

THE **SCHOOL OF MEDICINE** AND **DERMATOLOGY RESEARCH CENTRE**  
WELCOME YOU TO:

# THE 2<sup>nd</sup> ANNUAL ALAN COOPER **EPIDERM LECTURE**

## **Paraneoplastic Syndromes**

presented by

**Professor Mark Pittelkow**

MD

*Professor and Chair, Department of Dermatology,  
Mayo Clinic Arizona, Mayo College of Medicine*

*Professor of Biochemistry and Molecular Biology,  
Mayo Graduate School of Medicine  
Phoenix, Arizona*

**Friday 19 August 2016**

Auditorium, Translational Research Institute (TRI)

## PROGRAM

The Alan Cooper Epiderm Lecture has been established in recognition of Epiderm's generous support of UQ's dermatology and skin cancer research programs. Epiderm, formerly the Australian Dermatology Research and Education Foundation, was established in 1992 following Australia's successful bid to host the International League of Dermatological Societies World Congress of Dermatology meeting in Sydney in 1997. The World Congress was led by Professor Alan Cooper and Professor Robin Marks and generated a significant financial surplus representing the majority of the Foundation's initial funding.

Professor Alan Cooper, a driving force behind academic Dermatology in Australia, played a lead role on the board of Epiderm. Over a 22 year period, Epiderm funded many dermatological projects within Australia. From 2007-2014, Epiderm donated over \$2.8 million in support of the dermatology and skin cancer research within the Dermatology Research Centre under the direction of Professor H. Peter Soyer. Epiderm's capstone donation of \$2.05 million in 2014, prior to the Foundation's disestablishment, leveraged over \$3.5 million in additional support for UQ's dermatology and skin cancer research programs.

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6:00pm-6:45pm	Registration Canapes & refreshments in the Atrium
7:00pm-7:05pm	Opening remarks <b>Professor H. Peter Soyer</b> <i>Chair in Dermatology Director, Dermatological Research Centre Deputy Head, School of Medicine, UQ</i>
7:05pm-7:10pm	Welcome Address <b>Professor Anton Middelberg</b> <i>Pro Vice-Chancellor (Research and International), UQ</i>
7:10pm-7:30pm	The Australian Skin and Skin Cancer (ASSC) Research Centre Announcement of ASSC Enabling Grants recipients <b>Professor H. Peter Soyer and Professor David Whiteman</b>
7:30pm-7:35pm	Introduction of Speaker <b>Professor Alan Cooper</b> <i>Head, Department of Dermatology, Royal North Shore Hospital, St Leonards, NSW</i>
7:35pm-8:15pm	Alan Cooper Epiderm Lecture - Paraneoplastic Syndromes <b>Professor Mark Pittelkow</b> <i>Mayo Clinic, Phoenix, Arizona, USA</i>
8:15pm-8:25pm	Discussion and questions
8:25pm-8:30pm	Concluding Address <b>Professor H. Peter Soyer</b>
8:30pm-9:00pm	Tea & Coffee served in the Atrium

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## THE 2<sup>ND</sup> ANNUAL ALAN COOPER EPIDERM LECTURE

### Paraneoplastic Syndromes

Paraneoplastic syndromes of the nervous system are a group of rare disorders that develop in some people who have cancer. It is a rare, severe blistering condition of the mucosal surfaces and skin associated with an underlying cancer. The cancer is thought to trigger paraneoplastic pemphigus but the mechanism is not known. The cancer releases antibodies to particular proteins found in many tissue surfaces which result in the inflammation and blistering. There is a genetic susceptibility in some individuals. Cancer is associated with all cases of paraneoplastic pemphigus. In two thirds of these, the cancer

is present at the time of diagnosis and the remainder will be identified after diagnosis. Paraneoplastic syndrome has a very high mortality rate (75-90%) due to septicaemia, multi-organ failure, respiratory failure (including bronchiolitis obliterans and obstructive lung disease), gastrointestinal bleeding, the cancer itself or complications of the cancer therapies at the same time as immunosuppression. Typically those affected with paraneoplastic pemphigus succumb from disease 1 month to 2 years post diagnosis.



### Professor Mark R. Pittelkow

MD

*Professor and Chair, Department of Dermatology,  
Mayo Clinic Arizona, Mayo College of Medicine  
Professor of Biochemistry and Molecular Biology,  
Mayo Graduate School of Medicine  
Phoenix, Arizona*

Professor Mark Pittelkow is Professor and Chair of Dermatology, Mayo Clinic Arizona. Professor Pittelkow's current areas of research include control of keratinocyte growth and differentiation, gene profiling, and growth factor expression and function in epidermis and skin. He has also focused on translational dermatology and understanding the mechanisms underlying a variety of skin diseases, including autoimmune blistering diseases and chronic, idiopathic papulosquamous dermatoses such as lichen planus and pityriasis rubra pilaris as well as granulomatous diseases, including granuloma annulare and necrobiosis lipoidica.

His scientific contributions have included the discovery of autocrine and paracrine regulation of growth and differentiation of epidermal keratinocytes and other epithelial cells by the transforming growth factors, both transforming

growth factor alpha and transforming growth factor beta (TGF- $\alpha$  and TGF- $\beta$ ) as well as discovery, characterization and regulation of keratinocyte autocrine factor (KAF)/amphiregulin (AREG). His research also pioneered the early development and clinical application of cultured epidermal autografts for severe burn injury and other chronic wounds and skin diseases.

Professor Pittelkow has published extensively in the academic literature with over 350 peer-reviewed scientific articles to date, more than 22000 cumulative citations and a Hirsch index of 78 (Google Scholar). He has been a reviewer for Nature, Science, Cell, the New England Journal of Medicine, the Mayo Clinic Proceedings, Journal of Clinical Investigation and has served on various editorial boards, including the Journal of Investigative Dermatology.

## ABOUT THE UQ SCHOOL OF MEDICINE DERMATOLOGY RESEARCH CENTRE

The Dermatology Research Centre was established in 2007 as a joint initiative of The University of Queensland and the Queensland Skin and Cancer Foundation to represent Queensland's first research unit led by a specialist dermatologist. Since its inception, the Centre has grown at a rapid pace and has established a global reputation in clinical-molecular diagnosis of early melanomas utilising novel imaging techniques, next-generation sequencing technology and micromedical device development. The Centre currently consists of four cooperative clinical/laboratory research groups studying skin and skin cancer, utilising the world-class research infrastructure at the Translational Research Institute located within the Princess Alexandra Hospital Precinct.

### Our Team



**Professor H. Peter Soyer** is the inaugural UQ Chair in Dermatology and Director of the Dermatology Research Centre. Professor Soyer is a world-renowned academic dermatologist from Austria and is a pioneer of dermoscopy for the early diagnosis of melanoma and teledermatology. His research group's main focus is clinico-pathologic-molecular-characterisation of melanocytic and keratinocytic skin cancer and its precursor lesions. He was recently awarded an Australian Government NHMRC grant for the Centre of Research Excellence for the Study of Naevi. For more information: <https://naevi.centre.uq.edu.au/>



**Associate Professor Tarl Prow**, the Centre's Deputy Director, earned his PhD in 2004 from the University of Texas in the field of Nanomedicine. He joined the Centre in 2011 and is a multidisciplinary researcher with internationally recognised expertise in the fields of micromedical device development, nanodermatology and imaging. His research group focuses on topical drug delivery platform development, skin micro-sampling for research/diagnostics, and skin imaging and automated analysis.



**Associate Professor Helmut Schaidler** established his research team at the Centre in 2013. He is an academic dermatologist from Austria and previously headed the Cancer Biology Unit, Department of Dermatology, at the Medical University of Graz. His main research interests relate to all aspects of melanoma biology with an emphasis on elucidating mechanisms of drug resistance, melanoma progression and new treatment options.



**Associate Professor Rick Sturm** is a molecular geneticist by training, who joined the Centre in 2014 after numerous years of collaboration. He is one of the world's leading authorities on human pigmentation genetics, with a particular interest in assessment of the phenotypic association of physical traits including skin, hair, eye colour, skin UV-sensitivity, freckling and naevi formation with skin cancer. In addition he is studying the development and differentiation of the melanocytic cell lineage, naevocyte cell growth, and the interaction, and communication of melanocytes with keratinocytes.

One of the leading skin and skin cancer research centres in Australia and globally, an accomplished team of forty researchers underpin the Dermatology Research Centre's innovative research, which is aimed at improving patient outcomes through clinical translation.