

### **AUCKLAND MEDICAL HISTORY SOCIETY**

#### MEETING ANNOUNCEMENT

# Wednesday 7 May 2025 at 7pm

Venue

Ernest and Marion Davis Library (EMDL)
Building 43, Auckland City Hospital

Lectures

## The medical history of nitrous oxide

Presenter

**Shilpan Patel** 

The James Newman Lecture

A history of cataract surgery

Presenter

**Charles McGhee** 

Abstracts & biographical details of the presenters - see over

The EMDL will be open from **6.15 pm**All welcome-bookings are not required

See the AMHS website Latest News page for updates and links to the 2025 Programme page

Donations to the Society are invited & can be made on the night or preferably online.

Bank account: 02 0160 0237509 00



## **Lecture 1:** The medical history of nitrous oxide **Abstract**

Nitrous Oxide has been used for medicinal purposes for almost two centuries. It is a colourless and odourless gas which provides anaesthesia, however is also inhaled as a drug of abuse for a feeling of euphoria. We will journey the history of nitrous oxide from the initial use of this substance in dentistry to its role as both an anaesthestic agent and a drug of abuse in society today.

#### **Presenter**

Dr Shilpan G Patel

Shilpan Patel is an advanced trainee in neurology at Auckland City Hospital. His secondary education was at Mount Roskill Grammar School, and he graduated MB ChB from the University of Auckland in 2018. In 2022 he passed the written and clinical components of the RACP examination, gaining the top mark in the clinical examination. He has been the Chief Medical Resident and Chief Neurology Registrar at Auckland Hospital. Shilpan has published about ten scientific papers including one on a rare genetic variant in the PINK1 gene in Polynesians with early onset Parkinson's disease and another describing a potential founder effect in Māori and Pacific people with neuronal intranuclear inclusion disease. His main current research interest is moyamoya disease. While he has been a neurology registrar, he has written a paper on the spinal cord and peripheral nerve disease resulting from the poorly regulated availability and abuse of nitrous oxide. He has brought this problem to the attention of the media and the government, resulting in a change in legislation regarding the sale and possession of nitrous oxide. His efforts in this area were acknowledged last year when the Chief Medical Officer presented him with a special Staff Recognition Award.

## **Lecture 2:** A history of cataract surgery

#### **Abstract**

A perspective of contemporary cataract surgery: the most common surgical procedure in the world Charles N. J. McGhee, Jie Zhang and Dipika V. Patel

Department of Ophthalmology, New Zealand National Eye Centre, Faculty of Medical and Health Sciences, University of Auckland, New Zealand

JOURNAL OF THE ROYAL SOCIETY OF NEW ZEALAND 2020, VOL. 50, NO. 2, 245–262

Cataract is the most common, reversible cause of visual impairment and blindness in the world. Cataract surgery in primitive form has been around for millennia but the last 50 years have witnessed a monumental revolution in cataract surgery making it the most common, and one of the most successful, operations world-wide. Major advances have included the development of phacoemulsification techniques, refinement of small incision approaches, foldable and injectable specialised intraocular lenses (IOLs), day-case local anaesthetic approaches and a better understanding of risks and benefits. Clinicians and scientists in New Zealand / Aotearoa have contributed significantly to the global knowledge of cataract surgery, including aspects of indications for surgery, assessment and use of specialised IOLs including aspheric, toric and secondary IOLs, effect of surgical techniques on corneal structure and performance, training of cataract surgeons, intraoperative and post-operative complications, strategies to minimise complications, and visual outcomes following phacoemulsification surgery. These studies also reveal disparities in health care, with the indigenous Māori population demonstrating more advanced cataract at an earlier age, associated with greater risk of intra-operative complications, yet accessing cataract services disproportionally less. This review highlights key research contributions from a New Zealand perspective.

#### Lecture

This presentation will cover historical and current aspects of cataract surgery, from ancient couching to laser assisted surgery, with many period illustrations as well as illustrative landmark films and videos from the last hundred years. This walk-through history will highlight incremental knowledge progression as well as the occasional serendipitous discovery.



#### **Presenter**

#### Professor Charles NJ McGhee

Charles McGhee ONZM, FRSNZ, MBChB, BSc (Hons), PhD, DSc, FRCS, FRCOphth, FRANZCO is Maurice Paykel Professor and Chair of Ophthalmology (1999) and founding Director (2008) of the Aotearoa New Zealand National Eye Centre (ANZNEC), University of Auckland. Previously Consultant Ophthalmologist and Professor of Ocular therapeutics (Sunderland, England, 93-96), and foundation Professor of Ophthalmology (Dundee, Scotland, 96-99), as Director of the ANZNEC he brings together >140 ophthalmologists, optometrists, visual scientists and doctoral students in an internationally recognized teaching and research centre. He is a Fellow of the Royal Society of New Zealand (FRSNZ) and he was made an Officer of the New Zealand Order of Merit (ONZM) in the Queen's Birthday Honours list (2019) for contributions to ophthalmology. The Ophthalmologists magazine (UK) in their biannual survey, has ranked Professor McGhee as one the 100 most influential people (no. 8 in 2024) in the world of ophthalmology in 2014, 2018, 2022 and 2024. The Asia Pacific Journal of Ophthalmology also listed Professor McGhee as one of only 24 International "EyeCons" of the 21st Century, for contributions to Ophthalmology (2024). He is a clinician-scientist and has edited and co-written two major textbooks and >550 peer-reviewed papers and chapters. PBRF A-ranked since commencement of NZ-PBRF assessment, he has an H-Index of 51 (World of Science)(Scopus) and 56 (Scopus) with >10,000 citations (Scopus) and >70,000 views (Science Direct), having published with 577 co-authors. He provides tertiary clinical services, specialising in corneal transplantation, anterior segment tumours, complex cataract surgery and ocular trauma repair to Auckland District health Board and Eye Institute, Auckland, and was Clinical Director of the ophthalmology service (99-06). Within the Department of Ophthalmology, he has grown a research team from six to >80 scientists/ clinicians/ students (2024), including ten Professors/ Associate Professors. He has personally supervised >90 clinical and research fellows, leading to 36 doctoral thesis completions with 5 in progress, in addition to advanced clinical training opportunities for international fellows. His personal research interests have generated \$33 million in competitive grants and philanthropic funding. Since 2012 he has held >\$15.8 million in research funding as PI/AI, (>\$6.0M HRC/Marsden/MBIE grants) He has given >200 invited lectures to professional bodies in UK, Europe, USA, South America, India and China. Ex-fellows now hold leading clinical and academic posts internationally. He has assisted in the training of a generation of New Zealand ophthalmologists.

Leadership roles include Chair of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) annual scientific congress committee 2005-2008, Co-Chairman of the Scientific Program Committee of the Beijing Asia Pacific Academy of Ophthalmology (APAO) 2010 Congress (11,000 delegates), and Chairman of the Scientific Committee for Sydney APAO 2011. He is also on the scientific committees of the Society of German Ophthalmic Surgeons, Asia-ARVO, RANZCO, and Honorary Life President of the British Society for Refractive Surgery. He was President of the Asia Pacific Academy of Ophthalmology (2018-2019) that represents more than 50% of the world's ophthalmologists and chair of the APAO 2020/2021 international Congress. He is the former Editor in Chief of Clinical and Experimental Ophthalmology (2002-2010), Associate Editor for the Asia Pacific Journal of Ophthalmology, and was a longterm member of the Editorial Board of the Journal of Cataract and Refractive Surgery. He is an Honorary Professor of the Zhongshan Ophthalmic Centre, Guangzhou, and the Chinese University of Hong Kong, HK. National and international recognition includes: New Zealander of the Year Award Finalist, 2010; the De Ocampo Medal for academic excellence, 2011 (APAO), Sir Peter Gluckmann Medal for sustained excellence in Science, 2008 (UofA), Sir Norman Gregg Medal, 2008 (RANZCO), the Douglas Coster Lecture (Australasian Corneal Society), the Ida Mann Lecture (RANZCO), Norman Galloway Medal Lecture (UK), and American Academy of Ophthalmology Achievement Award, 2013. The International Council of Ophthalmology awarded him the 2014 Mark Tso Golden Apple award as the best ophthalmic teacher in the Asia Pacific region. He provided an invited plenary lecture on keratoconus to the international Cornea Society (San Diego 2015) and presented the Asian Cornea Society foundation medal lecture (on keratoconus) in 2018. He is an elected Life Member of Academia Ophthalmologica Internationalis (AOI) the most prestigious academic society in ophthalmology and visual sciences (100 members) and was elected Vice President of the society in 2022. He is President of the Academy of Asia Pacific Professors of Ophthalmology (AAPPO), and one of only 250 members of the International Intraocular Implant Club (IIIC) – the oldest society dedicated to advances in intraocular lenses.



#### THE JAMES NEWMAN LECTURE

## James Lister Newman MD (Cam) DPH(Eng) FRCP FRACP 1903-1983

James Newman's family established the James Newman Fund which generously supports the Society.

James Newman was born in London in 1903. Educated at Shrewsbury School, he was a brilliant classics scholar and left Magdalen College, Cambridge with Hons. National Sciences Tripos. After qualifying in Medicine at Kings College Hospital in 1927, he became a Visiting Physician in Chichester and was later given wartime responsibility for the Coventry Ambulance Services.

He emigrated to New Zealand in 1947 to the Department of Health in Whangarei but tired of the bureaucracy and moved to Green Lane Hospital as medical registrar, 1951, then Medical Tutor and Physician there, and later Medical Superintendent, Cornwall Geriatric and Green Lane Hospitals. He championed the cause of the elderly and became known as the "Father of Gerontology" in New Zealand.

For many years, James, was also Editor of the *New Zealand Family Doctor*, and wrote a weekly Medical Column in the *New Zealand Herald* until the time of his death on October 17, 1983.

He presented a number of papers to the Society, which is generously supported by the James Newman Fund, established by his family in 1984. His interest in medical history is given substance in his fascinating collection of old Apothecaries' Jars which graces the foyer of the Ernest and Marion Davis Library.

