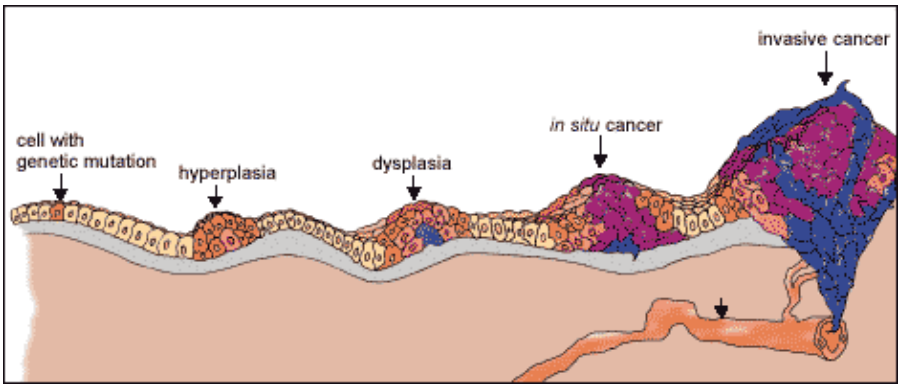
INVITATION TO SEMINAR (SS 08)

PRINCIPLES OF BIOLOGICAL DEVELOPMENT: REGENERATION AND CANCER



OBJECTIVE

Biological development typically starts from a single fertilized cell, follows a precisely regulated sequence of steps and finally leads to an intricate pattern of differentiated tissues in the adult organism. It has turned out that biological development can be interpreted as cooperative phenomenon emerging in a system of interacting cells and molecules. Accordingly, mathematical modelling is essential to understand key steps such as signalling, differentiation and growth control. In this seminar, we are focusing on the developmental dynamics of organ regeneration and cancer progression. By means of talks, discussions and computer simulations, key questions and corresponding mathematical models will be introduced.

The seminar is intended for undergraduate and graduate students in mathematics, biology, physics, medical or computer sciences who are interested in this highly interdisciplinary application field.

TIME AND LOCATION

The seminar will take place on 4 Friday afternoons 13.00-16.00:
April 25, May 30, June 27, July 11
Location: INF-1096, Computer Science Dept. of TU Dresden at Nöthnitzer Str. 46

KICKOFF MEETING AND DISTRIBUTION OF TALKS

April 25, 13.00-14.00

ORGANIZERS

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SEMINAR WEBSITE

http://www.tu-dresden.de/zih/lehre/bio/ss2008_sem

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