

# Metabolomics Summer Workshop

June 23-26, 2014

Forum Hall, Palmer Commons • University of Michigan, Ann Arbor

## Day 1: Monday, June 23

8:00 am	Registration and Welcome
8:30 am	Introduction to Metabolomics in Research ( <i>Chuck Burant</i> )
9:15 am	Experimental Design: Special Considerations for Metabolomics ( <i>Anna Mathew</i> )
10:15 am	Break
10:30 am	Sample Collection: Guidelines, Tricks and Tips ( <i>Anna Mathew</i> )
11:15 am	Overview of Metabolomics Methods ( <i>Charles Evans</i> )
12:00 pm	Lunch (Not Provided)
1:00 pm	Instrumentation ( <i>Charles Evans</i> )
1:45 pm	Analysis of Metabolomics Data ( <i>George Michailidis</i> )
2:30 pm	Break
2:45 pm	Analysis Methods Continued ( <i>George Michailidis</i> )
3:30 pm	Tools for Bioinformatics Analysis, Visualization, and Data Integration ( <i>Alla Karnovsky</i> )
4:30 pm	Group Discussion with Speakers

## Day 2: Tuesday, June 24

8:00 am	Welcome
8:15 am	Experimental Design Revisited: Human, Animals, and Cells ( <i>Anna Mathew</i> )
9:30 am	Break
9:45 am	Methods In-Depth: Targeted and Untargeted ( <i>Charles Evans</i> )
11:00 am	Lipidomics ( <i>TM Rajendiran</i> )
11:30 am	Lunch (Provided: Great Lakes Room)
1:00 pm	Statistical Analysis of Targeted and Untargeted Studies ( <i>George Michailidis</i> )
2:00 pm	Raw Data: Tools to Help <u>You</u> Review It ( <i>Sasha Raskind</i> )
2:30 pm	Demo Session: CoolMap ( <i>Barbara Mirel and Chuck Burant</i> )
3:15 pm	Break
3:30 pm	Demo Session: MetScape ( <i>Alla Karnovsky</i> )
4:15 pm	Discussion: So You Want to Find a Biomarker?

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## Day 3: Wednesday, June 25

8:00 am	Welcome
8:15 am	Fluxomics Case Study ( <i>Chuck Burant</i> )
9:00 am	Fluxomics ( <i>Santiago Schnell and Michelle Wynn</i> )
10:00 am	Break
10:15 am	Statistical Analysis of Fluxomic Studies ( <i>George Michailidis</i> )
10:45 am	Multiscale Integration of Metabolomics with Multiple Data Types ( <i>Alla Karnovsky</i> )
12:00 pm	Lunch (Not Provided)
1:00 pm	Special Topic: Metabolomics in Actions: Vignettes from the Field ( <i>Sub Pennathur, Chuck Burant, Kathleen</i> )
3:15 pm	Break
3:30 pm	Special Topic: On Data: Metadata, Sharing and Curation ( <i>Stephen Brown</i> )

## Day 4: Thursday, June 26 (Cure Room, Brehm Tower)

8:15 am	Welcome
8:30 am	(OPTIONAL SESSIONS) Hands-on Activity: MetScape ( <i>Bill Duren, Alla Karnovsky</i> )
10:00 am	(OPTIONAL SESSIONS) Lab and Sample Collection Demo ( <i>Stephen Brown, Li Zhang</i> )
11:00 am	Break-out sessions: MetaboAnalyst, Sample Submission, CoolMap, MetLims Tools, and Others to be Announced
12:00 pm	Lunch (Provided)
1:00 pm	Wrap up; Discussion with Experts; Scheduled Consultations

