



A HUMAN PATHWAYS APPROACH TO DISEASE RESEARCH

26 – 27 June 2017 | NIH Fishers Lane Conference Center, Bethesda, MD

DRAFT AGENDA

Monday 26 June 2017

- 0800 Registration and continental breakfast outside meeting room
- 0830 Welcome, summary of workshop, goals, work products Kate Willett
- 0845 KEYNOTE LECTURE: A CALL TO ACTION** Chris Austin, NCATS
- 0930 SESSION 1 – SETTING THE STAGE: WHAT IS NEEDED AND WHY?**
Chair: Warren Casey
- 0935 Challenges and needs to use existing data in drug development
François Pognan, Novartis
- 0955 NIEHS-led US roadmap to implementation of alternatives Warren Casey, NIEHS
- 1020 Clinical Point of view: current practices, challenges and needs Bruce Cuthbert, NIMH
- 1045 BREAK**
- 1100 FDA collaborations for addressing practical applications Suzanne Fitzpatrick, FDA
- 1120 Case studies in 21st Century disease models
A tiered approach to in vitro-based compound testing: Using computational modeling, big data approaches and fit-for-purpose in vitro assays to streamline compound development
Rebecca Clewell, ScitoVation
Using organoids to define key pathways in COPD pathogenesis
Ian Adcock, Imperial College London
Organs-on-Chips: A Platform for Advancing Drug Development and Disease Modeling
Daniel Levner, Emulate, Inc
- 1230 LUNCH**
- 1345 BREAKOUT GROUP DISCUSSION SESSION 1;**
- 1445 BREAK**
- 1500 SESSION 2: BIG DATA; INFORMATION INTO KNOWLEDGE INTO ACTION**
Chair: Ajay Pillai
- 1510 Overview of NIH Big data projects, LINCS in particular Ajay Pillai, NIH LINCS
- 1530 Biomedical Data Translator – What’s it going to take? Christine Colvis, NIH Translator
- 1550 Translator and Fanconi Anemia Christopher Chute
- 1610 BREAK**
- 1630 BREAKOUT GROUP DISCUSSION SESSION 2**
- 1730 BREAK**
- 1740 RECAP DAY1**
- 1800 ADJOURN**

0830 SESSION 3: CURRENT TOOLS TO SUPPORT PATHWAY-BASED DECISIONS

Chair: Suzy Fitzpatrick

0830 Tox21 and beyond for pharma and biomed Anton Simeonov, NCATS

0850 Organs on a chip: applications for testing and research Lucie Low, NCATS

0910 Primary Cell-Based Phenotypic Profiling for Building Human Outcome Pathways
Ellen Berg, DiscoverRx Corporation

0930 Systems Biology Approach to Cancer Shannon Hughes, NCI

0950 BREAK

1000 How might a “pathway-based” approach help (e.g. AOPs)? C. Willett, HSUS/HSI

1020 A network based approach to understanding drug toxicity and its application to human liver disease
Jeff Sutherland, Indiana Biosciences Research Institute Consultant

1040 Systems Pharmacology (PredicTox) Darrell Abernethy, FDA

1100 BREAK

1115 BREAKOUT GROUP DISCUSSION SESSION 3

1215 LUNCH

1345 SUMMARY OF BO GROUP DISCUSSIONS 1 – 3

1445 SESSION 4: COORDINATION AND SUPPORT: HOW TO MAKE IT WORK

Chairs, Troy Seidle

Panel discussion

Role of funding agencies: Chris Austin, NCATS

Role of pharma François Pognan, Novartis

Role of academia/SMEs Daniel Levner, Emulate

Role of regulatory agencies: Frank Weichold, FDA

1545 BREAK

1600 GROUP DISCUSSION SESSION 4

BREAK

1550 WRAP-UP: SUMMARY OF DISCUSSION QUESTIONS

Chairs, Kate Willett and Warren Casey

1700 ADJOURN