

OIST SEMINAR

Date: Monday, June 18, 2018

Time: 11:00 – 12:00

Venue: Meeting Room C016, Lab 1, Level C

Speaker: **Professor Shin-Ichi Aizawa Ph.D**

Affiliation: **Prefectural University of Hiroshima**

Title: “The Flagellar World”

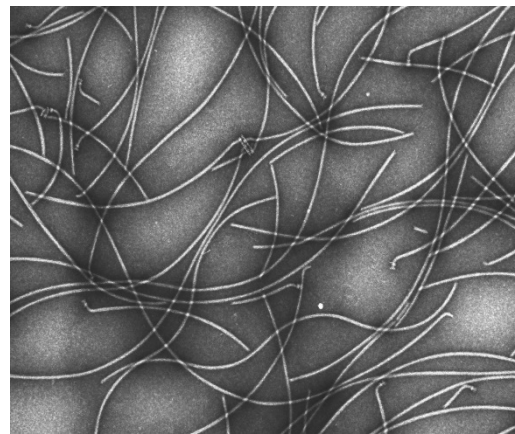
Abstract:

Bacterial cells swim in liquid using long filaments called flagella. The flagellum has a rotary motor at its base to generate motility, which gives cells the freedom to move into a wider world. The flagellum consists of several substructures (the filament, the hook, the basal body including the motor) which contain ca.30 proteins all together. The physical principle of the rotary motor has not been solved yet.

In this seminar, I will describe mainly the structural aspects of the *Salmonella* flagellum revealed in pursuit for the identity of the flagellar motor; that is, identification of the location of each component, and elucidation of the ordered self-assembly process of the flagellum. I will be also showing several types of flagella from various species living under special physiological conditions.



EM image of *Salmonella enterica*
serovar Typhimurium cell
with a bundle of flagella



Purified flagella with the basal

