

9月3日(月) 17:00~

平成30年度「医学特論」(大学院特別セミナー)

日本医科大学 先端医学研究所 病態解析学部門  
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血管新生の蛍光生体イメージング

In vivo fluorescence imaging of angiogenesis

## Abstract

Angiogenesis is the growth of new blood vessels from the pre-existing vasculature. Under physiological conditions, angiogenesis occurs during embryonic development, wound healing and ischemic diseases. It is also implicated in the pathogenesis of various diseases, such as cancer, arthritis, diabetic retinopathy, and macular degeneration. Therefore, the understanding the mechanisms of angiogenesis is important to develop effective vascular regenerative therapy for ischemic diseases and anti-angiogenic therapy for pathological angiogenesis-associated diseases. However, it remains unclear how cellular and morphological processes are coordinated to establish vascular networks during angiogenesis *in vivo*. To address this question, we have developed a fluorescence-based bio-imaging technique using zebrafish as a model animal and investigated the mechanisms underlying regulation of developmental angiogenesis. In addition, we have recently established a novel live-imaging technique for adult zebrafish and analyzed angiogenic processes during cutaneous wound healing. In this seminar, we will present our recent progress on the mechanisms of developmental angiogenesis and wound-induced angiogenesis, and introduce how fluorescence-based bio-imaging technique is useful for studying medical and life sciences.

どなたでもお気軽にご参加できます！

場所：薬学部研究棟Ⅱ 7階 セミナー室8