アドバンス生命理学特論

Topics in Advanced Biological Science

Integrative Graduate Education and Research Program in Green Natural Sciences

IGER Seminar

1. Diaphanous related formin at cleavage furrow during polar body emission

2. Potentiating presynaptic functions by mechanical forces

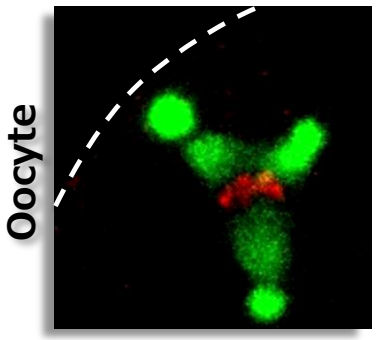
Speaker: Ucar Hasan, Ph.D.

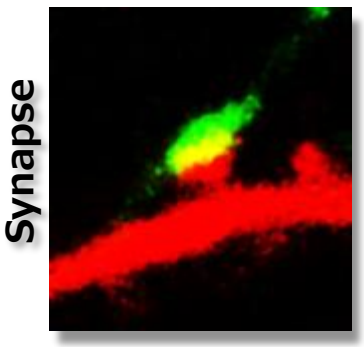
Research fellow, Laboratory of Structural Physiology,
Graduate School of Medicine, The University of Tokyo

In this seminar, I will talk about two distinct studies, each dealing with membrane-related mechanics, in different cell types. First, I will explain how oocytes get ready for fertilization by polar body emission, where cytoplasm is saved for oocyte, and only a tiny volume is sacrificed for chromosome number reduction. I will emphasize roles and regulation of a formin in this process.

In the second part, I will show how mechanical forces enhance communication between neurons in the central nervous system. Under physiological conditions, dendritic spine enlargement exerts a pushing force to presynaptic boutons and displaces them. Our recent findings show that the mechanical displacement at axonal bouton enhances presynaptic activity.

References:
J Cell Sci. 126(Pt 22):5153-65, 2013
Nat. Commun. 6:8531, 2015





IGER NAGOYA UNIVERSITY

博士課程教育リーディングプログラム

Program for Leading Graduate Schools

プラットフォーム System Bio Course

- 日 時 16:00-16:55, Nov 22 (Wed) 2017
- 場 所 理学南館1F セミナー室

お問合わせ先 Makoto Kinoshita E-mail: kinoshita.makoto@c.mbox.nagoya-u.ac.jp (3653)