

## Speaker:

## Mikiko Tanaka

< University of Oregon, Institute of Neuroscience >

## Title: "Establishment of the vertebrate body plan in relation to limb formation"

- Date: Monday, December 15
- Time: 3:30 P.M. ~4:30 P.M.
- Place: 7th floor Conference Room, Building C

## Summary:

A fundamental question is how limbs develop in the correct shape and correct time in the vertebrate body. Humans have two pairs of limbs along sides of the body and fossil evidence shows that these evolved from paired fins of ancestral fish. Why do paired fins/limbs arise in these locations and not anywhere in the flank? Experiments show that chick and mouse flank have the ability to form ectopic limbs and the mechanisms to position limbs seems to be conserved between various animals. This body plan seems to be inherited from the ancestral vertebrate that had only one pair of lateral fins.

I have performed embryological analyses using chick, mouse and dogfish embryos and formulated a model for evolution of vertebrate paired appendages.

Host : Kiyokazu Agata Evolutionary Regeneration Biology, CDB

E-mail: agata@cdb.riken.go.jp Tel: 078-306-3085(Ext.4530) RIKEN Center for developmental Biology http://www.cdb.riken.go.jp/