✱Medical & Life Science Seminar, AY2024 / 2024年度医学・生命科学セミナー✱

Regulation of mitochondrial dynamics and quality control by ubiquitin signaling and related diseases

Lecturer: YANAGI Shigeru

(Professor, Laboratory of Molecular Biochemistry,
Department of Life Science, Faculty of Science, Gakushuin University)

柳 茂 先生

（学習院大学 理学部 生命科学科 分子生化学/教授）

Date: May 15 (Wed) from 5:30 p.m.

令和6年5月15日（水）17:30～

Place: Lecture room 2, Medical Education & Library Building 3F

医学教育図書棟3階 第2講義室

Abstract

Accumulating evidence indicates the physiological significance of mitochondrial dynamics, such as mitochondrial fusion and division, dynamic movement of mitochondria along microtubules, and the interaction of mitochondria with the endoplasmic reticulum (ER). Disruption of mitochondrial dynamics leads to mitochondrial dysfunction, resulting in a variety of diseases, including neurodegenerative disorders and heart failure. We have previously identified MITOL (mitochondrial ubiquitin ligase) localized to the outer mitochondrial membrane and reported that MITOL is an important regulator of mitochondrial dynamics and mitochondrial quality control. The first half of my talk will focus on the roles of MITOL in regulating MAM functions, mitochondrial dynamics, and diseases. The second half of my talk will focus on the anti-aging effects of drugs that activate MITOL expression in mouse models of age-related diseases.

◆Inviter: Professor. Yuichi OIKE (Dep. Molecular Genetics) /尾池　雄一 教授（分子遺伝学）
◆Essay/レポート宛先(To Prof. OIKE)：oike@kumamoto-u.ac.jp
◆Essay/レポート宛先(CC: Student Affairs Sec.／医学教務)：iyg-igaku-3@jimu.kumamoto-u.ac.jp