

International Symposium on "Harmonized supramolecular motility machinery and its diversity"

September 13 - 14, 2017
ES Hall, Nagoya University, Japan

September 13

- 12:00 – 13:00 **Registration**
- 13:00 – 13:10 **Message from Makoto Miyata** Chair: Tohru Minamino
- 13:10 – 14:50 **Session1** Chair: Masahiro Ito
- 13:10 – 13:40 **Makoto Miyata** (Osaka City University, A01)
"Gliding motility of *Mycoplasma mobile*"
- 13:40 – 14:10 **Hiroyuki Mori** (Kyoto University, A01)
"Structure and physiological function of SecDF that enhances protein export"
- 14:10 – 14:30 **Kohji Ito** (Chiba University, A03)
"Self-organization of actin filaments of the same polarity by myosin"
- 14:30 – 14:50 **Mitsuhiro Sugawa** (The University of Tokyo, A03)
"Structural changes in F₁-ATPase and actin revealed by single-molecule polarization FRET measurement"
- 14:50 – 15:05 Break
- 15:05 – 15:50 **Session 2 "Special Lecture"** Chair: Makoto Miyata
- Robert Robinson** (IMCB, Singapore)
"The evolution of actin filament systems"
- 15:50 – 16:05 Break
- 16:05 – 17:15 **Session3** Chair: Yoshihiro Fukumori
- 16:05 – 16:35 **Masahiro Ito** (Toyo University, A02)
"Nonconventional cation-coupled flagellar motors derived from the alkaliphilic *Bacillus* and *Paenibacillus* species"
- 16:35 – 16:55 **Ken-ichi Wakabayashi** (Tokyo Institute of Technology, A03)
"Photomovements in *Chlamydomonas* and *Volvox*"
- 16:55 – 17:15 **Daisuke Nakane** (Gakushuin University, A03)
"Co-existence of two chiral helices produces kink translation in *Spiroplasma* swimming"
- 17:15 – 18:45 **Poster session**
- 19:00 – 21:00 Conference dinner Chair: Michio Homma

September 14

- 9:00 – 10:40 **Session 4** Chair: Taro Q.P. Uyeda
- 9:00 – 9:30 **Michio Homma** (Nagoya University, A02)
"Structure and function of the sodium driven flagellar supramolecular motor in marine bacterium *Vibrio*"
- 9:30 – 10:00 **Tohru Minamino** (Osaka University, A02)
"Mechanical communications among stator units coordinate the number of active stators in the bacterial flagellar motor"
- 10:00 – 10:20 **Yosuke Tashiro** (Shizuoka University, A03)
"The unique machinery for bacterial floatation -biogenesis and regulation of gas vesicles-"
- 10:20 – 10:40 **Yusuke V. Morimoto** (Kyushu Institute of Technology, A03)
"Highly-sensitive fluorescence imaging of membrane potential changes involved in signal transduction"
- 10:40 – 10:50 Break
- 10:50 – 12:00 **Session 5** Chair: Koji Nakayama
- 10:50 – 11:20 **Yoshihiro Fukumori** (Kanazawa University, A03)
"Structure and function of magnetotaxis machinery"
- 11:20 – 11:40 **Yoshiaki Iwadate** (Yamaguchi University, A03)
"Two dimensional observation of ciliary metachronal wave on the cortical sheet of a *Paramecium* cell"
- 11:40 – 12:00 **Asako Shindo** (Nagoya University, A03)
"Collective cell movements driven by actomyosin contractility in vertebrate embryos"
- 12:00 – 12:10 Picture time
- 12:10 – 13:10 Lunch break (Administration staff meeting)
- 13:10 – 14:50 **Session 6** Chair: Hiroyuki Mori
- 13:10 – 13:40 **Koji Nakayama** (Nagasaki University, A03)
"The type IX secretion, gliding motility and the type V pilus in *Bacteroidetes* bacteria"
- 13:40 – 14:10 **Taro Q.P. Uyeda** (Waseda University, A03)
"Functional significance of cooperative polymorphism of actin filaments"
- 14:10 – 14:30 **Daisuke Shiomi** (Rikkyo University, A03)
"Assembly, localization, and dynamics of MreB actin in *Escherichia coli*."
- 14:30 – 14:50 **Ryota Uehara** (Hokkaido University, A03)
"Dynamics and function of ERM proteins during cytokinesis in human cells"
- 14:50 - 15:30 **Discussion** Chair: Tohru Minamino
- 15:30 – 15:45 **Review** Chair: Tohru Minamino
- Keiichi Namba** (Osaka University), **Shin'ichi Ishiwata** (Waseda University)
Robert Robinson (IMCB, Singapore)