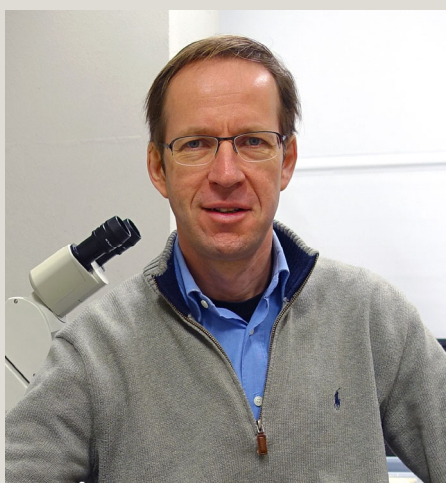




日本医科大学
NIPPON MEDICAL SCHOOL

令和5年度 日本医科大学 先端医学研究所 公開セミナー

Organo-typical control of angiogenesis in the nervous system



Prof. Ferdinand le Noble

Zoological Institute
Dept. of Cell and Developmental Biology
Karlsruhe Institute of Technology (KIT),
Germany

日時：令和6年2月13日（火）
16:00-17:00

会場：日本医科大学 大学院棟
演習室3（地下2階）

During evolution, higher vertebrates developed intricately branched vascular networks that perfuse organs according to a form follows function principle. However, the molecular and cellular substrates that add organ specificity to the vascular growth and patterning process are largely unknown. Vascular endothelial growth factor (Vegf) and its receptors are key-regulators of developmental angiogenesis and branching remodeling in most organs including pancreas, liver, skeletal muscle, heart, brain and peripheral nervous system. How this relatively limited set of molecules can account for the great diversity in organ vessel patterning is unknown but considered clinically relevant for designing organo-typical pro- and anti-angiogenic therapies. Through systematic comparison of angiogenic remodeling in a range of tissues, using a series of zebrafish growth factor mutants and transgenics we identified tissue-specific cellular and molecular heterogeneity in the Vegf driven angiogenic remodeling process, to be at the basis of organo-typical formation of vascular networks. Here we will present the specific findings for the developing nervous system.

事前登録なしで、どなたでもご参加いただけます

お問い合わせ先：
先端医学研究所 病態解析学部門
福原 茂朋
TEL: 03-5814-6843
E-mail: s-fukuhara@nms.ac.jp