



# Novel approach in systems biology for understanding tissue homeostasis

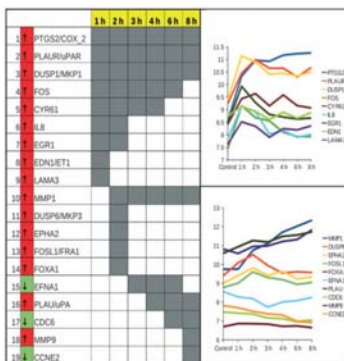
GUEST LECTURE by



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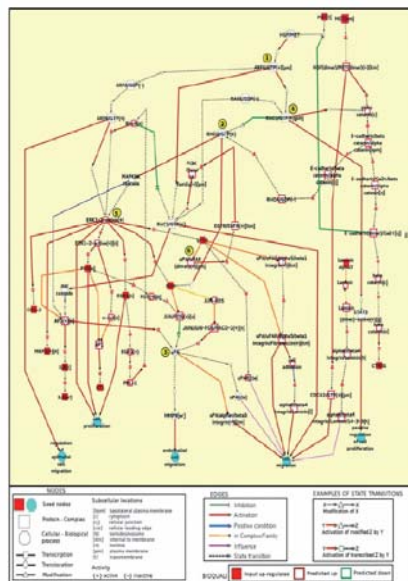
Friday, 24.08.2012  
9:00h

Department of Pathology, Lecture Hall  
Auenbruggerplatz 25, ground floor



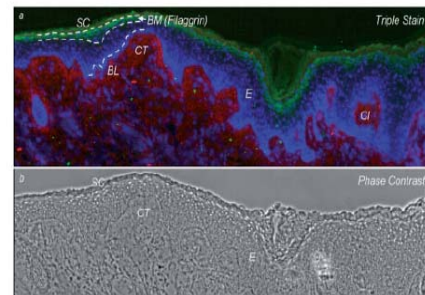
▲ Differentially expressed (DE) protein nodes.

Receptor-signalling-transcription-cell State network from the Pathway Interaction Database explaining the up-regulated genes induced after HGF stimulation.

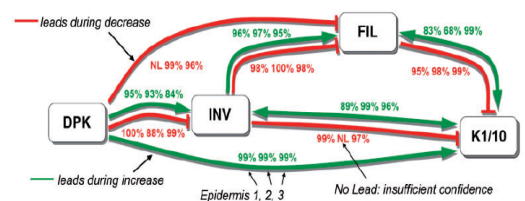
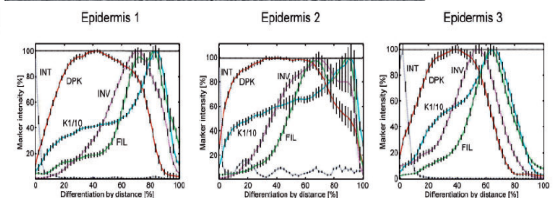


**Automatic generation of causal networks linking growth factor stimuli to functional cell state changes.**

M. Guziolowski et. al.; Febs J (2012) in press



◀ Exemplary fluorescent three color image of human epidermis with the according phase-contrast image.



▲ Reconstructing the regulatory network from quantitative spatial profiles.

**Reconstructing protein networks of epithelial differentiation from histological sections.**

N. Grabe et. al.; Bioinformatics 23(23):3200–3208