



# CDB SEMINAR

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**Title:** “ Molecular mechanisms specifying muscle-identity and myotube number in the *Drosophila* adult “

**Date:** Friday, November 14

**Time:** 16:00 P.M. ~ 17:00 P.M.

**Place:** 7th floor Conference Room of Building A, CDB

## Summary

Muscles, quite often, are composed of myotubes, each a multinucleate fibre. What determines muscle identity and myotube number? Examples from adult muscle development in *Drosophila* suggest molecular and cellular mechanisms that may be of general value. It appears that muscle identity is specified by the expression of specific transcription factors in myoblasts. We suspect that the initial expression of these factors is by lineage- dependent mechanisms, but the maintenance of their expression requires signalling, by Wingless, from the ectoderm. Fibre number appears to be specified by the number of special cells-- founders-- chosen not by lateral - inhibition as they are in the embryo, but by another signalling mechanism, perhaps FGF.