

CRC 829 virtual symposium November 28-30

Molecular mechanisms regulation skin homeostasis: insights from the skin and beyond

Projects 15 minute talks with 5 minute discussion, external speakers 30 minute talk with 5 minute discussion. Keynote 40 with 5 minute discussion

All times are CET

Sunday 28

Celebrating the end of 12 years and 3 months CRC 829: "Highlights in skin research and beyond"

16:00-16:15 Looking back and ahead. Thomas and Carien

16:15-17:15 CRC Advisory board member talks: own and general break throughs in their field.

16:15-16:45 **Sabine Werner (Zürich)**

16:45-17:15 **Dennis Roop (Denver, 08:45-09:15 am USA local Speaker time)**

17:15-18:00 Why Cologne and CRC 829 for a Humboldt sabbatical here?

17:15-17:30 **Doina Tumber (Ithaca NY, 11:15-11:30 am USA local Speaker time)**

17:30-17:45 **Vivek Malhotra (Barcelona)**

17:45-18:00 **Kathleen Green (Chicago, 10:45-11:00 am USA local Speaker time)**

18:00-18:10 Conclusions celebration session

Monday November 29

8:55-9:00 **Carien Niessen**

Opening remarks

Skin inflammation and Immunity

Chair: Sabine Eming

9:00-9:35 **Kenji Kabashima (Kyoto/Singapore, 17:00-17:30 pm Japan local Speaker time)**

Visualization of Skin Inflammation and Resulting Immunologic Novel Concepts

9:35-9:55 **Sebastian Willenborg (B7, Eming)**

Functions of the inflammatory response during tissue repair

9:55-10:15 **Mario Fabri (B13)**

Vitamin D regulation of the skin innate immune response

10:15-10:50 **Markus Rugg (Basel)**

Mechanistic insights into the loss of muscle mass and function at high age

10:50-11:15 COFFEE BREAK

Regulation of Skin mechanics

Chair: Thomas Krieg

11:15-11:35 **Matthias Rübsam (A1, Niessen)**

Regulation of epidermal morphogenesis and barrier function by intercellular junctions

11:35-11:55 **Sara Wickström (A11)**

Regulation of epidermal stratification and homeostasis through contractility and density sensing

11:55-12:30 **Kevin Chalut (Cambridge 10:55-11:30 am UK local Speaker time)**

12:30-12:50 **Beate Eckes (B3 Eckes/Krieg)**

Role of collagen-binding integrin receptors for cellular communication and homeostasis in the skin

12:50-14:00 LUNCH BREAK

Skin stress responses and aging

Chair: Mario Fabri

- 14:00-14:20 **Carien Niessen (A5, Brüning/Niessen)**
Metabolic control of skin morphogenesis, barrier function and development of diabetes associated skin complications.
- 14:20-14:40 **Björn Schumacher (A7)**
UV-induced DNA damage in photoaging and skin homeostasis.
- 14:40-15:00 **Sandra Iden (A10)**
Mammalian polarity proteins in skin homeostasis and disease
- 15:00-15:20 **Jan Hoeijmakers (B15)**
The Role of DNA damage and Repair in Skin Aging.
- 15:20-15:55 **Ramon Klein Geltink (Vancouver, 06:20-06:55 am Canada local Speaker time)**
Metabolic conditioning of a tumour-killing T cell army

15:55-16:15 COFFEE BREAK

Keynote

Chair: Carien Niessen

- 16:15-17:00 **Elaine Fuchs (New York, 10:15-11:00 am USA local Speaker time)**
Skin Stem Cells: Experience and Remembrance

Skin cancer

Chair: Cornelia Mauch

- 17:00-17:20 **Rudolf Wiesner (A14)**
Maintenance of mitochondrial integrity in epidermal stem cells.
- 17:20-17:40 **Paola Zigrino (B4, Zigrino/Mauch)**
Role of MMP-14 in connective tissue homeostasis and tumour invasion.
- 17:40-18:15 **Anthony Oro (Stanford, 08:40-09:15 local Speaker time)**
TBA

Tuesday November 30

Skin ECM and regeneration

Chair: Matthias Hammerschmidt

- 9:00-9:20 **Temitope Esho (B2, Paulsson/Wagener)**
Structure and function of microfibrillar and filamentous suprastructures in the dermis
- 9:20-9:40 **Gerhard Sengle (B12)**
Extracellular fibrillin microfibrils as multifunctional scaffolds integrating growth factor signalling in the skin
- 9:40-10:00 **Julia Hatzold (A9 Hammerschmidt)**
Genetic analysis of epidermal development and homeostasis in zebrafish
- 10:00-10:35 **Jody Rosenblatt (London, 09:00-9:35, UK local Speaker time)**
Asthma: putting the squeeze on airway epithelia
- 10:35-10:55 **Ulrich Baumann (B11 Baumann/Sengle)**
Structure-Function Relationships of Hsp47/SerpinH1 and its Role in Skin Fibrosis.
- 10:55-11:15 COFFEE BREAK**

Epidermal stem cells

Chair: Sandra Iden

- 11:15-11:35 **Hisham Bazzi (A12)**
Centrosomes in mammalian skin epithelial cell fate decisions

- 11:35-12:10 **Renata Basto (Paris)**
When double brings trouble – the importance of scaling in S-phase components
- 12:10-12:30 **Rizwan Rehim (A13 Rada Iglesias)**
Identification and characterization of major stem cell identity regulators within the epidermis
- 12:30-12:50 **Martin Denzel (B14)**
Protein quality control and ECM composition: Role of the hexosamine pathway in skin homeostasis
- 12:50-13:10 **Catherin Niemann (A3)**
Hedgehog-Gli signalling in skin homeostasis and tumour formation

13:10-14:00 LUNCH BREAK

Cellular and microbiome interactions in skin

Chair: Esther von Stebut

- 14:00-14:35 **Pantelis Rempelas (Philadelphia, 08:00-08:55 am USA local Speaker time)**
Neuro-epithelial crosstalk in skin regeneration
- 14:35-14:55 **Manolis Pasparakis (A4)**
Epithelial TNFR1 signalling in skin homeostasis and inflammation.
- 14:55-15:30 **Heidi Kong (Bethesda, 08:55-09:30 am east coast USA, local Speaker time)**
The forces that shape the human skin microbiome
- 15:30 **Thomas Krieg and Carlen Niessen**
Closing remarks