



Impromptu Seminar

Keio University School of Medicine

East Building 1F seminar room

Mon, March 4th, 2019

15:00-16:00

Bernat Olle, Ph.D.

Co-founder and Chief Executive Officer,
Vedanta Biosciences (Boston, USA)

**“Rational development of
medicines based on defined
bacterial consortia”**

(Host: K. Honda, Professor of Microbiology and Immunology)

Approaches to modulate the human microbiome hold enormous promise for treatment of immune and infectious diseases. First generation therapies based on fecal transplantation, while crude, have established proof of principle for the utility of microbiome modulation in treatment of *C. difficile* infections and IBD over the last decade. Drugs based on defined bacterial consortia (characterized communities of uniform composition containing limited numbers of live organisms) are a logical second generation of therapies that can retain some of the beneficial attributes of fecal transplants (e.g. ability to shift the composition of the endogenous gut microbiota) without the associated variability and safety risks, while being amenable to development as pharmaceutical-grade agents. I will present examples of Vedanta's efforts to develop first-in-class drugs based on rationally selected bacterial consortia for applications in infectious disease, tolerance, and cancer.