



CDB SEMINAR

Yasuhide Furuta

Department of Biochemistry and Molecular Biology,
University of Texas, M.D. Anderson Cancer Center

Wednesday, August 15

17:00~18:00 A7F CDB Conference Room

BMP Signaling in Eye Development: from Induction to Visual Function

Summary

Research in our laboratory is aimed at elucidating the role of secreted signaling molecules and their signaling pathways during embryonic organ formation. One area of studies is focused on understanding the process of visual system development in vertebrates. Our recent studies using transgenic and gene targeting approaches have demonstrated essential roles of bone morphogenetic proteins (Bmps), members of the TGF β superfamily of secreted signaling molecules, in multiple distinct aspects of eye development; ranging from lens induction/differentiation, retinal patterning/growth/ differentiation, and neuronal connection to the brain. Current studies have also uncovered potential cooperation of Bmp signaling with other signaling pathways, including those of fibroblast growth factors (Fgfs), during eye development. The seminar will summarize recent progress of these studies and their potential significance in understanding of the molecular mechanisms underlying construction of functional vision.

Host:

Shinichi Aizawa

Animal Resources and
Genetic Engineering,
CDB

saizawa@cdb.riken.jp

Tel: 078-306-3149
(ext: 4301)

RIKEN CENTER for DEVELOPMENTAL BIOLOGY (CDB)