

# OIIB Summer School 2016

## Observe, Read, Create the Life

### 「生命を観る、読む、創る」

August 18 (Thu) - 19 (Fri), 2016

**Registration**

<https://registration.ims.ac.jp/summer2016/>



**Venue**

Okazaki Institute for Integrative Bioscience (OIIB)  
Yamate campus, 3rd Building, 2F Seminar room  
5-1 Higashiyama Myodaijicho, Okazaki, Aichi, Japan

**Fee**

**Free** (Travel and accommodation expenses will be partially supported)

#### 18 August (Thu)

9:30 Registration

##### Session 1: Single-molecule analysis of biomolecules

10:30 Single-molecule imaging analysis of biological molecular machines

Ryota Iino (OIIB)

11:00 Single molecule study on zero-mode waveguides

Sotaro Uemura (Univ. Tokyo)

12:00 Lunch

##### Session 2: Multicellular systems and cellular networks

13:30 Regulation of learning and memory by mRNA transport and local translation

Nobuyuki Shina (OIIB)

14:00 Molecular dissection of the cell-cell junctions responsible for sealing the intercellular space

Mikio Furuse (NIPS)

15:00 Break

##### Session 3: Quantitative and advanced image analyses

15:30 Single live cell imaging for quantitative biology

Kazuhiro Aoki (OIIB)

16:00 Machine learning-based approaches to decoding biological systems

Shin Ishii (Kyoto Univ.)

17:00 Free Discussion and Banquet

#### 19 August (Fri)

9:00 Lab Tour (including guidance)

12:00 Lunch

##### Session 4: Molecular assembly, boundary between life and matter

13:00 Dynamic ordering of biomolecular and artificial systems

Koichi Kato (OIIB)

13:30 Molecular assembly of viruses: boundaries between life and materials

Kazuyoshi Murata (NIPS)

14:00 Are giant viruses alive or not?

Masaharu Takemura (Tokyo Univ. of Sci.)

##### Session 5: Creation of life from matter

15:00 Constructive biological approach to artificial cell

Kensuke Kurihara (OIIB)

15:30 Construction of minimal cell based on cell-free system

Yutetsu Kuruma (Tokyo Tech)

16:30 Closing Remarks

Kazuhiro Ikenaka (OIIB)

Organizer : Okazaki Institute for Integrative Bioscience (OIIB)  
SOKENDAI "Integrative Bioscience Education Program"

Support : JSPS Grants-in-Aid for Scientific Research on Innovative Areas  
"Dynamical Ordering & Integrated Functions"

主催 : 岡崎統合バイオサイエンスセンター / 総合研究大学院大学「統合生命科学教育プログラム」

後援 : 科学研究費補助金 新学術領域研究「動的秩序と機能」

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