

# 理学部講演会のご案内

演者：Prof. Doron Rapaport

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日時：10月13日 16時半から

場所：理学部 12 番教室

演題：Biogenesis of mitochondrial outer membrane proteins  
in evolutionary context



## 講演概要：

The mitochondrial outer membrane (MOM) mediates multiple interactions between the mitochondrial metabolic and genetic systems and the rest of the eukaryotic cell. Biogenesis of this membrane involves integration of newly synthesized proteins into the lipid bilayer. Among these precursor proteins are those that span the membrane once, twice or with multiple segments. Our aim is to fully define the biological processes and molecular mechanisms that underlie the biogenesis of MOM proteins. Employing in vitro, in organello and in vivo experiments we could characterize unique import pathways for the various families of MOM proteins. Remarkably, the biogenesis of  $\beta$ -barrel proteins is conserved from Gram-negative bacteria to mitochondria and this conservation allows the organelle to recognize and process bacterial substrates.

