

IMPC Conference

'International Mouse Phenotyping Consortium: Insights from the Past, Shaping the Future'

22 January 2026

Online

AGENDA

11.00 -11.20 EDT
08.00 -08.20 PDT
17.00 -17.20 CET

Welcome and Introduction

5 min each
(introductory
talks) - 20 min

Jason Heaney (Chair IMPC Steering Committee)
Welcome address – Short Introduction

Martin Hrabe de Angelis (Infrafrontier ERIC, Germany)

Je Kyung Seong (KMPC, South Korea)
Understanding Human Health with Animal Models in the AI Era

11.20 -12.20 EDT
08.20 -09.20 PDT
17.20 -18.20 CET

Session 1. Update on IMPC production and phenotyping efforts to date

Chairs:

Colin Fletcher (NHGRI/NIH, Washington, USA)

Oleg Mirochnitchenko (ORIP/OD/NIH, Washington, USA)

11.20-11.35 EDT
08.20 -08.35 PDT
17.20 -17.35 CET

Jason Heaney (Baylor College of Medicine, USA)
The Past and Future of the IMPC – Setting the Stage
10 min presentation + 5 min questions

11.35-11.50 EDT
08.35 -08.50 PDT
17.35 -17.50 CET

Lauryl Nutter (The Center for Phenogenomics, Canada)
IMPC Production - Resource & Technology Development
10 min presentation + 5 min questions

11.50-12.05 EDT
08.50 -09.05 PDT
17.50 -18.05 CET

Jacqui White (The Jackson Laboratory, USA)
Building a comprehensive catalogue of mammalian gene function
10 min presentation + 5 min questions

12.05-12.20 EDT
09.05-09.20 PDT
18.05 -18.20 CET

Piia Keskivali-Bond (MRC Harwell, UK)/ **Robert Wilson** (EBI, UK)/**Pilar Cacheiro** (QMUL, UK)
Data analysis, interpretation, and presentation at mousephenotype.org
10 min presentation + 5 min questions

12.20-12.40 EDT
09.20 -09.40 PDT
18.20 -18.40 CET

Coffee/lunch break (20 min)

12.40 -14.25 EDT
09.40 -11.25 PDT
18.40 -20.25 CET

Session 2. Informing human gene function using knockout mice: IMPC achievements and empowering community research

Chairs:

Jesse Mager (University of Massachusetts-Amherst, USA)
John Mudgett (Chair, IMPC Panel of Scientific Consultants/PSC)

12.40 -12.55 EDT
09.40 -09.55 PDT
18.40 -18.55 CET

Yann Hérault (ICS, France)
Overview of IMPC data contributions including major past papers
10 min presentation + 5 min questions

12.55 -13.10 EDT
09.55 -10.10 PDT
18.55 -19.10 CET

Steve Murray (The Jackson Laboratory, USA)
Lessons from more than 2,700 Essential Genes
10 min presentation + 5 min questions

13.10 -13.25 EDT
10.10 -10.25 PDT
19.10 -19.25 CET

Nadine Spielmann (GMC, Germany)
Aging under genetic manipulation will alter the heart in significant and diverse ways
10 min presentation + 5 min questions

13.25 -13.40 EDT
10.25 -10.40 PDT
19.25 -19.40 CET

Bob Braun (The Jackson Laboratory, USA)
Infertility
10 min presentation + 5 min questions

13.40 -13.55 EDT
10.40 -10.55 PDT
19.40 -19.55 CET

Sabine Hoelter-Koch (GMC, Germany)
Uptake of IMPC resources for preclinical research
10min presentation + 5 min questions

13.55 -14.25 EDT
10.55 -11.25 PDT
19.55 -20.25 CET

Kent Lloyd (University of California at Davis, USA)
Summary of results of the Survey sent to the research community soliciting their assessment of IMPC to date and the scientific rationale and value for continuing to

complete the *in vivo* functional annotation of the human orthologous genes in the mouse genome.

20 min presentation + 10 min questions

14.25 -14.45 EDT
11.25 -11.45 PDT
20.25 -20.45 CET

Coffee break (20 min)

14.45 -15.25 EDT
11.45 -12.25 PDT
20.45 -21.25 CET

Session 3. Scope and structure of a next phase of IMPC

Chairs of session:

Steve Brown (Former Chair IMPC Steering Committee)

14.45 -14.55 EDT
11.45 -11.55 PDT
20.45 -20.55 CET

Kevin Peterson (The Jackson Laboratory, USA)

Completing the Mouse Null Resource: Opportunities, Obstacles, and Next Steps

8 min presentation + 2 min questions

14.55 -15.05 EDT
11.55 -12.05 PDT
20.55 -21.05 CET

Naoki Kubo (RIKEN, Japan)

Functional annotation of non-coding sequences

8 min presentation + 2 min questions

15.05 -15.15 EDT
12.05 -12.15 PDT
21.05 -21.15 CET

Johannes Beckers (Infrafrontier, Germany)

INFRAFRONTIER: Advancing Europe's Infrastructure for Human Disease Modelling

8 min presentation + 2 min questions

15.15 -15.25 EDT
12.15 -12.25 PDT
21.15 -21.25 CET

Brendan Lee (Baylor College of Medicine, USA)

Impact and future for modeling rare human diseases in mice

8 min presentation + 2 min questions

15.25 -16.10 EDT
12.25 -13.10 PDT
21.25 -22.10 CET

Break -out sessions (45 min)

Break out session I
**Completing the protein
coding gene null resource**

Chair
Kevin Peterson

Break out session II
Rare disease Variants

Chair
Jason Heaney

Break out session III
Other parts of the Genome

Chair
Steve Brown

Panelists

Kent Lloyd
Jesse Mager
Damian Smedley

Panelists

Brendan Lee
Cat Lutz
Radislav Sedláček

Panelists

Toshihiko Shiroishi
Yann Hérault
Naoki Kubo
Ivan Marazzi

16.10 -16.30 EDT
13.10 -13.30 PDT
22.10 -22.30 CET

Coffee Break (20 min)

16.30 -17.00 EDT
13.30 -14.00 PDT
22.30 -23.00 CET

Summary of Break-out sessions
30 min

17.00 -17.05 EDT
14.00 -14.05 PDT
23.00 -23.05 CET

IMPC prioritization poll
5 min

17.05 -17.45 EDT
14.05 -14.45 PDT
23.05 -23.45 CET

Final Discussion - Future Priorities, Thoughts on Break-out Summaries, Funding
40 min

17.45 -18.00 EDT
14.45 -15.00 PDT
23.45 -00.00 CET
(+1)

Closing remarks
15 min

18.00 EDT
15.00 PDT
00.00 CET (+1)

Conference Concluded