



CDB SEMINAR

Speaker: **Frank S. Walsh, Ph.D.**
< Executive Vice President, Discovery Research Wyeth Research >

Title: "Myostatin: A Modulator of Skeletal Muscle Stem Cells"

Date:	Tuesday, March 15
Time:	16:00 - 17:30
Place:	7F Conference Room of Building A, CDB

Summary:

There has been considerable interest in a recently described inhibitor of muscle growth, myostatin, or growth/differentiation factor 8 (GDF-8), which belongs to the transforming growth factor superfamily of secreted proteins that control the growth and differentiation of tissues throughout the body. The myostatin gene is expressed almost exclusively in cells of skeletal-muscle lineage throughout embryonic development as well as in adult animals and functions as a negative regulator of muscle growth. In adult animals, myostatin appears to inhibit the activation of satellite cells, which are stem cells resident in skeletal muscle.

The function of myostatin appears to be conserved across species, since mutations in the myostatin gene have been shown to be responsible for the "double-muscling" phenotype in cattle. He reports the identification of a myostatin mutation in a child with muscle hypertrophy, thereby providing strong evidence that myostatin does play an important role in regulating muscle mass in humans.



Host: **Masatoshi Takeichi** <Cell Adhesion/Tissue Patterning, CDB >
E-mail: takeichi@cdb.riken.jp Tel: 078-306-3119 (ext:1323)