

# Recent Advances and Opportunities in the Development and Use of Humanized Immune System Mouse Models

December 18, 2018

Conference Room 1D13, 5601 Fishers Lane, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville MD

DRAFT AGENDA\*

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| 9:00 – 9:10 a.m.        | <b>Welcome and Background:</b> <i>ADM Brett Giroir</i> (Asst. Secretary for Health, HHS)   |
| 9:10 – 9:20 a.m.        | <b>Workshop Format, Goals, and Charge to Participants:</b> <i>Daniel Rotrosen</i> (Division Director, Division of Allergy, Immunology and Transplantation, NIAID)  |
| 9:20-9:30 a.m.          | Introductory Comments: <i>Lawrence Tabak</i> (Principal Deputy Director, NIH)  |
| 9:30 – 10:20 a.m.       | <b>Overview of Humanized Immune System (HIS) Mouse Models</b><br><i>Leonard Shultz, The Jackson Labs</i>   |
| 10:20– 10:35 a.m.       | <b>Break</b>   |
| 10:35 a.m. – 12:40 p.m. | <b>Breakout Groups: Features of Models using Fetal and Non-Fetal Tissue Sources regarding Human Immune System Development and Function</b> <ul style="list-style-type: none"><li>• <b>Group 1</b><br/>Discussion Leaders:<br/><i>Todd Allen (Ragon Institute)</i><br/><i>Roberta Pelanda (University of Colorado Denver)</i></li><li>• <b>Group 2</b><br/>Discussion Leaders:<br/><i>Karolina Palucka (The Jackson Labs)</i><br/><i>Michael Brehm (University of Massachusetts Medical School)</i></li></ul> |
| 12:40 – 1:55 p.m.       | <b>Lunch (Discussion Leaders to use this time to make slides for next session)</b>   |
| 1:55 – 2:55 p.m.        | <b>Breakout Group Reports (30 minutes/group)</b>   |

2:55 - 4:10 p.m.

**Group Discussion: Challenges, Limitations, Alternatives, and Strategies to Improve/Optimize Current Humanized Mouse Models**

Moderators: *Lishan Su (University of North Carolina) and Priti Kumar (Yale University)*

*Suggested Discussion Topics:*

- How well do fetal tissue and non-fetal tissue sources compare in terms of immune reconstitution, immune function, and/or recapitulation of host-pathogen or host-disease interactions?
- What benchmarks should be used to assess successful engraftment and functionality in HIS models generated from different sources of human tissue?

\*Subject to change.