

第 606 回 難 研 セ ミ ナ ー

第 181 回 難治疾患共同研究拠点セミナー

The 592th Medical Research Institute Seminar
The 165th Joint Usage/Research Program of Medical
Research Institute Seminar

日 時 (Date) : 2020 年 1 月 9 日 (木) 17:00 ~19:00

場 所 (Venue) : M&D 7-21 階 大学院講義室 1

演 者 (Lecturer): Dr. Yoshinori Takahashi

Assistant Professor, Department of Pediatrics,
Penn State University College of Medicine

**演 題 (Title): Harnessing Autophagy for Cancer Therapy:
mechanistic insight into the intracellular trash bag
sealing process**

要 旨 (Summary): Autophagy is an intracellular degradation and nutrient recycling process where cytoplasmic components are sequestered into double-membrane vesicles called autophagosomes for lysosomal hydrolysis. This catabolic process is frequently upregulated in many types of cancer cells to sustain their abnormal growth rates and thus has emerged as an attractive target for cancer therapy; however, the molecular mechanisms of autophagosome biogenesis remain far from clear. We have recently developed a robust and high-throughput screen-compatible tool for the analysis of autophagosome completion and characterized genes required for the vesicle closure. In this seminar, I will present the current knowledge of autophagosome formation and discuss the potential benefits of targeting the closure step for cancer treatment.

連絡先 (Organizer): 病態細胞生物学 清水重臣 内線 4692

Co-organizer : 発生再生生物学分野 仁科博史 内線 4659