

HUMAN CELL ATLAS

HCA MEETING
WELLCOME TRUST
LONDON, UK

13–14 OCTOBER 2016

Thursday, 13 October 2016

9:00–9:30 **Registration**

9:30–10:30 **Plenary Session 1: Vision**

Welcome and opening remarks

Historical perspective

Human Cell Atlas: Why?

Human Cell Atlas: Design considerations

Michael Stratton

Eric Lander

Aviv Regev

Sarah Teichmann

10:30–10:45 **Break**

10:45–12:30 **Plenary Session 2: Biological Areas**

Session chair and panel moderator

Immunology

Single cell phenotyping, drug screening and transcriptomic profiling of cancer patient-derived cells

Identifying cell types using organoid technology

Identification of novel cell types in the developing human brain

Single cell analysis of epidermal stem cells and skin fibroblasts

Accelerating the Human Cell Atlas through interdisciplinary approaches and collaboration

Ramnik Xavier

Christophe Benoist

Roland Eils

Hans Clevers

Arnold Kriegstein

Fiona Watt

Cori Bargmann

12:30–13:30 **Lunch**

13:30–15:00 **Plenary Session 3: Technological and Computational Approaches**

Session chair and panel moderator

Designing a cell atlas: cell types, trajectories and circuits

Design, analysis and dissemination: computational challenges when constructing a cell atlas

The Biohub and technology choices for a single cell atlas

Deep phenotype tissue imaging from the molecular scale on up

Chris Ponting

Dana Pe'er

John Marioni

Stephen Quake

Garry Nolan

15:00–15:30 **Break**

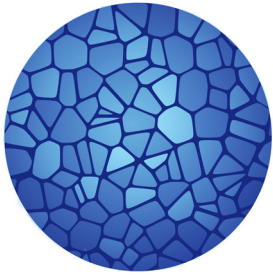
15:30–16:30 **Biology Breakout Sessions**

Immunology

Cancer

Discussion leader: Miriam Merad
Summarizer: Ton Schumacher

Discussion leader: Peter Campbell
Summarizer: Padmanee Sharma



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Epithelia

Brain and nervous system

Developmental biology and stem cells

Discussion leader: Seung Kim
Summarizer: Martijn Nawijn

Discussion leader: Ed Lein
Summarizer: James Eberwine

Discussion leader: Bertie Göttgens
Summarizer: Barbara Wold

16:30–17:00 [Break](#)

17:00–18:00 [Breakout Summaries](#)

19:00 [Pre-dinner reception](#)

19:30 [Dinner, Wellcome Trust](#)

Friday, 14 October 2016

9:00–9:30 [Registration](#)

9:30–10:30 [Breakout Sessions](#)

Samples: types, access, and process

Funding

Technology

Computation and analytics

Discussion leader: Lars Fugger
Summarizer: Mihai Netea

Discussion leader: Andrea Beckel-Mitchener
Summarizer: Michael Dunn

Discussion leader: Sten Linnarsson
Summarizer: Alex van Oudenaarden

Discussion leader: Oliver Stegle
Summarizer: Rahul Satija

10:30–11:00 [Break](#)

11:00–12:00 [Breakout Summaries](#)

12:00–14:00 [Lunch](#)

14:00–16:00 [White Paper Coordination: Presentation and Discussion](#)
Peter Campbell and Nir Hacohen