

Anatomy and Embryology

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Other Faculty Members

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Major Scientific Interests of the Group

We are working on the functional analysis of transcription factors in the body by employing developmental engineering techniques such as the generation of transgenic mice.

Projects for Regular Students in Doctoral or Master's Programs

- 1) Molecular mechanism of the development of pancreatic endocrine cells and macrophages. We are researching the molecular mechanisms of the development of pancreatic endocrine cells and macrophages by analyzing the function of the large Maf family of transcription factors. In both human and mouse, four large Maf transcription factors, MafA, MafB, c-Maf and Nrl, have been identified.
- 2) Analysis about in vivo functions of sugar chains on molecules. In addition to these themes, we are also analyzing functions of sugar chains on molecules in vivo by using genetically manipulated mice.

Study Programs for Short Stay Students (one week – one trimester)

- 1) Histological analysis of genetically manipulated mice.
- 2) Handling skill for mouse embryos.

Selected Publications

- 1) Tran MTN, et al. MafB is a critical regulator of complement component C1q. *Nat Commun.* 8, 1700, 2017.
- 2) Hamada M, et al. MafB promotes atherosclerosis by inhibiting foam-cell apoptosis. *Nat Commun.* 5, 3147, 2014.