

Signalling and Cellular Inputs to Spatial Patterning of the Skin

Denis Headon

Roslin Institute, University of Edinburgh
<http://www.roslin.ed.ac.uk/denis-headon/>

Úterý 18. dubna

10.00 - 11.00

v místnosti **T-112** na katedře matematiky

Fakulta jaderná a fyzikálně inženýrská ČVUT
Trojanova 13, 12000 Praha

Abstract: The embryonic skin rapidly produces a repeating pattern of hair or feather follicles as it develops. We are interested in understanding how this spatial periodicity is achieved. I will describe the process of pattern formation in avian and mammalian skin and present what we understand about the integration of cell signalling and cell movement during spatial organisation of the follicles. The results support the operation of a reaction-diffusion system in producing a template to guide cell movement for hair follicle formation. However, in other situations we find that cell movement can play a direct role in pattern formation, without recourse to a prepatterned molecular template