

**13<sup>th</sup> meeting of the  
European Epidermal Barrier Research Network (E<sup>2</sup>BRN)  
9-10 September 2015, Rotterdam, The Netherlands**

Scientific Organising Committee:

Sandrine Dubrac (Innsbruck, Austria) and Patrick Zeeuwen (Nijmegen, The Netherlands)

Email addresses: [sandrine.dubrac@i-med.ac.at](mailto:sandrine.dubrac@i-med.ac.at) and [Patrick.Zeeuwen@Radboudumc.nl](mailto:Patrick.Zeeuwen@Radboudumc.nl)

## **Scientific Program**

**Wednesday, September 9, 2015**

### **Session 1 (Topic – skin barrier: mechanisms of disease)**

**Chairs:** Johanna Brandner (Hamburg) & Patrick Zeeuwen (Nijmegen)

Keynote lectures: 20 min + 5 min discussion

13.00 – 13.05: opening E<sup>2</sup>BRN meeting by Johanna Brandner

13.05 – 13.30: Keynote lecture 1

**Stephan Weidinger (Kiel, Germany)**

Title: “Barrier and Bases”

13.30 – 13.55: Keynote lecture 2

**Johanna Brandner (Hamburg, Germany)**

Title: “Interaction of the tight junction barrier and the stratum corneum barrier”

**3 Short communications chosen from the abstracts (12 min + 3 min discussion each)**

13.55 – 14.10: **Laura Ivanovas** (Gießen, Germany) - Inflammation and stress: The epidermal tight junctions under attack

14.10 – 14.25: **Elisa Domínguez-Hüttinger** (London, UK) - *In silico* models to study the onset, progression and prevention of AD

14.25 – 14.40: **Alexander Boreham** (Berlin, Germany) - Skin penetration and tumor specific cellular uptake of G5G2.5 tecto-dendrimer nanoparticles as a new strategy for targeted delivery by topical application

14.40 – 16.00: Coffee break + poster session

## **Session 2 (Topic – Organotypic 3D cultures: models to study atopic dermatitis)**

**Chairs:** Sandrine Dubrac (Innsbruck) & Katja Bäsler, Hamburg

Keynote lectures: 20 min + 5 min discussion

16.00 – 16.25: Keynote lecture 3

**Dusco Ilic (London, UK)**

Title: “Gene editing of human pluripotent stem cells in modeling atopic dermatitis *in vitro*”

16.25 – 16.50: Keynote lecture 4

**Gitta Neufang (Hamburg, Germany)**

Title: Innervated skin models: Implication for atopic dermatitis

### **3 Short communications chosen from the abstracts (12 min + 3 min discussion each)**

16.50 – 17.05: **Evelyne De Vuyst** (Namur, Belgium) - Cholesterol-depletion followed by interleukins-4, -13 and -25 enhances alterations in a reconstructed human epidermis

17.05 – 17.20: **Jeroen van Smeden** (Leiden, The Netherlands) - Altered Epidermal Lipid Biosynthesis in Patients with Atopic Dermatitis

17.20 – 17.35: **Li Fang Koh** (Singapore) - TAp63 $\beta$  and Notch in human skin differentiation

17.35 – 17.45: **Poster Prizes**

**Thursday, September 10, 2015**

**Session 3 (Topic – Skin barrier homeostasis)**

**Chairs:** Michel Simon (Toulouse) & Stefan Blunder (Innsbruck)

Keynote lectures: 20 min + 5 min discussion

08.30 - 08.55: Keynote lecture 5

**Howard Maibach (San Francisco, USA)**

Title: "BARRIERS: Lessons Learned"

08.55 – 09.20: Keynote lecture 6

**Matthias Schmuth (Innsbruck, Austria)**

Title: "Epidermal permeability barrier: Lessons from monogenetic disease "

09.20 – 09.45: Keynote lecture 7

**Ellen van den Bogaard (Nijmegen, The Netherlands)**

Title: "The aryl hydrocarbon receptor (AHR) in skin barrier homeostasis and disease"

**3 Short communications chosen from the abstracts (12 min + 3 min discussion each)**

09.45 – 10.00: **Aurelie Hayez** (Namur, Belgium) - TMEM45A gene expression is dispensable for epidermal keratinization and morphogenesis

10.00 – 10.15: **Emmi Wachsmut** (Cologne, Germany) - p38 Map kinase compensates barrier dysfunction caused by loss of epidermal insulin/IGF-1 signaling

10.15 – 10.30: **Matthias Schäfer** (Zurich, Switzerland) - A novel Nrf2-Il-36 $\gamma$  pathway mediates paracrine growth control of keratinocytes