

# Special Seminar

## **DR. BARRY BOCHNER**

CEO & CSO

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Hayward, CA

### ***Phenotype MicroArrays: Applications in Microbial Metabolism and Physiology***

*Phenotype MicroArray (PM) technology allows a biologist to test thousands of phenotypes of a cell line in a single experiment, to gain a comprehensive overview of the metabolism, physiology, and pathway activities. It provides phenomic and metabolomic information that is complementary to genomic or proteomic analysis and often more easy to interpret and more useful. The PM technology platform is applicable to a wide range of cells including bacterial, fungal, or animal and enables metabolic analysis in the context of genotype-phenotype studies. For example, it can be used for (1) analyzing cells with mutations to determine the metabolic and physiologic effects of genetic differences, (2) studying and defining cell metabolism and metabolic regulation, (3) understanding the interplay of environment and environmental signals on cell metabolism and physiology, (4) optimizing cell culture conditions, and (5) looking at the effects of drugs and other chemicals on cellular pathways. Recent work has demonstrated the utility of the technology for determining culture conditions that turn on and turn off production of toxins and other secondary metabolites that microbes can produce. Specific examples and discoveries will be presented to illustrate the many uses of PM technology.*

**Tuesday, April 17, 2018 from 10:00-11:30 AM**

H.L. DeLuca Biochemistry Laboratories Room 175  
433 Babcock Drive

Contact Trey Sato (tksato@glbrc.wisc.edu) for additional information