The John Lawrence Seminars

BERKELEY LAB
Lawrence Berkeley National Laboratory

"Predicting and Preventing Drug Metabolism by the Human Gut Microbiome"

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One of the most important limitations to modern medicine is the variation between patients in their response to dietary and therapeutic interventions. Mutations in the human genome, in particular the enzymes and transporters expressed in the intestine and liver, have a major impact on drug levels in circulation. But these studies ignore our "second genome" – that of the trillions of microorganisms that thrive in and on the human body (the microbiome). We are pursuing a more comprehensive view of pharmacology that includes the structure and activity of our resident microbial communities, and a deeper understanding of their interactions with each other, with their host habitat, and with the nutritional milieu of the gastrointestinal tract. We primarily use gnotobiotics (germ-free and intentionally colonized mice) and metagenomics (culture-independent methods for studying microbial communities).

Tues., May 3rd
4:00 p.m.

717 Potter Street
Room 141
Berkeley Lab

Host:
Antoine Snijders

Schedule of Seminars: http://johnlawrenceseminars.lbl.gov
Non-LBNL attendees: please RSVP to FGuagliardo@lbl.gov or 510-486-6490