

## **Agenda**

8.30-9.00 Arrive, coffee and pastries provided

9:00 Introduction to JBIMS (Britt Koskella)

9.05 Introduction to workshop goals (Luke Lee and Adam Deutschbauer).

### **Topic 1: Disruptive technologies for microbiome research**

- 9:10 – Luke Lee - Novel platforms and pathways into microbiomes, UCB
- 9:40 – Vivek Mutalik - In situ manipulation of microbiomes, LBNL
- 9.55 - Matt Traxler - Eavesdropping on microbiomes, UCB

### **Topic 2: Existing Berkeley capabilities**

- 10.10 - Shana Mc Devitt, UCB, QB3
- 10.20 - Rex Malmstrom, JGI (Genomics, Metabolomics, DNA Synthesis )
- 10.30 - Peidong Yang (Kavli ENSI - Semiconductor bacteria interfaces)

### **10:45 Discussion (30 minutes)**

- What are the greatest technology needs for innovative scientific tools in microbiome science?
- What barriers exist for applying current technologies? How can these barriers be overcome at UCB/LBNL?

11:15 Break (10 minutes)

### **11:25 Topic 3: Question-focused applications of new technologies to microbiome research**

- 11:25 – John Taylor, UCB
- 11:35 – Kate Zhalnina, LBNL
- 11:45 – TBD, UCB/LBNL

### **11:55 Discussion (30 minutes)**

- What are the highest impact scientific questions we could address with development of novel technologies?
- How should technologies be integrated to understand microbiomes across scales?
- How should model microbiome/systems be integrated into technology development?  
Which model microbiomes should be prioritized for this effort?

### **12.25 Grab lunch and group discussion**

What do we hope to get out of this initiative?

- How do we enhance communication and awareness between technology developers in disparate fields and microbiome researchers across Berkeley and Berkeley Lab?
- What type of funding would be most useful for the rapid development/adaptation of technologies to microbiome research?
- What type of foundations/agencies might be amenable to supporting this component of the initiative?