income relating to capital expenditure grants is as follows:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| At cost | 21,499,132 | 19,577,918 |
| Less: Accumulated amortisation: | | |
| At 1 April | 14,538,234 | 12,923,626 |
| Amortisation charge for the year | 1,998,402 | 2,153,625 |
| Disposal of assets funded by grants | (1,256,977) | (539,017) |
| At 31 March | 15,279,659 | 14,538,234 |
| | 6,219,473 | 5,039,684 |
| Non-current | 4,813,966 | 3,624,278 |
| Current | 1,405,507 | 1,415,406 |
| | 6,219,473 | 5,039,684 |

## 11. Trade payables

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Trade payables | 2,960,487 | 453,221 |
| Trade amounts due to: | | |
| - Immediate holding company | 1,930,877 | 1,935,520 |
| - Intermediate holding company | 2,654,158 | 3,249,205 |
| - Related corporations | 406,271 | 337,294 |
| | 7,951,793 | 5,975,240 |

The Company's exposure to liquidity risks related to trade payables is disclosed in Note 21.

## 12. Other payables

| | | 2023<br>$ | 2022<br>$ |
|---|---|---|---|
| Accrued operating expenses | | 4,968,846 | 4,879,977 |
| Loans from immediate holding company | | 6,000,000 | 6,000,000 |
| Research grants received in advance from government | | 7,829,129 | 4,002,024 |
| Research grants received in advance from third parties | | 2,723,479 | 4,571,909 |
| Research grants received in advance from related corporation | | 13,464,714 | 12,683,289 |
| Lease liabilities | 14 | 1,644,212 | 2,454,114 |
| Refundable deposits | | 48,440 | 34,690 |
| | | 36,678,820 | 34,626,003 |
| Non-current | | 769,584 | 1,627,668 |
| Current | | 35,909,236 | 32,998,335 |
| | | 36,678,820 | 34,626,003 |

Loans from immediate holding company are unsecured, interest-free and repayable on demand.

The Company's exposure to liquidity risks related to other payables is disclosed in Note 21.

## 13. Employee benefits

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Liability for short-term accumulated compensated absences | 1,266,933 | 1,266,933 |

## 14. Leases

**Company as a lessee**

The Company's obligations under its leases are secured by the lessor's title to the leased assets.

Set out below are the carrying amounts of right-of-use assets (included under property, plant and equipment) recognised and the movements during the period:

| | Building and office space |
|---|---|
| | $ |
| At 1 April 2021 | 749,477 |
| Additions | 2,602,001 |
| Depreciation expense | (894,033) |
| At 31 March 2022 and 1 April 2022 | 2,457,445 |
| Depreciation expense | (867,334) |
| At 31 March 2023 | 1,590,111 |

Set out below are the carrying amounts of lease liabilities (included under trade and other payables) and the movements during the period:

| | 2023 | 2022 |
|---|---|---|
| | $ | $ |
| At 1 April | 2,454,114 | 788,194 |
| Additions | – | 2,602,001 |
| Accretion of interest | 118,926 | 42,958 |
| Payments | (928,828) | (979,039) |
| At 31 March | 1,644,212 | 2,454,114 |
| Current | 874,628 | 826,446 |
| Non-current | 769,584 | 1,627,668 |
| | 1,644,212 | 2,454,114 |

The maturity analysis of lease liabilities are disclosed in Note 21.

## 14. Leases (cont'd)

**Company as a lessee (cont'd)**

The following are the amounts recognised in surplus or deficit:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Depreciation expense of right-of-use assets | 867,334 | 894,033 |
| Interest expenses on lease liabilities | 118,926 | 42,958 |
| Expenses relating to short-term leases (included in Rental & utilities) | (8,193) | 79,548 |
| Expenses relating to leases of low-value assets (included in Rental & utilities) | 95,415 | 98,884 |
| Total amount recognised in surplus or deficit | 1,073,482 | 1,115,423 |

The Company had total cash outflows for leases of $1,016,047 (2022: $1,157,471) in 2023. The Company also had non-cash additions to right-of-use assets and lease liabilities of $ Nil in 2023 (2022: $2,602,001). There are no lease contracts committed but not yet commenced as at 31 March 2023.

## 15. Operating expenditure grants

These grants are received mainly from National Medical Research Council, Biomedical Research Council, SingHealth Foundation, Singapore Health Services Pte Ltd, Singapore National Eye Centre Pte Ltd and SNEC Health Research Endowment Fund for research projects.

## 16. Other income

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Clinical trial and research income | 3,577,665 | 3,687,214 |
| Other miscellaneous income | 1,566,184 | 462,622 |
| | 5,143,849 | 4,149,836 |

## 17. Net finance costs

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Interest expense on lease liabilities (Note 14) | (118,926) | (42,958) |
| Net foreign exchange loss | (4,878) | (4,459) |
| Net finance costs | (123,804) | (47,417) |

## 18. Government subvention

Government subvention is recognised in the surplus or deficit when conditions attached to its recognition are met by the Company. The Government is currently reviewing and finalising the subvention paid and payable to the Company in respect of the current year, no adjustment has been made in the financial statements for this component in the current financial year.

## 19. Tax expense

The Company is a non-profit organisation registered with the Commissioner of Charities under the Singapore Charities Act 1994. With effect from Year of Assessment 2008, all registered and exempt charities will enjoy automatic income tax exemption. Thus, no provision for taxation was made in the financial statements.

## 20. Surplus/(deficit) for the year

The following items have been included in arriving at surplus/(deficit) for the year:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Contributions to defined contribution plan included in staff costs | 2,102,274 | 2,105,841 |
| Loss on disposal of property, plant and equipment | 158,694 | 93,590 |

## 21. Financial Instruments

**Overview**

The Company has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk.

**Risk management framework**

Risk management is integral to the whole business of the Company. The Company has a system of controls in place to create an acceptable balance between cost of risks occurring and the cost of managing the risks. The management continually monitors the Company's risk management process to ensure that an appropriate balance between risk and control is achieved. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

## 21. Financial Instruments (cont'd)

**Credit risk**

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations as and when they fall due.

The carrying amount of financial assets in the balance sheet represents the Company's maximum exposure to credit risk, before taking into account any collateral held. The Company does not hold any collateral in respect of its financial assets.

*Financial assets measured at amortised cost*

The Company has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis.

The allowance account in respect of trade and other receivables is used to record impairment losses unless the Company is satisfied that no recovery of the amount owing is possible. At that point, the financial asset is considered irrecoverable and the amount charged to the allowance account is written off against the carrying amount of the impaired financial asset.

Cash is placed with financial institutions which are regulated.

The Company's primary exposure to credit risk arises through its receivables from funding bodies and corporations. These parties are established and reputable institutions which management regarded the associated credit risk to be minimum. The Company's historical experience in the collection of accounts receivable falls within the recorded allowances for impairment losses. Due to these factors, management believes that no additional credit risk beyond the amounts provided for collection losses is inherent in the Company's trade and other receivables.

The maximum exposure to credit risk for trade and other receivables of the Company at the reporting date (by type of debtor) is:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Funding bodies | 23,372,941 | 19,967,116 |
| Corporations | 4,775,532 | 4,481,051 |
| | 28,148,473 | 24,448,167 |

## 21. Financial Instruments (cont'd)

**Credit risk (cont'd)**

*Impairment losses*

The ageing of trade and other receivables at the reporting date was:

| | 2023 Not credit-impaired $ | 2023 Credit-impaired $ |
|---|---|---|
| Not past due | 26,059,419 | – |
| Past due 1 – 30 days | 771,031 | – |
| Past due 31 – 150 days | 1,095,732 | – |
| Past due over 150 days | 222,291 | 61,074 |
| Total gross carrying amount | 28,148,473 | 61,074 |
| Impairment loss allowance | – | (61,074) |
| | 28,148,473 | – |

| | 2022 Not credit-impaired $ | 2022 Credit-impaired $ |
|---|---|---|
| Not past due | 21,655,978 | – |
| Past due 1 – 30 days | 133,576 | – |
| Past due 31 – 150 days | 2,356,052 | 7,971 |
| Past due over 150 days | 302,561 | 34,903 |
| Total gross carrying amount | 24,448,167 | 42,874 |
| Impairment loss allowance | – | (42,874) |
| | 24,448,167 | – |

## 21. Financial Instruments (cont'd)

**Credit risk (cont'd)**

*Impairment losses (cont'd)*

The Company uses an allowance matrix to measure the ECLs of trade and other receivables from funding bodies and corporations (excluding related parties).

Other receivables from funding bodies of $ 23,372,942 and $19,967,116 as at 31 March 2023 and 31 March 2022 respectively are neither past due nor impaired.

The following table provides information about the exposure to credit risk and ECLs for other receivables from corporations (excluding related parties) as at 31 March:

| 2023 | Weighted average loss rate % | Gross $ | Impairment losses $ |
|---|---|---|---|
| Not past due | – | 607,923 | – |
| Past due 1 – 30 days | – | 10,824 | – |
| Past due 31 – 150 days | – | 170,436 | – |
| Past due over 150 days | 21.8 | 279,232 | 61,074 |
| | | 1,068,415 | 61,074 |

| 2022 | Weighted average loss rate % | Gross $ | Impairment losses $ |
|---|---|---|---|
| Not past due | – | 1,398,621 | – |
| Past due 1 – 30 days | – | – | – |
| Past due 31 – 150 days | 2.1 | 380,463 | 7,971 |
| Past due over 150 days | 14.8 | 236,354 | 34,903 |
| | | 2,015,438 | 42,874 |

Loss rates are based on actual credit loss experience over the past three years. These rates are adjusted by scalar factors to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Company's view of economic conditions over the expected lives of the receivables. These scalar factors are calculated using statistical models that determine numeric co-relation of loss rates with relevant economic variables.

*Amounts due from related parties*

Impairment on these balances has been measured on the 12-month expected loss basis which reflects the low credit risk of the exposures. The amount of the allowance on these balances is insignificant.

## 21. Financial Instruments (cont'd)

**Credit risk (cont'd)**

*Movements in allowance for impairment in respect of trade and other receivables*

The movement in the allowance for impairment in respect of trade and other receivables during the year was as follows:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| At 1 April | 42,874 | 11,547 |
| Reversal of impairment loss | 18,200 | 31,327 |
| At 31 March | 61,074 | 42,874 |

*Cash and cash equivalents*

The Company held cash and cash equivalents of $14,710,545 at 31 March 2023 (2022: $12,076,761). The cash and cash equivalents are held with regulated financial institutions.

Allowance for impairment losses on cash and cash equivalents has been measured on the 12-month expected loss basis and reflects the short maturities of the exposures. The Company considers that its cash and cash equivalents have low credit risk based on the external credit ratings of the counterparties. The amount of the allowance on cash and cash equivalents was negligible.

**Liquidity risk**

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due under normal and stressed conditions without incurring unacceptable losses or risking damage to the Company's reputation.

The Company's operation is funded primarily from grants from National Medical Research Council and loans from immediate holding company. As such, the Company's exposure to liquidity risk is minimised.

The Company monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Company's operations and to mitigate the effects of fluctuations in cash flows.

The immediate holding company has agreed to provide financial support as is necessary for the next twelve months to enable the Company to meet its liabilities as and when they fall due (see Note 2.1).

## 21. Financial Instruments (cont'd)

**Liquidity risk (cont'd)**

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements:

| | Note | Carrying amount | Total contractual cash flows | Within 1 year | Within 5 years |
|---|---|---|---|---|---|
| | | $ | $ | $ | |
| **2023** | | | | | |
| **Non-derivative financial liabilities** | | | | | |
| Trade payables | 11 | 7,951,793 | (7,951,793) | (7,951,793) | – |
| Other payables* | 12 | 11,017,284 | (11,017,284) | (11,017,284) | – |
| Lease liabilities | 14 | 1,644,212 | (1,733,182) | (945,372) | (787,810) |
| | | 20,613,289 | (20,702,259) | (19,914,449) | (787,810) |
| **2022** | | | | | |
| **Non-derivative financial liabilities** | | | | | |
| Trade payables | 11 | 5,975,240 | (5,975,240) | (5,975,240) | – |
| Other payables* | 12 | 10,914,667 | (10,914,667) | (10,914,667) | – |
| Lease liabilities | 14 | 2,454,114 | (2,678,554) | (945,372) | (1,733,182) |
| | | 19,344,021 | (19,568,461) | (17,835,279) | (1,733,182) |

** Excludes research grants received in advance from government, third parties and related corporation and lease liabilities*

The maturity analysis shows the undiscounted cash flows of the Company's financial liabilities on the basis of their earliest possible contractual maturity.

## 21. Financial Instruments (cont'd)

**Measurement of fair values**

The Company has an established control framework with respect to the measurement of fair values.

If third party information, such as broker quotes, property valuations or pricing services, is used to measure fair values, then the Company assesses and documents the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of FRS, including the level in the fair value hierarchy in which such valuations should be classified.

When measuring the fair value of an asset or a liability, the Company uses market observable data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement (with Level 3 being the lowest).

The Company recognises transfers between levels of the fair value hierarchy as of the end of the reporting period during which the change has occurred.

## 21. Financial Instruments (cont'd)

**Accounting classifications and fair values**

The carrying amounts of recognised financial assets and liabilities, as shown below, with a maturity of less than one year (including trade and other receivables, cash and cash equivalents, trade payables and other payables) approximate their fair values because of the short period to maturity. Accordingly, no fair value is separately presented.

| | Note | Financial assets at amortised cost $ | Financial liabilities at amortised cost $ | Total carrying amount $ |
|---|---|---|---|---|
| **31 March 2023** | | | | |
| **Financial assets not measured at fair value** | | | | |
| Cash and cash equivalents | 8 | 14,710,545 | – | 14,710,545 |
| Trade and other receivables^ | 6 | 28,148,473 | – | 28,148,473 |
| | | 42,859,018 | – | 42,859,018 |
| **Financial liabilities not measured at fair value** | | | | |
| Trade payables | 11 | – | (7,951,793) | (7,951,793) |
| Other payables* | 12 | – | (11,017,284) | (11,017,284) |
| | | – | (18,969,077) | (18,969,077) |

| | Note | Financial assets at amortised cost $ | Financial liabilities at amortised cost $ | Total carrying amount $ |
|---|---|---|---|---|
| **31 March 2022** | | | | |
| **Financial assets not measured at fair value** | | | | |
| Cash and cash equivalents | 8 | 12,076,761 | – | 12,076,761 |
| Trade and other receivables^ | 6 | 24,448,167 | – | 24,448,167 |
| | | 36,524,928 | – | 36,524,928 |
| **Financial liabilities not measured at fair value** | | | | |
| Trade payables | 11 | – | (5,975,240) | (5,975,240) |
| Other payables* | 12 | – | (10,914,667) | (10,914,667) |
| | | – | (16,889,907) | (16,889,907) |

*^ Excludes deferred expenses*

** Excludes research grants received in advance from government, third parties and related corporation and lease liabilities*

## 22. Commitments

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Capital commitments: | | |
| - contracted but not provided for | 2,521,509 | 2,120,362 |

## 23. Related parties

**Collectively, but not individually significant transactions**

The Company charges its immediate holding company for manpower services provided and purchases services from its intermediate holding company, immediate holding company and related corporations.

**Other related party transactions**

Other than disclosed elsewhere in the financial statements, the transactions with related parties are as follows:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| **Other income received/receivable** | | |
| Intermediate holding company | (234,482) | (364,731) |
| Immediate holding company | (3,405,355) | (2,433,811) |
| Related corporation | (646,780) | (709,969) |
| **Purchase of manpower services** | | |
| Intermediate holding company | 2,657,358 | 3,197,716 |
| Immediate holding company | 1,006,608 | 787,167 |
| Related corporation | 770,713 | 869,174 |
| **Purchase of other services** | | |
| Intermediate holding company | 1,295,742 | 1,563,878 |
| Immediate holding company | 1,624,374 | 1,232,388 |
| Related corporations | 485,597 | 411,120 |
| **Purchase of supplies and consumables** | | |
| Intermediate holding company | 491,983 | 1,110,533 |
| Immediate holding company | 37,354 | 46,174 |
| Related corporations | 615 | 62 |
| **Other expenses paid/payable** | | |
| Intermediate holding company | 2,281,768 | 1,983,389 |
| Immediate holding company | 249,790 | 213,361 |
| Related corporations | 162,428 | 170,970 |

The Company occupies space at the premises of its intermediate and immediate holding companies. The current year rental of $72,283 (2021: $72,283) is waived by the immediate holding company.

## 23. Related parties (cont'd)

**Key management personnel remuneration**

Key management personnel of the Company are those persons having the authority and responsibility for planning, directing and controlling the activities of the Company. The senior management are considered as key management personnel of the Company.

Key management personnel remuneration recognised in the statement of comprehensive income is as follows:

| | 2023<br>$ | 2022<br>$ |
|---|---|---|
| Key management personnel | | |
| - short-term employee benefits | 1,285,307 | 1,293,269 |
| - contribution to defined contribution plan | 61,371 | 32,208 |
| | 1,346,678 | 1,325,477 |

In compliance with the Code of Corporate Governance for Charities and Institutions of a Public Character - Guideline 8.3, the annual remuneration of the Company's three highest paid staff who each received remuneration exceeding $100,000, in the following bands in the year are as follows:

| | 2023 | 2022 |
|---|---|---|
| Number of personnel in bands: | | |
| - $200,001 to $300,000 | 1 | 1 |
| - $300,001 to $400,000 | 1 | 1 |
| - $400,001 to $500,000 | 1 | 1 |

## 24. Authorisation of financial statements for issue

The financial statements for the financial year ended 31 March 2023 were authorised for issue in accordance with a resolution of the directors on 21 June 2023.

## APPENDIX

In compliance with the Code of Corporate Governance for Charities and Institutions of a Public Character - Guideline 8.3, the annual remuneration of the Company's three highest paid staff who each received remuneration exceeding $100,000, in the following bands in the year are as follows:

None of these three highest paid staff serves as a governing board member of the charity.

There is no paid staff, being a close member of the family belonging to the Executive Head or a governing board member of the charity, who has received remuneration exceeding $50,000 during the financial year.

| | 2023 | 2022 |
|---|---|---|
| Number of personnel in bands: | | |
| - $200,001 to $300,000 | 1 | 1 |
| - $300,001 to $400,000 | 1 | 1 |
| - $400,001 to $500,000 | 1 | 1 |

## SERI Board Meeting

The SERI Board Meeting were held quarterly in the financial year.

## Details of the meetings:

| ***SERI Board Meeting on 23 June 2022, 6pm via Zoom*** | |
|---|---|
| **Present** | **Absent with Apologies** |
| Prof Aung Tin | Prof Vernon Lee |
| Prof Chong Yap Seng | |
| Prof Benjamin Seet | |
| Ms Ooi Chee Kar | |
| Prof Thomas Coffman | |
| Prof Tan Sze Wee | |
| Prof Joseph Sung | |
| Ms Eileen Yeo | |
| Ms Poh Mui Hoon | |
| Mr Esmond Choo | |
| Mr Tan Shong Ye | |

| ***SERI Board Meeting on 5 September 2022, 6pm via Zoom*** | |
|---|---|
| **Present** | **Absent with Apologies** |
| Prof Aung Tin | Prof Chong Yap Seng |
| Prof Benjamin Seet | Prof Joseph Sung |
| Ms Ooi Chee Kar | Mr Tan Shong Ye |
| Prof Thomas Coffman | Ms Poh Mui Hoon |
| Prof Tan Sze Wee | Prof Vernon Lee |
| Ms Eileen Yeo | |
| Mr Esmond Choo | |
| | |
| | |
| | |
| | |

## SERI Board Meeting (con't)

| *SERI Board Meeting on 6 December 2022, 6pm via Zoom* | |
|---|---|
| **Present** | **Absent with Apologies** |
| Prof Aung Tin | Mr Esmond Choo |
| Prof Thomas Coffman | Prof Benjamin Seet |
| Prof Chong Yap Seng | Prof Vernon Lee |
| Prof Joseph Sung | |
| Prof Tan Sze Wee | |
| Ms Eileen Yeo | |
| Mr Tan Shong Ye | |
| Ms Poh Mui Hoon | |
| | |
| | |
| | |

| *SERI Board Meeting on 30 March 2023, 6pm via Zoom* | |
|---|---|
| **Present** | **Absent with Apologies** |
| Prof Aung Tin | Prof Thomas Coffman |
| Prof Chong Yap Seng | Prof Vernon Lee |
| Mr Tan Shong Ye | |
| Prof Tan Sze Wee | |
| Prof Benjamin Seet | |
| Prof Joseph Sung | |
| Ms Eileen Yeo | |
| Ms Poh Mui Hoon | |
| Mr Esmond Choo | |
| | |
| | |