

ASSC Australian Skin and Skin Cancer
Research Centre



Sun Exposure Summit

15-16 March 2021



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA



QIMR Berghofer
Medical Research Institute

WELCOME

On behalf of the Australian Skin and Skin Cancer Research Centre, I would like to welcome you to this virtual Sun Exposure Summit. As a delegate to the Summit, you will be well aware that the sun has both risks and benefits for health. The risks are well established (skin cancer, premalignant skin lesions, cataract, pterygia) but the benefits are less clear. Generation of vitamin D is an established benefit of sun exposure, but the optimal 25(OH)D for health and the best way to achieve this is controversial. Further, evidence is emerging to suggest benefits of the sun through non-vitamin D pathways. Generating and communicating guidelines that balance the risks and benefits is challenging, and surveys suggest that clinicians and the general public are confused about this.



The Sun Exposure Summit aims to address the questions:

1. Are Australia and New Zealand's current guidelines regarding the risks and benefits of sun exposure optimal for health?
2. How should the message about the risks and benefits of sun exposure be communicated to health practitioners and the public?

I hope you enjoy the interaction and discussion between attendees, and that the resulting discussion will have a positive impact on striking a balance between the risks and benefits of sun exposure in Australia.

Professor Rachel Neale

QIMR Berghofer Medical Research Institute
On behalf of the Sun Exposure Summit Organising Committee

SUN EXPOSURE SUMMIT ORGANISING COMMITTEE



Professor David Whiteman
QIMR Berghofer Medical
Research Institute



Professor Monika Janda
The University of Queensland



Professor Robyn Lucas
Australian National University



Professor Graeme Jones
University of Tasmania



Professor Craig Sinclair
Cancer Council Victoria

PROGRAM

Monday 15 March 2021: Day 1, Open forum

All times are in AEST (QLD)

12:30 - 12:45 Summit welcome Rachel Neale

Session 1: Setting the scene: guidelines, ultraviolet radiation, and skin cancer

Chaired by Graeme Jones

12:45 - 1:10 Current public health guidelines: implementation and understanding Craig Sinclair

1:10 - 1:25 An overview of available guidelines / position statements Christina Verma

1:25 - 1:45 The UVI and its relationship to UV dose Richard McKenzie

1:45 - 2:00 Short tea Break

2:00 - 2:15 Burden of skin cancer in Australia and NZ Catherine Olsen

2:15 - 2:35 Sun exposure dose needed to cause skin cancer: is sunburn a necessary cause? David Whiteman

2:35 - 3:00 Break

Session 2: Clinical and Consumer Perspectives

Chaired by Craig Sinclair

3:00 - 4:00 ***How are the risks and benefits of Sun Exposure currently balanced in practice?***

Adj. Associate Professor David Francis, Australasian College of Dermatologists

Associate Professor Cherie Chiang, Australian and New Zealand Bone & Mineral Society

Dr Solange Green, Skin Cancer Doctor

Associate Professor Jane Smith, Royal Australasian College of General Practice

Isha Sharma, Consumer

Jessica Stafford, Consumer, Melanoma Patients Australia

4:00 - 4:15 Wrap up Day 1

Tuesday 16 March 2021: Day 2, Open forum

All times are in AEST (QLD)

Session 3: Vitamin D and health: fact and fiction

Chaired by *Robyn Lucas*

12:30	- 12:35	Opening Day 2	
12:35	- 12:50	Vitamin D and musculoskeletal health	Graeme Jones
12:50	- 1:05	Vitamin D and other health outcomes in adults	Rachel Neale
1:05	- 1:20	Vitamin D during pregnancy	Rebecca Mason
1:20	- 1:35	Vitamin D and diverse populations	Georgia Paxton
1:35	- 1:50	Vitamin D deficiency in Australia	Eleanor Dunlop
1:50	- 2:05	Break	
2:05	- 2:30	The SACN guidelines: modelling to prevent vitamin D deficiency in the UK	Ann Webb

Session 4: It's not all about vitamin D

Chaired by *Monika Janda*

2:30	- 2:45	Benefits of exposure to UV radiation through non-vitamin D pathways	Robyn Lucas
2:45	- 3:05	Sun exposure and the eyes: harms and benefits	David Mackey
3:05	- 3:25	Daylight exposure and other benefits	Anna Wirz-Justice
3:25	- 3:35	Short break	

Session 5: Panel discussion

Chaired by *David Whiteman*

3:35	- 4:15	<i>Balancing the risks and benefits of sun exposure</i> Adj. Associate Professor David Francis, Australasian College of Dermatologists Adj. Associate Professor Craig Sinclair, Cancer Council Victoria Professor Ann Webb, University of Manchester Professor Rebecca Mason, University of Sydney Associate Professor Georgia Paxton, Royal Children's Hospital, Melbourne	
4:15	- 4:20	Sun Exposure Summit Close	

Professor Rachel Neale

Rachel Neale completed her PhD working within the Nambour Trial of Sunscreen and Beta-Carotene for skin cancer prevention. She has subsequently launched a research program in vitamin D and runs the D-Health Trial, a large randomised trial of vitamin D supplementation in elderly Australians. She was instrumental in the 2018 Sunscreen Summit, which resulted in the change to national sunscreen policy.



Adjunct Associate Professor Craig Sinclair

Adjunct Associate Professor Craig Sinclair is the Head of Prevention at the Cancer Council Victoria where he is responsible for the development and delivery of population-wide cancer prevention and screening programs. He is also Director of the World Health Organisation's (WHO) Collaborative Centre for UV Radiation and co-chair of the World Meteorological Organisation's (WMO) UV and Ozone Scientific Advisory Group. In 2010, the United States Environment Protection Agency (EPA) awarded Craig with an EPA Montreal Protocol Award for his substantial contribution to human health protection.



Christina Verma

Christina graduated with a Masters of Health Policy from the University of Sydney in 2018 and a Bachelor of Medical Science from University of Technology in 2016. Christina has contributed to the planning and coordination of health policy projects, including those related to cancer in state and federal government organisations. Christina is currently a Senior Policy Officer and is undertaking a Master of Philosophy with the University of Queensland to research the effectiveness of digital health interventions in skin cancer prevention.



Emeritus Scientist Richard McKenzie

Dr Richard McKenzie is an atmospheric research scientist with interests in UV radiation, its variability, its environmental impacts, and its interactions with climate change. He has extensive experience measuring and modelling spectral UV irradiance, and measuring trace gases (e.g., ozone) and aerosols that affect UV propagation through the atmosphere. Prior to the inception of NIWA he was DSIR's Lauder site manager, and from 1992 to 2012 he led NIWA's UV radiation research programme (niwa.co.nz/our-services/online-services/uv-ozone). He has authored ~150 papers published in the peer-reviewed literature and has been lead-author in several International Assessments for the WMO and UNEP panels that report back to the parties of the Montreal Protocol on Protection of the Ozone Layer. More recently, his research focus has moved to UV radiation and its effects- both positive and negative – on humans. He works closely with relevant health and environmental agencies in New Zealand and Internationally and has been involved with the use of personal UV dosimeter badges in clinical trials.



Associate Professor Catherine Olsen

Associate Professor Catherine Olsen is a cancer epidemiologist from the Cancer Control Group of the QIMR Berghofer Medical Research Institute in Brisbane. She has research interests in the causes and prevention of cancer particularly skin cancer. Current research activities encompass modifiable lifestyle risk factors and environmental exposures in disease aetiology as well as risk prediction for melanoma and keratinocyte cancer. She currently co-leads a large prospective cohort of over 43,000 Queensland residents established in 2011 with the aim of defining the role of environmental and host/genetic factors in the development of melanoma and other cancers of the skin.



Professor David Whiteman

Professor David Whiteman is a medical epidemiologist with a special interest in the causes, control and prevention of cancer. Professor Whiteman has an international reputation for research into melanoma and skin cancer, and the public health aspects of cancer control. He is Principal Investigator of QSKIN, a large prospective cohort study which has gathered clinical, phenotypic and genetic data on more than 45,000 people to unravel the causes of skin cancer. In addition to his research activities, he is Deputy Director of QIMR Berghofer, a Fellow of the Australian Academy of Health and Medical Sciences, a Fellow of the Australasian Faculty of Public Health Medicine, and Honorary Fellow of the Skin Cancer College of Australasia.



Professor David Mackey

Professor Mackey was appointed Managing Director of the LEI and Professor of Ophthalmology/Director of the Centre for Ophthalmology and Visual Science at UWA in March 2009. Professor Mackey has achieved international recognition as a genetic ophthalmologist/scientist. His original research over more than 25 years into the genetics of glaucoma and in the fields of optic atrophy and congenital cataract has received continued research funding support. Dr Mackey announced that he was stepping down from the role of Managing Director of the LEI in late 2018 to focus on several major research projects.



Professor Graeme Jones

Graeme Jones is currently Professor of Rheumatology and Epidemiology and Head of the Musculoskeletal Unit at the Menzies Research Institute. He is also in private practice in Hobart for 50% of his working week. He has received grants from competitive and non-competitive sources totaling over \$22 million dollars and has published >430 articles primarily on osteoporosis and osteoarthritis. He was Tasmanian scientist of the year in 2013 and was awarded the University of Tasmania research medal in 2014.



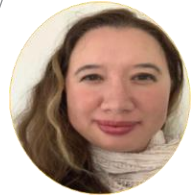
Professor Rebecca Mason

Rebecca Mason is a medical graduate with research interests in vitamin D, bone, and sun damage in skin. She was a member of two Technical Committees of the Commission Internationale de L'Eclairage on Sunlight, Health and Vitamin D and contributed to the "Risks and Benefits of Sun Exposure" documents from the Cancer Councils of Australia. Prof Mason led the working group which developed the most recent consensus Australian and New Zealand position statement on vitamin D in adults and contributed to the position statement on vitamin D issues in pregnant women, children and adolescents. She served on the Editorial Boards of Journal of Bone and Mineral Research and Endocrinology.



Eleanor Dunlop

Eleanor Dunlop is a dietitian and final-year PhD student, focusing on food composition and nutrient intake research. She currently works on two NHMRC-funded projects, led by Dr Lucinda Black, that aim to investigate dietary vitamin D in the general Australian population and Australian Aboriginal and Torres Strait Islander people. The Australian population project forms part of Eleanor's current PhD work, which will provide Australia's first comprehensive vitamin D food composition database, the first accurate estimates of usual vitamin D intakes in the Australian and models of potential vitamin D food fortification strategies to improve vitamin D status in the Australian population.



Associate Professor Georgia Paxton

Georgie Paxton is a general paediatrician who has worked in refugee health since 2005 and led the Royal Children's Hospital Immigrant Health Service since 2007. Georgie is involved in guideline and policy development in refugee health at local, state and national level. Her research interests include the health status of refugee and asylum seeker children and young people. She was Chair of the Victorian Refugee Health Network over 2013-2015 and has previously held advisory roles with the Department of Home Affairs. In 2016, she was inducted to the Victorian Honour Roll for Women for her work in refugee health, and in 2019 she received an OAM for service to community health and to refugees.



Professor Robyn Lucas

Professor Robyn Lucas is an epidemiologist and public health physician. She is head of the National Centre for Epidemiology and Population Health at the Australian National University. Lucas led the Global Burden of Disease due to Ultraviolet Radiation study, and has been an author and lead author for the United Nations Environment Program Environmental Effects Assessment Panel reports, since 2006. Her research has focused on the risks and benefits of sun exposure, particularly involving autoimmune diseases such as multiple sclerosis, and the implications for sun exposure/protection messaging. She is increasingly involved in also considering the potential effects of climate change on the balance of risks and benefits of sun exposure.



Professor Ann Webb

Ann Webb graduated from Reading University with a BSc in Physics and Meteorology, then gained a PhD in Environmental Physics from Nottingham University and, later, a DSc from University of Manchester Institute of Science and Technology (UMIST). She spent 3 years as a researcher in a medical environment in USA, applying her knowledge of sunlight to understanding its effects on human health. She returned to the UK, Reading University and work with a more atmospheric focus before joining UMIST as a lecturer in Physics, and then moving into the School of Earth and Environmental Sciences at University of Manchester. There she is a Professor in the Centre for Atmospheric Sciences and until recently Associate Dean for Graduate Education. Her research work remains at the interface between disciplines with radiation measurement, particularly at UV wavelengths, and (sun)light as a central theme. A topical interest in which she specialises is vitamin D synthesis by the skin after exposure to (solar) UV radiation, while other work explores, for example, the scattering of radiation by ice crystals. The multidisciplinary nature of Ann's work is also apparent in the external positions she holds. In addition to several previous and current roles at the World Meteorological Organisation, she is a Past President of CIE (Commission Internationale de l'Éclairage), and a commissioner of the International Radiation Commission.



Emeritus Professor Anna Wirz-Justice

Anna Wirz-Justice is emeritus Professor and Research Fellow at the Centre for Chronobiology, Psychiatric Hospital of the University of Basel. Born in Christchurch, NZ she received a PhD in Organic Chemistry from University College London. Anna initially worked on circadian rhythms in animals and the effects of psychiatric medications on neurotransmitter receptor and rest-activity rhythms. During a fellowship at the U.S. National Institute of Mental Health, she and Thomas Wehr, MD carried out the first sleep phase advance experiment in a bipolar patient. Anna introduced light therapy to Europe, followed up with more than 20 years of research on seasonal affective disorder and light therapy.



Anna is a former president of the Society for Light Treatment and Biological Rhythms. A prestigious Anna-Monika-Prize with Thomas Wehr recognised their seminal work in the chronobiology of depressive illness. In 2002, she received the Scholar's Prize of the City of Basel, awarded for outstanding scientific career achievement. She has also worked with artists, architects and designers who are inspired by the complexities of neuroscience. Collaborations include Phillippe Rahm's "Light Room" at the Swiss Pavillion in the 2002 Venice Biennale, and light installations by Andreas Horlitz using chronobiological images. Her work has inspired the incorporation of novel lighting regimens in architecture to improve sleep, mood and cognition in Alzheimer's patients. Anna is director of CET's Chronotherapeutics Consultants, formed in 2004 to advise hospital psychiatrists on the implementation of light and wake therapies as adjuncts to drug treatment of major depression. Most recently, she led a team including Francesco Benedetti and Michael Terman to the field's first treatment manual for clinicians, Chronotherapeutics for Affective Disorders.

Professor Joanne Aitken

Joanne Aitken has led a program of research in population-based cancer epidemiology over the last 14 years that has focussed on improving diagnosis and early detection of melanoma, cancer outcomes and survival. She began the world's only randomised trial of the effectiveness of a population skin screening program for melanoma and provided the first evidence that whole-body skin cancer screening significantly reduces the risk of developing thick melanoma. She is Head of Research at Cancer Council Queensland with Honorary and Adjunct appointments at University of Queensland, QUT, and the Menzies Health Institute Queensland. She is Director of Australian Childhood Cancer Registry and President-Elect of the International Association of Cancer Registries.



ABOUT

ASSC Australian Skin and Skin Cancer
Research Centre

The Australian Skin and Skin Cancer Research Centre (ASSC) was established in 2016 by The University of Queensland and QIMR Berghofer Medical Research Institute in acknowledgment of the internationally recognised talent in skin and skin cancer research in Brisbane.

The ASSC drives skin and skin cancer research by attracting talented local and international researchers to The University of Queensland and the QIMR Berghofer Medical Research Institute. The ASSC was the convener for the Sunscreen Summit in March 2018, which achieved revisions to sunscreen policy in Australia and New Zealand, and the Melanoma Screening Summit, in 2019.

Our Vision

To reduce suffering from skin diseases through the application of research

Objectives

Collaborate: Further develop links between skin researchers at UQ and QIMR Berghofer in collaboration with other researchers in Queensland, Australia and globally, to undertake fundamental, translational, and clinical research.

Fund: Attract competitive national and international funding streams and increase alternative funding models (public and private health sectors, industry, philanthropy and corporate partnerships).

Commercialise: Foster and expand existing industry collaborations, attract new industry partners and launch entrepreneurial activities.

Translate: Introduce and develop new preventative strategies, and novel diagnostics, treatments and health delivery models for skin diseases to improve patient outcomes.

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