UNIVERSITY OF CALIFORNIA, SAN DIEGO · EXTENSION

Systems Biology & Bioengineering

July 6-8, 2005

Gain an advanced understanding of the cutting-edge field of Systems Biology!

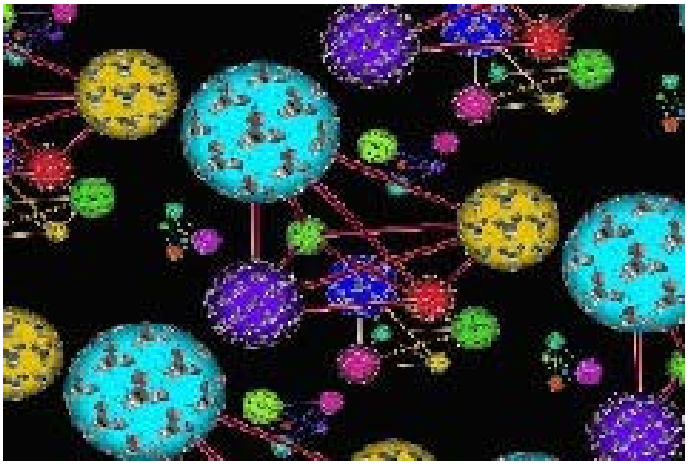
Dr. Bernhard Palsson, renowned scientist and professor of Bioengineering at UCSD, partners with UCSD Extension's Bioscience Department to present this 3-day intensive course focused on helping current university faculty, life-science researchers, and others gain an advanced understanding of the cutting-edge field of systems biology. Through the combination of lecture and lab based instruction, participants will explore the molecular- and engineering-levels of biology and gain a thorough understanding of the developments in this new field.

The course focuses on:

- Reconstructing biochemical reaction networks using heterogeneous data sources
- Characterizing the topological properties of the reconstructed networks
- Determining the functional states of networks and how to compare computation with experimental results

The program includes:

- The various high-throughput data types, how they are generated, and interpreted
- The heterogeneous high-throughput data types and how they are used to reconstruct cellular reaction networks
- The representation of network reconstructions as chemically and genetically structured databases
- The way to mathematically represent reconstructed networks
- The capabilities and properties of networks and how they are analyzed
- Analyzing the structural, steady state and dynamic properties of networks
- The public and commercial software packages are used for such analysis



Date/Time:
July 6-8, 2005
8:00 a.m.-5:00 p.m.

Location:
UCSD Extension, Sorrento Mesa Center
Cingular Wireless Building
Room 112
6925 Lusk Blvd.
San Diego, CA 92121

Fee:
$1195
(Includes continental breakfast, lunch, and course materials.)

Instructor:
Bernhard Palsson, Ph.D., is a Professor of Bioengineering and Adjunct Professor Medicine at UCSD. He is an inventor of over 20 U.S. patents, many of which are in the area of hematopoietic stem cell transplantation, bioreactor design, gene transfer, high-throughput single cell manipulation, network reconstruction, in silico model building and metabolic engineering. He is the founder/co-founder of: AASTROM BIOSCIENCES, ONCOSIS, CYNTELLECT, GENOMATICA, and the Iceland Genomics Corporation.

Information:
Call Essy Levy at (858)-622-5736 or e-mail etlevy@ucsd.edu.

To enroll:
Call (858)-534-3400 or visit www.extension.ucsd.edu/registration.
Section ID #: 051129

UCSD EXTENSION
extension.ucsd.edu