

Drug Metabolism and Pharmacokinetics Interest Group Report of the Interest Group Workshop at 70th ASMS Conference on Mass Spectrometry and Allied Topics June 5 - 9, 2022 Minneapolis Convention Center | Minneapolis, Minnesota

The Drug Metabolism and Pharmacokinetics (DMPK) Interest Group (IG) Workshop was held on Tuesday, June 7th from 5:45 to 7:00 pm. The coordinators, Bhagwat Prasad and Lina Luo led the workshop. Approximately 35 scientists attended the workshop demonstrating interest in drug metabolism and pharmacokinetics. An expert panel shared their perspectives to spur discussion on the workshop topic, Recent advances in ADME biomarkers. The active attendee participation in the discussion provided a good endorsement for continuing the DMPK-IG in future years.

Bhagwat Prasad shared the DMPK IG goals to attendees and introduced the session, Lina Luo introduced the speakers, moderated the panel discussion, and called for nominees and volunteers for future DMPK-IG sessions. One potential workshop co-coordinator expressed his interest to involve in the planning of future meeting.

1. Review of the DMPK IG Goals

The DMPK Interest Group goals of providing a discussion forum to MS practitioners in drug metabolism, pharmacokinetics, qualitative and quantitative, non-regulated bioanalysis include sharing:

- Recent advances in techniques and methodologies for metabolite identification and pharmacokinetic bioanalysis
- Interpretation of and application of related guidance documents (i.e., MIST, ICH M3, DDI, expl. IND)
- Sharing of best practices across industry and academia
- Provide input on ASMS conference program of interest to scientists working in DMPK
- Reach out and coordinate with related groups to complement scope and broaden outreach to scientific community

2. 2022 and future DMPK IG Coordinators

2022: Bhagwat Prasad, WSU (Coordinator) – bhagwat.prasad@wsu.edu
Lina Luo, BMS(Co-coordinator) – lina.luo@bms.com

2023: Lina Luo, BMS (Coordinator) – lina.luo@bms.com
Hlaing (Holly) Maw (Co-coordinator) hlaing.maw@boehringer-ingenelheim.com

2024: Hlaing (Holly) Maw (Coordinator) hlaing.maw@boehringer-ingenelheim.com
Josh Yu (Co-coordinator) josh.yu@gilead.com

3. DMPK IG workshop agenda for 2021

Two speakers shared their experiences and recommendations on the theme “Recent Advances in ADME Biomarkers”:

- A Pharmaceutical Industry Perspective on OATP1B Endogenous Biomarkers (**Hong Shen, Ph.D.**)
- A Non-invasive Urinary Biomarker of In Vivo Activity of a Highly Polymorphic Enzyme, UGT2B17 (**Bhagwat Prasad, Ph.D.**)

4. Update on the DMPK Interest Group’s Impact on the 2022 ASMS Program

We thank the ASMS for being receptive to our request and proposals for DMPK oriented oral sessions for the 2022 meeting. This responsiveness was reflected in a number of DMPK related Oral sessions and the positive feedback from the Interest Group attendees.

5. Suggestions on ASMS 2022 Oral Session Topics from DMPK-IG Attendees

1. Idiosyncratic toxicity
2. Liquid biopsy: Success stories and challenges
3. Absolute bioavailability studies using stable labeled compared to radio labeled approaches
4. Metabolism of new modalities
5. Tissue imaging

Current Officers for the ASMS DMPK Interest Group:

Coordinators of 2022:

- Bhagwat Prasad (Coordinator for 2022)
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- Lina Luo, BMS (Coordinator for 2023)
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