

# Neutrophil 2020

## Edinburgh, May 31-June 3 2020

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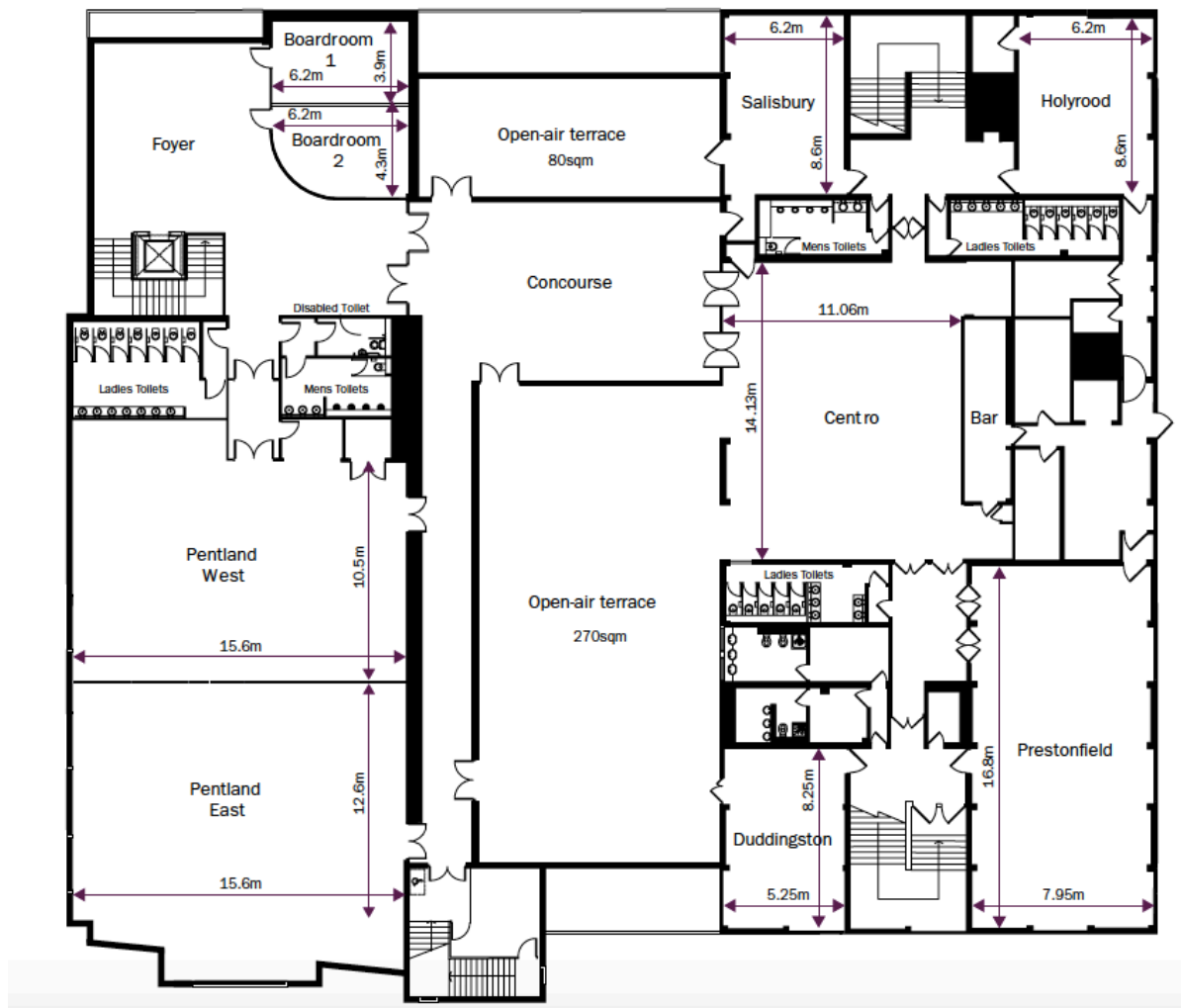
## SOCIAL PROGRAM

Welcome reception will be held on Sunday 31st May at 20:15 in the John McIntyre Conference Centre. All registered participants are invited. Admission is included in registration fees.

Conference dinner will be held on Tuesday 2nd June at 19:30 at Edinburgh Castle, Castlehill, Edinburgh, EH1 2NG. Conference dinner and coach transport can be booked at registration.

## VENUE FLOOR PLANS

John McIntyre Conference Centre, First floor space



## SCIENTIFIC PROGRAM

### Sunday, May 31

- 15h00-18h00 On-site registration begins
- 19h00 **Introductory remarks** Co-chairs (S Renshaw, S Walmsley)
- 19h15-20h00 **Keynote Lecture:** Sussan Nourshargh (Queen Mary University London)  
*Neutrophil breaching of venular walls: Mode, Mechanisms and Consequences of two-way trafficking*
- 20h15 Welcome Reception

### Monday, June 1

- 08h00 Coffee

#### **Session I: Neutrophil Trafficking: Mechanisms, Regulation & Novel concepts**

Chairs: Barbara Walzog, Tim Lämmerman

Will include cutting edge science using both in vitro and in vivo approaches aimed at deciphering mechanisms of neutrophil migration. Selected short-talks will similarly describe cutting edge works from young investigators and will complement the invited talks.

- 08h30-09h00 Barbara Walzog (Ludwig-Maximilians Universität, Munich, Germany)  
*Integrin signalling and neutrophil trafficking in innate immunity*
- 09h00-09h15 Selected short talk  
*Title tbc*
- 09h15-09h45 Lai Guan Ng (A\*STAR, Singapore)  
*Neutrophils: the power of many*
- 09h45-10h00 Selected short talk  
*Title tbc*
- 10h00-10h30 Graham Lieschke (Royal Melbourne Hospital, Australia)  
*Neutrophils at work! New insights from in vivo imaging in zebrafish*
- 10h30-11h00 COFFEE BREAK
- 11h00-11h15 Selected short talk  
*Title tbc*
- 11h15-11h45 Anjelika Gonzalez (Yale University, New Haven, USA)  
*Fast and furious: tracking neutrophils in the microvascular wall*

#### **Poster session**

11h45-13h30 Lunch and posters

### **Session II: Neutrophil signalling**

Chairs: Helen Wright, Len Stephens

13h30-14h00 Jamel El-Benna (Université Diderot, Paris, France)  
*Signalling pathways involved in NADPH oxidase priming and activation in human neutrophils*

14h00-14h15 Selected short talk  
*Title tbc*

14h15-14h45 Sonja Vermeren (University of Edinburgh, Edinburgh, UK)  
*Non-canonical PI3K signalling in neutrophils*

14h45-15h00 Selected short talk  
*Title tbc*

15h00-15h30 Attila Mocsai (Semmelweis University, Budapest, Hungary)  
*Neutrophil signalling in autoimmune and inflammatory diseases models*

15h30-16h00 COFFEE BREAK

### **Session III: Neutrophil niches**

Chairs: Sonja Vermeren, Oliver Söhnlein

Will explore the specialised roles of neutrophils in niche environments. Selected short-talks will similarly describe cutting edge works from young investigators and will complement the invited talks.

16h00-16h30 Ilaria Malanchi (Francis Crick Institute, London, UK)  
*The complex relation between neutrophils and cancer*

16h30-16h45 Selected short talk  
*Title tbc*

16h45-17h15 Filip Swirski (Harvard University, Boston, USA)  
*Lifestyle, cardiovascular disease, and the non-neutral neutrophil*

17h15-17h30 Selected short talk  
*Title tbc*

17h30-18h00 Mia Phillipson (Uppsala University, Sweden)  
*Immune cells building blood vessels*

### **Poster Session**

## Tuesday, June 2

08h00 Coffee

### Session IV: Neutrophil kinetics and fate

Chairs: Edwin Chilvers, Andrés Hidalgo

08h30-09h00 Triant Chavakis (Technische Universität Dresden, Germany)  
*Del-1, a regulator of neutrophil homeostasis*

09h00-09h15 Selected short talk  
*Title tbc*

09h15-09h45 Andrés Hidalgo (Spanish National Centre for Cardiovascular Research, Madrid, Spain)  
*Circadian dynamics of neutrophil function*

09h45-10h00 Selected short talk  
*Title tbc*

10h00-10h30 Sara Rankin (Imperial College, London, UK)  
*Role of CXCR4 on neutrophil dynamics in the bone marrow, lung and spleen*

10h30-11h00 COFFEE BREAK

### Session V: Resolution and Repair

Chairs: Adriano Rossi, Moira Whyte

11h00-11h30 Derek Gilroy (University College, London, UK)  
*How resolution of acute inflammation improves barrier function*

11h30-11h45 Selected short talk  
*Title tbc*

11h45-12h15 Lucy Norling (Queen Mary University, London, UK)  
*Resolvin D1 is protective in a neutrophil-driven model of arthritis*

12h15-12h30 Selected short talk  
*Title tbc*

12h30-13h00 Bruce Levy (Harvard University, Boston, USA)  
*A surprising mechanism for neutrophil cytoplasmic granules in non-T2 inflammation in asthma, and their regulation by SPMs*

### Poster session

13h00-14h30 Lunch and posters

### Session VI: Ongoing warfare: neutrophil-pathogen interactions and their outcomes

Chairs: Alison Condliffe, Alison Criss

Will include cutting edge science interrogating the host-pathogen interaction, including bactericidal function but also subversion of neutrophil functions by pathogens. Selected short-talks will similarly describe cutting edge works from young investigators and will complement the invited talks.

14h30-15h00 Bryan Yipp (University of Calgary, Canada)  
*Understanding neutrophil behavior in the lung microvascular in vivo*

15h00-15h15 Selected short talk  
*Title tbc*

15h15-15h45 Isaac Chiu (Harvard University, Boston, USA)  
*Neuronal regulation of innate immunity in bacterial host defence*

15h45-16h00 Selected short talk  
*Title tbc*

16h00-16h30 COFFEE BREAK

16h30-17h00 Thomas Rudel (Universtiy of Würzburg, Germany)  
*Surviving the neutrophil attack: strategies of an obligate intracellular bacterium*

17h00-17h15 Selected short talk  
*Title tbc*

17h15-17h45 Alison Criss (University of Virginia, Charlottesville, USA)  
*Gonococcal suppression of neutrophil antimicrobial activities*

17h45-18h00 Selected short talk  
*Title tbc*

18h00 Poster Awards

19h30 Conference dinner

## Wednesday, June 3

08h00 Coffee

## **Session VII: Neutrophils in Disease**

Chairs: Janet Lord, Bruce Levy

- 09:00 - 9:45 Keynote: Tanya Mayadas (Harvard University, Boston, USA)  
*Neutrophil plasticity and function in disease.*
- 09:45- 10:15 J Edwin Blalock (University of Alabama at Birmingham, USA)  
*Proteolytic Exosomes: Novel Effectors of Neutrophil-mediated Lung Destruction and Disease*
- 10:15-10:30 Selected short talk  
*Title tbc*
- 10:30-11:00 COFFEE BREAK
- 11:00-11:15 Suchita Nadkarni (Queen Mary University London, UK)  
*Neutrophil and T-cell cross-talk in vascular diseases.*
- 11:15-11:30 Selected short talk  
*Title tbc*
- 11:30-11:45 Selected short talk  
*Title tbc*
- 11:45-12:15 Mikala Egeblad (Cold Spring Harbor Laboratory, USA)  
*Neutrophils as regulators of the metastatic tumour environment*

## **Concluding remarks**

12h15-12h45