

4 - 9 Aug.
2019



Think Different, Stay Pappara-Pa



The 1st International Training Course for Singularity Biology

Purpose

To acquire the skills indispensable for investigating singularity resides in biological science, the relevant tangible techniques and skills, including, e.g., state-of-the-art microscopy, single cell genomics and machine learning-based image processing, will be trained through workshops, lectures and brainstorming.

Course contents

Practical training

1. Construction of Raman and fiber microscopy
2. Automated in-cell single-molecule imaging system
3. Single cell picking and gene expression analysis
4. Whole-brain imaging and post image processing
5. 4D cell nuclear tracking and cell dynamics analysis
6. Strategies for the Exploration/Exploitation Dilemma
7. Signal processing techniques to biological imaging

Lecture

1. Singularity Biology overview
2. Bioluminescence imaging
3. Onset of the signaling wave at 10,000 cell population
4. Principle and application of single-molecule imaging
5. Singularity in cancer immunology

Design Thinking

Brainstorming to develop an ability to find a "proper question" necessary for outstanding science.

The concept is "Stay Pappara-Pa (foolish in Osaka dialect) to think different"

Eligible Participants

Graduate students, Postdoc/Researcher level who have interests in Singularity Biology. The maximum number is 16.

Period for application

Wed. 5, June – Wed. 26, June, 2019

Participation fee

25,000 JPY
(travel, accommodation and meals not Incl.)

Language

English

Venue

Osaka University Suita Campus and
RIKEN Osaka Campus

For more information and application

<http://singularity-bio.jp/eng/training2019/>

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