

Winter 2015

UCLA

Biochemistry Seminar Series



Dr. Ralph Bock

Professor and Director, Department of Organelle Biology,
Biotechnology and Molecular Ecophysiology, Max Planck Institute for
Molecular Plant Physiology, Potsdam-Golm, Germany

Presents

“Genes Gone Wild: Experimental Evolution Meets Synthetic Biology”

In my talk, I will describe experimental approaches to study genome evolution in real time. I will discuss three fundamental processes in eukaryotic genome evolution and show how they can be reconstructed in laboratory experiments: (i) the transfer of organellar (plastid and mitochondrial) genes to the nuclear genome, (ii) the conversion of transferred organellar genes into functional nuclear genes, and (iii) the movement of genetic material between plants by horizontal gene and genome transfer. Finally, I will show how horizontal genome transfer can be employed as a versatile tool in plant biotechnology and synthetic biology.

Host: Dr. Daniela Strenkert, Postdoctoral Fellow, Merchant Group, danielas@chem.ucla.edu, 825-3661

Friday, January 16, 2015

3:30 p.m.

in 3440 Molecular Sciences

For more information about this seminar series, contact Penny Jennings, 310-825-7071, penny@chem.ucla.edu