MONDAY 18TH APRIL - DAY 1

15.00        REGISTRATION OPENS

17.00 – 17.15 CONFERENCE OPENING AND WELCOME

**Birgit LANE**
Executive Director (Scientific), Skin Research Institute of Singapore
Executive Director, Institute of Medical Biology, A*STAR

**Roy CHAN**
Executive Director (Clinical), Skin Research Institute of Singapore
Senior Consultant, National Skin Centre

17.15 – 18.15 THE HOWARD GREEN MEMORIAL LECTURE

17.15 – 17.25 **Yann BARRANDON**, Institute of Medical Biology, Singapore
and EPFL, Switzerland
*A Tribute to Howard Green*

17.25 – 18.15 **Philip JONES**, The Wellcome Trust Sanger Institute, UK
*How oncogenes alter epidermal stem cell behaviour*

18.15 – 21.00 CONFERENCE RECEPTION

@ PEPERONI, BIOPOLIS
TUESDAY 19TH APRIL - DAY 2

08.30 – 18.00 REGISTRATION

09.00 – 12.30 THE SKIN CONTINUUM

Chair: Birgit LANE

09.00 – 09.30 Kathy GREEN, Northwestern University, Chicago, USA
Desmosomes: Signalling Scaffolds in differentiation and disease

09.30 – 10.00 Carien NIESSEN, University of Köln, Cologne, Germany
Adhesion and signalling dependent regulation of tissue polarization and epidermal barrier function

10.00 – 10.15 Claire HIGGINS, Imperial College, London, UK
Mysteries of dermal papilla cells in vitro

10.15 – 10.30 Audrey WANG, Institute of Medical Biology, Singapore
Loss of lamin B1: a novel marker for ultraviolet-induced cellular senescence

10.30 – 11.00 Morning coffee/tea break

11.00 – 11.30 Daisuke NANBA, Tokyo Medical and Dental University, Japan
Kinetic analysis and modelling for understanding human keratinocyte behaviour in epidermal sheet formation

11.30 – 12.00 Jens TITZE, Vanderbilt University, Nashville, USA
Fluid, electrolyte, and blood pressure regulation in the skin

12.00 – 12.30 Kevin MILLS, Procter & Gamble, Cincinnati, USA
Molecular profiling in health and disease: utility in discovery of agents to improve skin condition

12.30 – 14.00 Buffet lunch
Poster Session I
TUESDAY 19TH APRIL - DAY 2

14.00 – 17.30 INFLAMMATION AND IMMUNITY
Chair: Florent GINHOUX

14.00 – 14.30 Muzlifah HANIFFA, Newcastle University Medical School, UK
Functional heterogeneity of human mononuclear phagocytes in health and disease

14.30 – 15.00 Jean DAVOUST, INSERM, France
Intravital Imaging of Epidermal Langerhans Cells, Mast Cells and Regulatory T Cells in Skin Inflammation

15.00 – 15.15 Franklin ZHONG, Institute of Medical Biology, Singapore
Germline NLRP1 mutations cause an inherited skin cancer syndrome via spontaneous inflammasome activation

15.15 – 15.35 Rebecca MORRIS, University of Minnesota, USA
Evidence for reciprocal interaction between bone marrow and cutaneous epithelial cells

15.35 – 16.00 Afternoon coffee/tea break

16.00 – 16.30 Laura MACKAY, University of Melbourne, Australia
Generation of epithelial resident memory T cells

16.30 – 17.00 Keisuke (Chris) NAGAO, National Cancer Institute, USA
Regulation of skin immunity by the hair follicles

17.00 – 17.20 Ambika KURBET, Institute for Stem Cell Biology and Regenerative Medicine, India
ECM degradation in integrin β1 KO embryonic skin is triggered by a integrin β6-TGFβ-TNC mediated inflammatory response

17.20 – 17.35 Hari BALAJI, Duke-NUS Medical School, Singapore
The interface between the skin microenvironment and systemic immunity shapes the inflammatory Immunome in Systemic Sclerosis: a multidimensional, high throughput analysis

End of Day 2
09.00 – 12.30  SKIN INTEGRITY AND REPAIR

Chair: Zee UPTON

09.00 – 09.30  Allison COWIN, University of South Australia, Adelaide, Australia  
*Development of an antibody-based therapy for the treatment of fragile skin*

09.30 – 09.45  Daniel BROSZCZAK, Queensland University of Technology, Brisbane, Australia  
*Proteome-scale quantification of wound fluid for the investigation of skin injury, repair processes, and biomarker discovery*

09.45 – 10.00  Roopa SUBBAIAIH, Nanyang Technological University, Singapore  
*Analysis of acute wound fluid peptides reveals unique immune and host defense signatures*

10.00 – 10.30  Paul MARTIN, LKC Medicine, Nanyang Technological University, Singapore, and University of Bristol, UK  
*Live imaging of inflammation in wound healing and cancer*

10.30 – 11.00  Morning coffee/tea break

11.00 – 11.15  Leila CUTTLE, Queensland University of Technology, Australia  
*Burn wound silver dressing cytotoxicity: comparative studies in vitro, ex vivo and in vivo*

11.15 – 11.30  Vincent RONFARD, University of North Texas Health Science Center, Fort Worth, USA  
*Road map for the development of bioengineered skin constructs: lessons from the past and current situation*

11.30 – 12.00  Kiarash KHOSROTEHRANI, University of Queensland, Australia  
*Skin wound healing and inflammation: a genome wide perspective*

12.00 – 12.30  Benjamin TEE, Institute of Materials Research and Engineering, Singapore  
*Electronic sensor skins for health and biomedical applications*

12.30 – 14.00  Buffet lunch  
*Poster Session II*
THE SKIN-ENVIRONMENT INTERFACE

14.00 – 14.30 Tom DAWSON, Institute of Medical Biology, Singapore
The skin microbiome - penetrating the surface

14.30 – 15.00 Heidi KONG, National Cancer Institute, Bethesda, USA
Investigating the microbiome in healthy and eczematous skin

15.00 – 15.15 John COMMON, Institute of Medical Biology, Singapore
Whole metagenome profiling reveals distinct population and functional differences in skin microbiomes of individuals predisposed to atopic dermatitis

15.15 – 15.30 Paola DE SESSIONS, Genome Institute of Singapore, Singapore
MRSA in Singapore, genomics that is more than skin deep

15.30 – 16.00 Afternoon coffee/tea break

16.00 – 16.30 David Turdil, Bacteriophages antimicrobial

16.30 – 16.45 Hao LI, Molecular Engineering Laboratory, Singapore
Identification and characterization of novel microbial secreted proteases in human skin disease pathogenesis

16.45 – 17.15 Olaf RÖTZSCHKE, Singapore Immunology Network, Singapore
Dissection of allergic reactions in a tropical-urban environment saturated with house dust mite allergens

17.15 – 17.30 Mariena VAN DER PLAS, Lund University, Sweden
Pseudomonas aeruginosa evades immune responses by mimicking the endogenous formation of host defence peptides from thrombin

End of Day 3

18.00 – 21.00 CONFERENCE DINNER
@HALIA, BOTANICAL GARDENS
THURSDAY 21\textsuperscript{TH} APRIL - DAY 4

09.00 – 12.30 STEM CELLS, PLASTICITY & DIFFERENTIATION

Chair: Xinhong LIM

09.00 – 09.30 Sung-Jan (Jerry) LIN, National Taiwan University, Taiwan
\textit{Conversion of fibroblasts into hair follicle-forming cells by extracellular proteins in vivo}

09.30 – 10.00 Ting CHEN, National Institute of Biological Sciences, China
\textit{Origin of functional niche and stem cells in hair follicle}

10.00 – 10.15 Xinhong LIM, Institute of Medical Biology, Singapore
\textit{Axin2 marks quiescent hair follicle bulge stem cells that are maintained by autocrine Wnt/b-catenin signaling}

10.15 – 10.30 Kenneth LAY, The Rockefeller University, New York, USA
\textit{Foxc1 governs hair follicle stem cell quiescence and niche maintenance to preserve long-term tissue-regenerating potential}

10.30 – 11.00 Morning coffee/tea break

11.00 – 11.30 Sarah MILLAR, University of Pennsylvania, Philadelphia, USA
\textit{Histone deacetylases coordinate epidermal development, differentiation and regeneration}

11.30 – 11.45 Carlos CLAVEL, Institute of Medical Biology, Singapore
\textit{BMP signalling in the hair follicle stem cell niche regulates hair growth and skin pigmentation}

11.45 – 12.00 Etienne WANG, Columbia University, New York, USA
\textit{Oncostatin M is upstream of Jak-Stat signalling during the murine hair cycle}

12.00 – 12.30 Pantelis ROMPOLAS, University of Pennsylvania, USA
\textit{Spatiotemporal mechanism of epidermal differentiation}

12.40 – 13.30 LUNCH DISCUSSION supported by Procter & Gamble
The Effect of Urban Living on Skin

12.40 – 13.00 John OBLONG, The Procter & Gamble Company, Cincinnati, USA
\textit{Clinically measured differences in skin metrics between urban and rural residents in Beijing, China}

13.00 – 13.50 Discussion with panel from Industry, Academia and the Media
THURSDAY 21\textsuperscript{TH} APRIL - DAY 4

14.00 – 17.00  **SKIN CANCER**

Chair: David LANE

14.00 – 14.30  David LANE, p53 Laboratory, Singapore
*The expression of the mutant and wild type p53 protein in epithelia*

14.30 – 15.00  Andrew SOUTH, Thomas Jefferson University, Philadelphia, USA
*The genetic landscape of keratinocyte skin cancers – does mutation matter?*

15.00 – 15.15  Helmut SCHAIDER, University of Queensland, Brisbane, Australia
*Notch4 mediated mesenchymal-epithelial transition facilitates tumour suppression in melanoma*

15.15 – 15.30  Kimberley BEAUMONT, Centenary Institute, Sydney, Australia
*Cell cycle phase-specific drug resistance as an escape mechanism of melanoma cells*

15.30 – 16.00  *Afternoon coffee/tea break*

16.00 – 16.15  Minhee KIM, University of New South Wales, Sydney, Australia
*Squamous cell carcinoma complicating recessive dystrophic epidermolysis bullosa in Australia and New Zealand: Experience from Australasian EB Registry*

16.15 – 16.30  Ildiko SZEVERENYI, Institute of Medical Biology, Singapore
*A multi-pronged approach to understanding self-healing skin cancer*

16.30 – 17.00  Ervin EPSTEIN, Children's Hospital Oakland Research Institute, San Francisco, USA
*Anti-cancer effects of ultraviolet radiation on the skin and mammary gland*

17.00  **ANNOUNCEMENT OF PRIZEWINNERS AND PRIZE AWARDS**

17.30  **CLOSE OF CONFERENCE**

18.00 – 21.00  **BUFFET DINNER**

@ IMMUNOS BUILDING, LIVE STATIONS