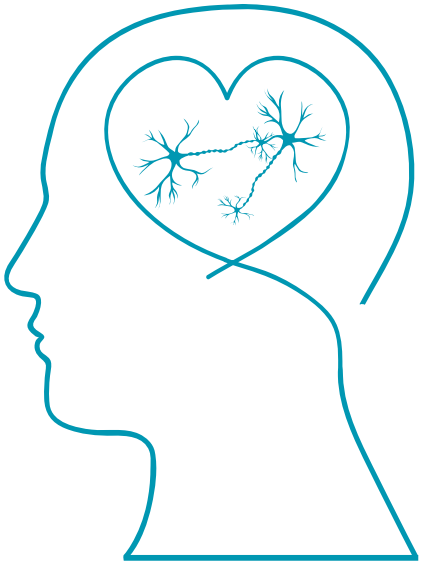

INSIGHTS IN INTEGRATIVE MEDICINE:

Connecting science & clinical practice

SPEAKER PROFILES & PRESENTATION SUMMARIES

9th Annual NIIM Symposium
12 & 13 September 2024

DOCUMENT UPDATED ON: 2-JULY-2024

Dr Thomas Arkell

Research Fellow, PhD

Medical cannabis: recent real-world evidence and its effects on driving performance and cognitive function
This presentation will review recent real-world evidence for medical cannabis efficacy, focusing on registry studies and a case series involving over 3000 Australians. This presentation will also provide an overview of current knowledge on cannabis and its effects on driving, including recent work at Swinburne University looking for the first time at the effects of prescribed medical cannabis on driving performance and neurocognitive function.

BIO: Dr. Thomas Arkell is a Research Fellow at Swinburne University of Technology in Melbourne, Australia. He holds a BA (Psychology/Philosophy) and a PhD (Medicine) from the University of Sydney. His research focuses primarily on the behavioral pharmacology of cannabis and the therapeutic potential of medical cannabis. Current projects include investigations into the effects of THC and CBD on driving performance and cognitive function, the impact of early-stage medical cannabis treatment on health-related quality of life in people with chronic pain, and the development of a novel driving simulation paradigm to assess the impact of cannabis and other drugs on driving performance. Dr Arkell chairs the International Council on Alcohol Drugs and Traffic Safety's Cannabis and Driving Working Group.

Rachel Arthur

Integrative Nutritionist & Naturopath

The New Nuance of Thyroid Nutrition
Thyroid physiology makes many HPT health concerns especially amenable to nutritional interventions. And contemporary research has brought to light a much needed, new level of detail that should see us refine our old ideas. This is an opportunity to update nutritional approaches, both with respect to the key traditional players, Iodine, Selenium & Vitamin D, and a new cast of characters. We get down to the real detail of optimal form, dose and duration for the major thyroid applications.

BIO: Rachel's favourite colour is red, as in the deep red of a blood sample collected for analysing labs to gain optimal insights into all patients. With her impressive credentials as a contributor to many authoritative texts and author of peer-reviewed articles. Her trademark? Translating complex scientific concepts into accessible language and providing practical, easy-to-implement solutions that are delivered with a splash of colour and humour. Rachel's conscientious research is what sets her apart and has earned her international recognition as a leading authority in the fields of integrative nutrition & diagnostics.

A/Prof Nathan Butler

CEO and Founder, Active Health Clinic & Accredited Exercise Physiologist

Navigating Long COVID: Understanding Pathophysiology & Empowering Management Strategies

COVID-19 has resulted in nearly 7 million deaths globally, but an often overlooked aspect is the nearly 400 million people who continue to suffer from Long COVID, a condition where symptoms persist long after the initial infection. The journey from diagnosis to recovery for these individuals can be uncertain and lacks a standardized pathway, making it akin to a roll of the dice.

Long COVID serves as an umbrella term encompassing a range of lingering symptoms and health issues. To support those affected, it is crucial to understand the underlying pathophysiology and explore effective management pathways. This knowledge can empower individuals on their health journey, providing them with better tools and strategies to manage their condition. By delving into the mechanisms behind Long COVID and identifying optimal treatment approaches, we can offer hope and direction to those navigating this challenging and often confusing health landscape.

BIO: Associate Professor Nathan Butler is a distinguished health professional with over 20 years of experience in managing post-viral conditions and other 'invisible illnesses.' As the CEO and founder of the Active Health Clinic and the COVID Recovery Initiative, Nathan has dedicated his career to improving the lives of individuals affected by these often misunderstood and challenging health issues.

Nathan's extensive background includes coordinating specialist inpatient and outpatient programs at the Austin Hospital in Melbourne and the Royal Free Hospital in London, focusing on chronic fatigue syndrome, cardiac, respiratory, and pain rehabilitation. His diverse experience has equipped him with a unique understanding of the complexities involved in treating chronic conditions.

In 2008, Nathan established the Active Health Clinic based on his core values of long-term self-management through knowledge, compassion, and trust. Under his leadership, the clinic has become a leader in its field, providing innovative and comprehensive care. Nathan also contributes to the academic community by lecturing Master's students at La Trobe University, sharing his knowledge and passion with the next generation of health professionals.

Nathan is also an active investigator in research trials focused on Long COVID, continually seeking to advance understanding and treatment of this complex condition. His involvement in research ensures that his clinical practices are informed by the latest scientific developments, benefiting his patients with cutting-edge care.

Nathan has a keen interest in conditions such as fatigue, orthostatic intolerance (OI) & postural orthostatic tachycardia syndrome (POTS), central sleep disorders, and chronic pain. His personal connection drives his dedication to finding new ways to help his patients and to continuously learn and adapt in his practice.

Changing lives might sound cliché, but for Nathan, it's a daily reality and the most rewarding aspect of his work. His innovative approach, combined with his personal and professional experiences, makes him a leading figure in the treatment and management of long COVID and other invisible illnesses.

Nikki Callan

BHSc Nutrition, Adv Dip Nat

Did you know the gut microbiome can influence a women's hormonal health?
The microbiome develops alongside a woman as she moves through life stages where an ongoing dynamic crosstalk between gastrointestinal (GI) microbes and sex hormones shape immune, neurological, metabolic, and reproductive health. Further, the gut microbiome influences the health of the vaginal microbiome through this interplay known as the gut-reproductive axis.

Accumulating evidence links microbial dysbiosis to a spectrum of women-specific conditions, including PCOS, endometriosis, infertility and postmenopausal complications. Adding to the complexity of this is the influence of endocrine disrupting chemicals (EDCs), which further shape the female landscape through the gut-reproductive axis. Whilst exploring the emerging science around the microbial influences on women's health, be empowered with knowledge and research-based tools to enhance health outcomes in your patients.

Attendees will explore new science uncovering mechanisms linking the gut microbiome to PCOS pathophysiology. You'll also understand how the gut-reproductive axis may help or hinder women's health and wellbeing. Learn how to update management of EDCs exposure to support women's health. Expand clinical strategies for managing some of the most resistant and persistent health challenges facing women today.

BIO: Nikki has experience working as a Naturopath and within the complementary therapy industry both overseas and in Australia. Nikki gained clinical experience internationally working with patients afflicted by gut disorders, CIRS, chronic infections and addictions. Having a soft spot for biochemistry balanced by an interest in energetic practices that support emotional wellbeing, Nikki combines both to provide practitioners with comprehensive education.

Prof Anitra Carr

BSc(Hons)(Cant), PhD(Otago)

Beyond scurvy: the requirements and use of oral and intravenous vitamin C in chronic health conditions

BIO: Professor Anitra Carr is Director of the Nutrition in Medicine Research Group in the Department of Pathology and Biomedical Science at the University of Otago, Christchurch (UOC), New Zealand. Following a PhD at UOC, Anitra undertook an American Heart Association Postdoctoral Fellowship at the Linus Pauling Institute, Oregon State University, USA. Whilst there she produced a number of high impact publications on the role of vitamin C in human health and disease which have helped inform international dietary recommendations for vitamin C. Following a return to New Zealand, Anitra began carrying out a translational research program comprising human intervention studies investigating the bioavailability and potential health effects of oral and intravenous vitamin C, including research into the prevention and treatment of acute and chronic diseases such as respiratory infections, cancer and diabetes. Anitra was awarded a 4-year New Zealand Health Research Council Fellowship to investigate the role of vitamin C in severe infections such as pneumonia and sepsis, two major complications of COVID-19. More recently, Anitra has been investigating the requirements for vitamin C in haematological cancers, obesity and type 2 diabetes mellitus. Anitra is considered an international key opinion leader on the role of vitamin C in human health, being involved in the recent updating of the Nordic Nutrition Recommendations, and has been awarded a Gold Medal in recognition of her sustained Research Excellence.

Dr Arun Dhir

Gastrointestinal Surgeon, researcher & author

The Double Whammy: Addressing the challenges of Obesity and Gastro Oesophageal Reflux Disease (GORD)

Gastroesophageal Reflux diseases contribute to a significant burden of medical presentations in general practice. While these disorders may not be life threatening, they certainly carry significant long-term implications. It is well accepted that GORD if untreated can progress to Oesophageal cancer.

How is the rising challenge of obesity in our society contributing to GORD? Is there an association between these two conditions? If yes, then what are the implications of 'reflux' in an obese population? And what should medical practitioners be aware of? With the rising popularity of GLP-1 agonists (Ozempic and Saxenda), we have suddenly discovered that treating obesity is as simple as giving an injection! While this may sound like an overly simplistic view, it cannot overlook the long-term implications of these medications on gut function - Gastroparesis and Delayed Gastric emptying in particular that can mimic GORD. In his talk Dr Arun Dhir, a Gastrointestinal Surgeon, researcher and author presents insights from latest research and from personal anecdotes on the link between obesity and GORD.

BIO: Dr Arun has previously presented at ACNEM on the role of Gut microbiome in obesity and its relevance. His most recent paper on this subject has been accepted for presentation at the American Society of Bariatric and Metabolic Surgery in Las Vegas in June 2023. He's currently involved in a research project jointly with La Trobe University, looking at the changes in the biliary microbiome in individuals with gall stone disease.

Rebecca Edwards

Director of Education

The Role of the Microbiome in Cholesterol Regulation

High cholesterol is a major risk factor for the development of CVD and in Australia, 1 in 3 adults have high levels of LDL and/or total cholesterol. Hypercholesterolaemia is a major health concern, and the risk of atherosclerotic cardiovascular disease is approximately 3 times higher in individuals with severe hypercholesterolaemia. With 20% of those prescribed statins experiencing side effects, and 40-75% discontinuing statin therapy after 1-2 years, additional options to improve the management of cholesterol levels in our patients are needed. In fact, it is estimated that approximately 50% of high-risk CVD patients don't get their cholesterol down to target levels.

Research into the gut microbiota has revealed that gut microorganisms can impact cholesterol metabolism and homeostasis, providing physicians with an additional therapeutic target to help improve cholesterol management in their patients. Join Rebecca Edwards for an exploration into the cholesterol metabolism and excretion pathways impacted upon by the microbial community in the gut. Rebecca will also be discussing specific strains of probiotic microorganisms which have been shown to improve the management of cholesterol, including both LDL and small LDL levels, positively impact the lipoprotein profile (including ApoB), and improve the antioxidant capacity of cholesterol particles.

BIO: Rebecca Edwards, Director of Education at Activated Probiotics (and presenting on behalf of Oborne Health Supplies), is a speaker, writer, educator, and qualified naturopath. She has twenty years of experience educating on all aspects of complementary and integrative health. A passionate and inspiring speaker, Rebecca has lectured to undergraduate students in Australia, the UK, and the US, and delivered naturopathic education to healthcare practitioners around the world.

Rhiannon Hardingham

Naturopath

Endometriosis: A Multifactorial Perspective
Clinically endometriosis is a deeply challenging chronic condition, affecting over 10% of women and all those who menstruate. It is also disproportionally overrepresented in reproductive medicine, affecting 20%-50% of those presenting to fertility clinics in Australia. Conventional medical management fails to fully address underlying causes, meaning that even with surgery and hormone suppression, disease progression and infertility often persist. In many cases, understanding the diverse drivers of the condition is essential for effective long-term clinical management.

This presentation will include an exploration of the multifactorial approach required for functional medicine management of endometriosis and adenomyosis, including the microbiome, immune response, hormones and genetic factors. Rhiannon will take practitioners through the most recent evidence, as well as insights from her significant clinical experience, illustrating the breadth of considerations required for effective patient care in this field.

BIO: Rhiannon is an experienced fertility naturopath, presenter, practitioner educator, mentor and author.

As a practitioner Rhiannon is committed to the successful integration of natural and conventional medicine, regularly working alongside Melbourne's top fertility doctors to achieve the best outcomes for her patients. As testament to this, Rhiannon is routinely invited to present on the topic of collaborative patient care to medical specialists and naturopaths alike.

After almost 20 years clinical experience in the area of reproductive health, Rhiannon provides professional mentoring and education in both group and individual settings. Her education style is approachable yet thorough, attracting practitioners from all areas of functional medicine, as she assists them to best understand hormone, fertility and pregnancy cases through expertise in nuanced pathology interpretation and herbal and nutritional medicine prescription.

Melinda Jackson

Associate Professor

Sleep on it: the relationship between sleep & chronic health conditions

Sleep is one of the three pillars of good health, alongside diet and exercise. In this presentation, Melinda will discuss the bi-directional links between sleep disturbance and chronic health conditions, with a particular focus on brain health. She will also outline key, evidence-based approaches to addressing sleep disorders and their impacts on improving both sleep and mental health outcomes.

BIO: Associate Professor Melinda L. Jackson is an academic and sleep psychologist, and heads the Sleep, Cognition and Mood Laboratory in the School of Psychological Sciences, Monash University. Her research examines the impact of sleep loss and sleep disorders on cognition, mood, and brain health, and explores the impact of different treatment approaches, including cognitive behavioural therapy for insomnia and mindfulness, to address sleep issues in community and cognitive populations.

Dr Douglas Jones

MD, FAAAAI, FACAAI, Director, Global Food Initiative

How to handle the Spectrum of Food Adverse Reactions

1. Understand the broad spectrum of Food Adverse Reactions and the variety of ways food interacts with people and define the terms.
2. Present the evidence behind the various types of testing that is available: what is validated and what is not and when to utilize the tests. Busting the myths.
3. How to integrate and individualise the management approach to patients.
4. What are the evidence-based treatments and what is currently under investigation.
5. What is the role of the microbiome in prevention and treatment of food adverse reactions.

BIO: Founder and director of Rocky Mountain Allergy, Asthma, and Immunology in Utah, and Immunity Group Australia in Sydney. Dr Jones is a cofounder of Global Food Initiative, a company dedicated to furthering food allergy treatment globally. Dr. Jones is also the director of Allergy Microbiome Foundation, a non-profit organization dedicated to advancing the science of integrated prevention and treatment of allergic disorders. He also directs the Covid Long-Hauler's program at Tanner Clinic. After receiving his medical degree from Penn State University College of Medicine in Hershey, Pennsylvania, Dr. Jones completed a residency program in internal medicine and subspecialty fellowship training in allergy, asthma, and immunology at Creighton University Medical Center in Omaha, Nebraska. Dr. Jones is board certified by the American Board of Allergy and Immunology. Dr. Jones is internationally recognized for its innovative food allergy treatment program involving oral immunotherapy and the microbiome. Dr. Jones has published in peer-reviewed journals and is a national and international speaker at medical meetings. He is a Hereditary Angioedema Allies Award Winner and has also earned numerous awards including Most Compassionate Doctor, America's Top Physicians, Patient's Choice Award, and Salt Lake City's Best of Utah's Body and Mind 2022 #1 Allergist.

Dr Brad Leech

PhD, Clinical Nutritionist

Polyphenols and Gut Health: Therapeutic Application

Polyphenols are considered an essential functional food that brings a richness to our diets. While there are thousands of different types of polyphenols, there are four main families of polyphenols with unique chemical structures — flavonoids, lignans, stilbenes and phenolic acids. Understanding the role these polyphenols have in human health has been of great interest to the integrative and functional medicine community. The current research has started to scratch the surface of how polyphenols can influence different body systems, with the link to gut health and the gut microbiome taking centre stage.

Dr Brad Leech will delve into the dynamic interplay between dietary and supplemental polyphenols and their clinical impact on the gut microbiome and gastrointestinal health, shedding light on their potential therapeutic applications. Brad will examine the diverse mechanisms through which polyphenols influence the gut ecosystem and modulate intestinal barrier function, with a focus on their anti-inflammatory, antioxidant, antimicrobial and prebiotic actions. Evidence-based strategies are provided for prescribing polyphenols based on patients' clinical presentations and microbiome assessments. Brad further highlights how intestinal inflammation markers, such as calprotectin, and microbial markers 3-indolepropionic acid (IPA) and trimethylamine (TMA) may be altered with polyphenol prescription. Real-world clinical scenarios where polyphenols may be pivotal in restoring gut health and alleviating gastrointestinal symptoms are shared, along with clinical evidence supporting the benefits of polyphenol-rich diets and supplements.

BIO: Dr Brad Leech is a PhD-qualified Clinical Nutritionist specialising in chronic autoimmune conditions and complex gastrointestinal disorders. After entering the profession in 2008, Brad has taught and developed subjects at leading universities and conducted research on intestinal permeability, autoimmune disease management and food-based probiotics. Brad is the Lead Clinical Educator at Co-Biome by Microba where his expertise in gastrointestinal healthcare enables him to translate the latest science on the gut microbiome into practical clinical applications. In addition to being an Adjunct Fellow at the National Centre for Naturopathic Medicine Brad offers practitioner support through his mentoring program Brad's Brainiacs.

Dr Simone Peters

Psychophysiologist

Disorders of Brain-Gut Interaction (DGBI) & the Utilisation of Gut-Directed Hypnotherapy

Disorders of Gut-Brain Interaction (DGBI) are gastrointestinal conditions characterized by chronic symptoms without identifiable structural abnormalities, where gut-directed hypnotherapy — a specialized form focusing on the gut-brain axis through positive suggestions and metaphor — has been shown to effectively manage symptoms like pain and altered bowel habits, comparable to the low FODMAP diet, and is now widely accessible via digital therapeutics like the Nerva app.

BIO: Dr. Simone Peters is a psychophysiologist specializing in brain-gut therapies for gastrointestinal disorders. She is a pioneer in the development of gut-directed hypnotherapy, showing it as effective as the low FODMAP diet for IBS. Dr. Peters founded the Mind + Gut Clinic in Melbourne and created the digital therapeutic app, Nerva. She completed her PhD with Monash University and is a prolific researcher with the Department of Gastroenterology, Monash University, Alfred Health. Dr Peters has published extensively and is an international invited speaker.

Dr Nick Morgan

Integrative GP

A Therapeutic Order for the Sensitive Patient

Patient X comes in with the works: chronic headaches, IBS, overactive bladder, widespread body pains and fatigue with post exertional malaise. The good diagnostician you are, you quickly flag the relevant micronutrient deficiencies, the gut dysbiosis, the candida overgrowth, the methylation detox SNPs, and clean up the patient's diet.

But nothing seems to shift the needle. In fact, the great detox supplements seem to cause a crash, the anti-Candida treatment causes major IBS flares and setbacks, and the clean diet seems to 'help', but it's becoming increasingly restrictive due to a growing food sensitivities list. Puzzled, but unperturbed, you address vagal nerve toning, trauma physiology with EDMR, counselling and breathing. The patient promises you they're not overly stressed or depressed, but boy are they tired, and it's getting worse. Also, the B vitamins are starting to cause flares, and they're asking you about finer points in mitochondrial chemistry that remind you to read that physiology chapter again.

But no matter the approach, your formulas that SHOULD work, continue to fail, despite diagnosing a myriad of functional disorders: estrogen dominance, Zn:Cu imbalances, heavy metal burdens, SIBO and MARCoNs. The list of helpful or even TOLERATED treatments shortens. With a long list of problems, but no clear first steps, you find yourself apologising to your patient that the bag of tricks is running dry.

Come along to discuss the labyrinth that is complex multi-system inflammatory disease - the epidemic of our time. We'll be discussing a therapeutic order for the sensitive patient, valuable missing diagnostic pieces, and critical early interventions.

BIO: Dr Nick is an Integrative Medical Practitioner committed to the ever-evolving study of environmental drivers to inflammatory illness. After graduating medical school in 2014, he went on to obtain a Diploma of Tropical Medicine & Hygiene in Liverpool, UK in 2018, then a RACGP GP Fellowship. Following this, personal health circumstances motivated him to delve into the multiple imbalances that can ensue in the setting of myalgic encephalomyelitis / chronic fatigue syndrome. Further study in mast cell immunology, chronic infections, gut microbiome, and bioidentical hormones all proved essential in providing the tools necessary to address the chronic inflammatory effects of ME/CFS and other chronic inflammatory illnesses.

Prof Andrew Pipingas

Cognitive Neuroscientist

Ameliorating cognitive decline & reducing dementia risk:
Evidence from nutritional & multidomain lifestyle intervention trials addressing modifiable risk factors

Age-associated cognitive decline can begin in the third decade of life and involves a gradual slowing of speed of response and failing cognitive function, in particular working and episodic memory. While this decline is evident in all individuals, the timing and degree of decline is highly variable and has been attributed to health factors such as nutrition, education and genetics. The presentation will provide an overview of several clinical trials, including our own, investigating the amelioration of age-associated cognitive decline, using specific nutrient interventions such a B-vitamins, omega-3 and plant extracts.

The World Health Organisation and the Lancet Commission on Dementia Prevention, Intervention and Care reports prioritise the need to target known modifiable risk factors including poor diet and physical inactivity to reduce dementia risk. The presentation will also cover findings from recent clinical trials investigating the effects of improving diet quality and other risk factors on cognition in healthy older people. These studies have helped to inform future directions for research including a recently funded Australian randomised controlled trial named MedWalk – "Mediterranean diet and walking intervention to reduce cognitive decline and dementia risk in independently living older Australians." Working towards dementia prevention, it is important to demonstrate in these studies that longer term behavioural change can be achieved and that there is an associated reduction in the rate of age-related cognitive decline.

BIO: Professor Andrew Pipingas is a cognitive neuroscientist. He is Head of Neurocognitive Ageing Research at Swinburne University's Centre for Mental Health and Brain Sciences. His research combines cognitive, brain sciences and psychopharmacology methodologies in the investigation of healthy brain ageing. A key focus is on human clinical trials related to healthy brain ageing and dementia prevention including nutritional, nutraceutical and lifestyle intervention studies.

Prof Sandeep Reddy

MBBS DPH MMgmt MSc MBAcert PhD SFHEA FCHSM FAIDH CHIA CHE ECFMG

The Impact & Implications of Artificial Intelligence (AI) in Healthcare
This presentation will explore the impact and implications of AI in healthcare, beginning with a brief history of AI and significance in the medical field. It delves into diagnostics and imaging, patient education and engagement, precision medicine, chronic disease management, drug discovery and administrative tasks. Real-world examples and case studies highlight the benefits and successful implementations of AI-driven solutions. The future potential of AI in transforming healthcare delivery and patient outcomes is examined, along with the challenges of privacy, data security, ethics, regulatory issues, and system integration. The role of healthcare practitioners is emphasized, underscoring the importance of human oversight, patient education, and collaboration with AI systems. The presentation concludes with a recap of key points and a forward-looking perspective on the evolution of AI in healthcare.

BIO: Professor Sandeep Reddy is an Artificial Intelligence (AI) in healthcare researcher based at Queensland University of Technology, he is also the chairman of the 'Centre for Advancement of Translational AI in Medicine', a not-for-profit institute set up to enable the adoption of AI in healthcare. He also functions as a certified health informatician and is a World Health Organisation recognised digital health expert. He has a medical and healthcare management background and has completed machine learning/health informatics training from various sources. He is currently engaged in research about the safety, quality, and explainability of the application of AI in healthcare delivery, in addition to developing AI models to treat and manage chronic diseases. He has authored several articles and books about the use of AI in Medicine. He has set up local and international forums to promote the use of AI in Healthcare and sat on various international committees focusing on AI in Healthcare.

A/Prof Karin Ried

PhD MSc GDPH Cert Integrative Medicine Research Director

Kyolic Aged Garlic Extract improves Aerobic Fitness in middle-aged Recreational Endurance Athletes

Arterial stiffness is a cardiovascular risk factor, which increases naturally with age. Kyolic-aged-garlic-extract has been shown to reduce arterial stiffness, while normalising blood pressure, cholesterol, and blood stickiness. We hypothesised that increased flexibility of arteries will lead to slower blood flow, increased oxygen uptake, and aerobic fitness. Our 12-week dose-response-trial aimed to assess the effect of Kyolic-aged-garlic-extract on arterial stiffness, lactate threshold, aerobic fitness, recovery, and cardiovascular proteomic biomarkers, in middle-aged endurance athletes with elevated arterial stiffness. A total of 78 middle-aged recreational endurance athletes were randomly allocated to either Kyolic-aged-garlic-extract (2 or 4 capsules/ day containing 1.2-2.4g AGE-powder/1.2-1.4mg S-allylcysteine) or placebo for 12 weeks.

Arterial stiffness was assessed by pulse-wave-velocity (PWV), and aerobic fitness was by Volume-Maximal-Oxygen-Consumption (VO2max), lactate threshold, and muscle fatigue, during high-intensity exercise using a cycle-ergometer-test-station at 12 weeks compared to baseline. Urinary proteomics assessed the concentration of cardiovascular-damaging proteins, biomarkers for risk of cardiovascular events, at 12 weeks compared to baseline.

The garlic group significantly improved their aerobic fitness, evident by increased oxygen-uptake (VO2max, $p=0.07$), more power ($p=0.05$), higher lactate-threshold to oxygen-uptake ($p=0.02$), higher lactate-threshold-to-power-output ($p<0.001$), and quicker recovery ($p=0.05$) than the placebo group. Pulse-Wave-Velocity, a measure for arterial flexibility, tended to improve more in the garlic group compared to placebo. The proteomics analysis found that cardiovascular-damaging peptides decreased in the garlic group, therefore lowering the risk of cardiovascular event such as stroke and heart attacks, while selected proteins had increased in the placebo group at 12 weeks compared to baseline.

Our first-in-human study suggests that Kyolic-aged-garlic-extract significantly improves aerobic fitness, lactate-threshold, arterial stiffness, recovery, and cardiovascular-proteomic-biomarkers in middle-aged endurance athletes in 12 weeks.

BIO: Director of Research at NIIM, with over 20 years' experience in medical research. Karin has a PhD (Human Genetics) & Masters Degree from the University of Heidelberg, Germany. She holds an Honorary Adjunct A/Professor position at Torrens University, VIC & an Honorary A/Professor title at the University of Adelaide, SA. 2022 marked the 10-year anniversary of Research at NIIM. Within this time, A/Prof Ried led several projects in long COVID, chronic fatigue, cancer, cognition, sleep, heart, gut and respiratory health, and published more than 40 articles in peer-reviewed journals.

Prof Avni Sali AM

Founder - NIIM.

MBBS, PhD, FRACS, FACS, FACNEM

HYPERBARIC OXYGEN THERAPY (HBOT)

Prof Sali will present evidence-based indications for the use of Hyperbaric Oxygen Therapy (HBOT). He will outline what HBOT is and discuss its use for various conditions, including brain and cognition, concussion, cancer, fibromyalgia, wound healing, stroke, anti-ageing and other.

There is an exciting growing body of evidence to support the use of HBOT for many conditions. From an integrative medicine perspective, HBOT can be used safely in the treatment of patient care.

The NIIM Clinic utilises the Perry HBOT system which is regarded as the certified world leader in the manufacture, installation and service of hyperbaric oxygen therapy systems for medical application.

Integrative medicine, with its whole person and whole medicine approach can bring together the best that all medicine has to offer.

BIO: Professor Avni Sali AM is recognized as the father of Integrative Medicine in Australia. He founded the Graduate School of Integrative Medicine at Swinburne University in 1996 and established the National Institute of Integrative Medicine (NIIM) in 2009. With past leadership roles in medical boards and associations, including the Australasian Integrative Medicine Association (AIMA), he has been a driving force in advancing Integrative Medicine. Professor Sali is a key figure in the development of the Integrative Medicine Network, overseeing GP training and ethical practices.

He holds several educational and research affiliations, contributing to publications and co-authoring numerous medical books. As a sought-after speaker, he presents at national and international seminars and conferences. Professor Sali actively engages with communities, delivering public health talks. His significant contributions have earned him awards and honours, including the St. Michael's Award and the Australian Humanitarian Award.

With expertise in complex and chronic diseases, particularly cancer, he has inspired a new generation of doctors in the field of Integrative Medicine. Throughout his career, he has tirelessly promoted evidence-based Integrative Medicine, aiming to make it a mainstream medical paradigm. In 2016, he was honoured as a Member of the Order of Australia (AM) for his outstanding service to Integrative Medicine, education, and research.

Dr Janet Schloss

Clinical Research Fellow

A pilot feasibility trial: Medicinal Cannabis as a treatment option for Fibromyalgia.

Fibromyalgia syndrome (FMS) is a complex condition characterised by widespread chronic pain, often combined with fatigue, cognitive dysfunction, sleep disturbances, and other somatic and psychological impairments. FMS has a significant physical and mental impact on patients, decreasing their quality of life and a substantial healthcare system burden. The heterogeneity of FMS risk factors and pathophysiological mechanisms requires individualised disease management strategies, with most having only moderately effective outcomes. We conducted a feasibility study through a double-blind, placebo-controlled trial with a 10:10 (THC:CBD) medicinal cannabis oil. Participants underwent a month of titration, then 12 weeks on a set dose. Bloods were taken at day -28, baseline, week 4, 8 and 12. The feasibility of this study was assessed via study procedures (cross-institutional implementation, recruitment, attrition, compliance, acceptability, tolerability and safety). Secondary outcomes were based on effectiveness of cannabis in reducing pain and other FMS-related symptomology e.g. depression, anxiety, poor sleep, fatigue and quality of life. Bloods were also taken for endocannabinoids and inflammatory cytokines. This talk will discuss the overall outcomes of the trial.

BIO: Dr Janet Schloss is the Clinical Research Fellow at the National Centre for Naturopathic Medicine, Southern Cross University. Janet is an accomplished researcher with extensive experience in coordinating clinical trials and conducting research. In addition to her academic career, Janet is a practicing clinical nutritionist and naturopath with over 23 years' experience. Following the completion of her doctorate in 2015, Janet has focused her research on supporting people who have cancer through studying the use of complementary medicines to assist side effects of cancer treatments. Janet has completed a number of ground-breaking studies, been involved as the chief investigator for over 20 trials and has over 70 publications, and now focuses a lot of her research on medicinal cannabis and supplements to assist chronic diseases.

Dr Ross Walker

Cardiologist

Epigenetics & Lifestyle: You are the master of your genes, not the victim

BIO: Dr Ross Walker is an eminent practising cardiologist with a passion for people and health with 40 years' experience as a clinician. For the past 25 years he has been focusing on preventative cardiology & is one of Australia's leading preventative health experts. A world-renowned keynote speaker, life coach, author of seven best-selling books and a regular health presenter in Australian Media. He had his own national radio show, Healthy Living for 8 years on radio 2UE. Dr Walker broadcasts on 2GB, 3AW, 4BC, 6PR, 2CC & 5AA. Dr Walker runs the Sydney Heart Health Clinic in Lindfield on Sydney's North Shore, that focuses on all aspects of non-invasive & preventative cardiology. Dr Walker is also the Chief Medical Officer for the Access Corporate Group. Dr Walker is on the scientific advisory board of SRW.com, a company developing evidence-based anti-ageing products & the Ambassador for Theronomics. Dr Walker is the Chief Medical Officer for Miyagi Coach, an online coaching service to support health & wellness. He is also the Chief Cardiologist for the Miskawaan Health Group, an integrative health service in Southeast Asia. Dr Walker is a consultant for the Kaneka Corporation. Dr Walker is a consultant for Nathealth, a company that has developed high quality Bergamot products for metabolic health. Dr Walker is the Chairman of the Gut Foundation of Australia. Dr Walker is the patron for Heart Support Australia.

Rochelle Wickramaratchi

Clinical Naturopath & Ayurveda Practitioner

Yoga Nidra & Wellness Session
Rochelle will be providing a Yoga Nidra meditation session. Yoga Nidra is an advanced meditation that is guided by a practitioner (ideally whilst lying down on a yoga mat). The technique guides you to a state of mind between wakefulness and sleep. Following a set of verbal instructions the body is completely relaxed, lightly withdrawing from the 5 senses in order to focus on your inner being. In this state of deep relaxation, mental and physical stress, tension and trapped energies that are obstacles to health, are released. This allows the body's innate ability to accept, resolve and healing to take place.

BIO: Rochelle is a Bachelor of Health Science degree qualified Clinical Naturopath as well as a certified Ayurveda practitioner, yoga teacher and meditation coach of which she has over 15 years of experience spanning Sri Lanka, UK, Japan and Australia. She is the 3rd generation of the Pandith G. P. Wickramarachchi ayurvedic practitioner lineage in Sri Lanka.

Rochelle combines the ancient wisdom of Ayurveda and the knowledge of Naturopathy, with the latest evidence-based research to design an individualised treatment plan for patients. She is a firm believer of not merely treating the obvious signs and symptoms, but also balancing your unique mind-body Doshic constitution and mitigate the root cause of imbalanced health. Rochelle's individualised treatment plans aim to support your body's innate ability to heal and provide lasting health solutions to bring you back to your optimal self.

Peter Webb

Psychologist

How to evaluate psychological well-being
Assessments of mental health such as the K10 and DASS are routinely applied in clinic. But how do you assess the patient's overall well-being? Medical or biological descriptions are necessary but not sufficient. Instead, well-being is a philosophical question about the meaning of a good life.

Professor Carol Ryff created one of the first systematic models of Psychological Well-Being more than 2 decades ago, and her model remains one of the most scientifically verified and empirically rigorous. Find out how to apply and interpret Professor Ryff's PWB-18 questionnaire to evaluate your and your patient's Psychological Well-Being.

BIO: Peter Webb is an experienced psychologist, endorsed by the Australian Health Practitioner Regulation Agency. He has been a member of the Australian Psychological Society for nearly 40 years. During that time, he also trained in naturopathic clinical medicine and conducted successful practices in mind-body therapies over a 15-year period. Peter is also a leadership coach with broad experience working with leaders and top teams in medium to large enterprises and government agencies across the Asia Pacific region for the past 20 years. He is well known for his research and practice in wise decision making, including papers, conference presentations, book chapters, and workshops.

Peter's counselling approach is well-suited to individuals who find themselves facing doubt, or dilemma, or disruption in their personal and professional lives. He draws on a range of successful therapeutic approaches including cognitive behaviour therapy, schema therapy, mindfulness, and neuropsychotherapy.

Dr Christabelle Yeoh

Integrative General Practitioner

The biophysics of mitochondrial heteroplasmy
Mitochondrial heteroplasmy has major implications on health and disease. The clinical picture varies depending on the level of heteroplasmy and the specific tissues affected, such that mitochondrial mechanisms are easily overlooked, since we do not have simple tools to measure them. However mtDNA heteroplasmy is linked to all chronic disease we deal with today- metabolic, neurodevelopmental, neurodegenerative, psychiatric, cancer andautoimmune disease.

In our modern times of extensive and frequent energy deficit, everyone is after more energy. Integrative medicine practitioners are highly aware of macronutrient balancing and micronutrient requirements for mitochondrial medicine and the need to support cellular respiration. The diet and nutrient protocols for these are countless! Many have decent evidence base to them and are often times useful, but which ones should we pick for our patients?

In this talk, we explore mitochondria epigenetics to build a context of energy supply and demand. We dive into the biophysics components that have built our evolutionary systems from the ground up. This discussion will provide you and your patients the basis for the foundation of mitochondrial health and vital force.

BIO:
Dr Christabelle Yeoh has over 2 decades of experience in clinical care, most of which has focused on understanding root causes of chronic disease. She works with her patients to optimise digestive health, microbiome, mitochondria and brain performance. She applies the premise that dysfunctions can be corrected with established practices of nutritional and environmental medicine. Through clinical assessments, you gain a perspective of your gastrointestinal and microbiome function. We then apply specific lifestyle and nutrition advice to positively influence metabolism.

Dr Yeoh has a strong interest in chronic disease management, neurological, gastrointestinal and metabolic health. She is passionate about sharing her in-depth knowledge on the interconnectedness of human metabolism, biology and behaviour. Dr Yeoh dedicates her practice to working with patients with complex chronic conditions, neuro-immune mediated or chronic inflammatory illness. She helps address the chronic conditions that can be related to adverse factors in her patient's lifestyle, nutrition and environment to help optimise their overall function and wellbeing.

Dr Yeoh graduated from medicine at the University of London in 1999 and obtained her membership with the Royal College of Physicians (UK). She has a Masters degree in Nutrition from King's College London. After practicing hospital medicine, she worked as a general physician with an interest in Nutritional and Environmental Medicine. She was a director and past president at the Australasian College of Nutritional and Environmental Medicine (ACNEM) and is active on the teaching faculty.