

Speaker: Konrad Basler

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Title: "Patterning and growth in *Drosophila* limb development "

Date: Thursday, November 27

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

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

Summary

Growth and patterning of *Drosophila* limbs are organized by the BMP homolog Decapentaplegic (Dpp). Secreted by a stripe of cells in the center of imaginal discs, Dpp induces the transcription of different target genes at distinct threshold concentrations. An important, albeit indirect, mode by which Dpp controls the spatial extent of its targets is via the graded downregulation of *brinker*, whose product in turn negatively regulates the expression of these targets.

During this process cells appear to compete with one another, possibly for extracellular survival factors such as Dpp. Evidence is presented that d-Myc stimulates such competition and that elevated d-Myc levels transform cells into 'super-competitors', which cause surrounding cells with normal d-Myc expression to undergo apoptosis.

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