

## CCSS Colloquium

# Size matters! Growth, Innovation and the Pace of Life: is it Sustainable?

**Prof. Geoffrey B. West**

Santa Fe Institute, Santa Fe, USA

A general framework, successfully developed for understanding "universal" scaling laws in biological phenomena, will be extended to social organisations in an attempt to reveal general principles of organization, structure and dynamics.

We shall show that scaling laws, analogous to those in physiological traits, are manifested in social organisations, suggesting that there are general principles of organization, structure and dynamics common, for example, to all cities reflecting a "universal" underlying social network structure. We shall address questions such as: are social organisations "just" an extension of biology, and to what extent is a city, for example, a very large organism?

These scaling laws have dramatic implications for growth, the pace of life, development and sustainability: innovation and wealth creation that fuel social systems, if left unchecked, potentially show the seeds for their inevitable collapse.

**When?** Tuesday, 6 May 2008, 13.15 – 14.45

**Where?** ETH Zürich, RZ F 21, Clausiusstrasse 59