## 2024 年度 第3回 生命科学技術国際卓越講義



World-leading Innovative Lectures in Life Science & Technology The University of Tokyo



## Curiosity-Driven Research:

**Constructing and deconstructing RNA granules** 

## Professor Takanari Inoue, Ph.D.

Professor of Cell Biology; Director Center for Cell Dynamics Johns Hopkins School of Medicine

 Date:
 Wednesday, 24th, July, 2024
 Please register by this QR code or clicking the following link

 Time:
 15:30 registration
 Registration

 16:00-17:00 Lecture including Questions and Discussions
 17:00-17:10 Break
 Image: Please registration

 \*17:10-17:40 Interview with students and researchers
 (\*Attending an interview session needs another registration (see your e-mail))
 Image: Please registration (see your e-mail)

 Venue:
 Seminar room No.6, 13F Faculty of Medicine Experimental Research Bldg.
 Image: Please registration (see your e-mail)

 Hongo- Campus, The University of Tokyo (医学部教育研究棟 13 階 第 6 セミナー室)
 Image: Please registration (see your e-mail)

## Abstract:



The function of proteins and nucleic acids within a cell is determined by their primary sequence. Recent work, however, has shown that within living cells the role of many proteins and RNA molecules can be influenced by the physical state in which the molecule is found. More specifically, proteins and RNA molecules can undergo condensation to form nonmembrane-bound structures collectively known as RNA granules. Based on chemical and optical genetics schemes, our group recently developed two distinct molecular techniques to either construct or deconstruct RNA granules including stress granules and pathological condensates related to neurodegenerative diseases. I will introduce how we

designed, developed and implemented such techniques, and share biological insights obtained from the unique probing of these redefined subcellular organizations.

Organizer: World-leading Innovative Graduate Study Program for Life Science and Technology Cooperation: Graduate Program for Leaders in Life Innovation, The University of Tokyo Clinical Research Promotion Center, The University of Tokyo Hospital

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