



המכון
ללימודים
מתקדמים
The Institute
for Advanced
Studies



**VICTOR ROTHSCHILD MEMORIAL SYMPOSIA
JOINT COST NANONET TRAINING SCHOOL
ISRAELI SCIENCE FOUNDATION**

**ISRAEL INSTITUTE FOR ADVANCED STUDIES
AT
THE HEBREW UNIVERSITY**

**The 20th Jerusalem School in Life Sciences
Nuclear Organization, Dynamics
and Activity**

July 22 – 26, 2012

**Directors: Roger Kornberg (Stanford University)
Yosef Gruenbaum (The Hebrew University)**

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PROGRAM

Sunday July 22

- 08:45 – 09:45 Registration and hanging of posters (IAS lobby)
- 09:45 – 09:50 Welcome and acknowledgments
- 09:50 – 10:00 Greetings
- 10:00 – 11:15 **Opening lecture**
Roger Kornberg (Stanford University)
Chromatin Structure and Transcription
- 11:15 – 11:45 Coffee break

A) Structural Aspects of the Nucleus

- 11:45 – 12:45 Ohad Medalia (U. Zurich, BGU)
Structural Analysis of the Nuclear Envelope Revealed by Cryo-Electron Tomography
- 12:45 – 12:55 Greetings by Lea Prawer (IAS Associate Director)
- 12:55 – 14:15 Lunch
- 14:15 – 15:15 Ivan Raska (Charles University)
Hunt for the Polycomb Group Proteins (PcG) Bodies in the Amazon Chromatin Forest
- 15:15 – 15:45 Coffee break
- 15:45 – 16:45 Howard Cedar (The Hebrew University)
Programming of DNA Methylation during Development
- 16:45 – 18:30 Poster Session I and School Reception at IAS lobby

Monday July 23

B) The Periphery of the Nucleus

- 09:00 – 10:00 Robert Goldman (Northwestern U.)
The Nuclear Lamins: Building Blocks of Nuclear Structure and Function
- 10:00 – 10:30 Coffee break
- 10:30 – 11:30 Yasushi Hiraoka (Osaka University)
The Nuclear Envelope in Meiosis
- 11:30 – 12:30 Roland Foisner (Medical University, Vienna)
The Lamina and Nucleoplasmic Lamins in Chromatin Organization and Gene Expression
- 12:30 – 13:30 Brian Burke (A Star, Singapore)
The LINK Complex
- 13:30 – 15:00 Lunch
- 15:00 – 16:00 Katherine Wilson (Johns Hopkins School of Medicine)
Biochemistry and Regulation of the LEM-domain Protein Emerin
- 16:00 – 16:30 Coffee break

C) Nuclear Bodies

- 16:30 – 17:30 Angus Lamond (University of Dundee)
The Nucleolus; Past, Present and Future
- 17:30 – 18:30 Ivan Raska (Charles University)
Where are the Christmas Trees in the Nucleolus?

Speakers' dinner at Brasserie restaurant

Tuesday July 24

D) RNA Dynamics and Processing

- 09:00 – 10:00 Robert Singer (Einstein College of Medicine)
Counting Single RNA Molecules
- 10:00 – 10:30 Coffee break
- 10:30 – 11:30 Ruth Sperling (The Hebrew University)
*Nuclear Pre-mRNA Processing within a Giant
Multifunctional RNP Machine*
- 11:30 – 12:30 Gil Ast (Tel Aviv University)
*The Intersection between Chromatin Organization
and Alternative Splicing*
- 12:30 – 14:00 Lunch
- 14:00 – 15:00 Angus Lamond
*Protein Dynamics/Proteomics/the Future of Cell Biology
in the Post-genome Age*
- 15:00 – 16:00 Nir Friedman (The Hebrew University)
Exploring Transcriptional Regulation
- 16:00 – 18:00 Poster Session II

Speakers' dinner at Ima restaurant

Wednesday July 25

E) Chromatin Organization

- 09:00 – 10:00 Tom Misteli (NIH)
Nuclear Architecture: From Fundamentals to Disease
- 10:00 – 10:30 Coffee break
- 10:30 – 11:30 Martin Hetzer (The Salk Institute)
The Discovery of Extremely Long-lived Proteins in the Brain and their Role in Aging and Disease
- 11:30 – 12:30 Batsheva Kerem (The Hebrew University)
Chromosome Instability and Fragile Sites
- 12:30 – 13:30 Susan Gasser (The FMI for Biomedical Research)
Nuclear Changes during Development
- 13:30 – 15:00 Lunch
- 15:00 – 16:00 Eran Meshorer (The Hebrew University)
Chromatin Plasticity in Pluripotent Stem Cells
- 16:00 – 16:30 Coffee break
- 16:30 – 17:30 Yehudit Bergman (The Hebrew University)
Epigenetics of the Hematopoietic Cell System
- 17:30 – 18:30 Ido Amit (Weizmann Inst.)
"Principles of dynamic gene regulation in mammals"

Speakers' dinner at Colony restaurant

Thursday July 26

F) Structural Aspects of the Nucleus

09:00 – 10:00	Dirk Goerlich (MPI, Goettingen) <i>Mechanisms of Nuclear Transport</i>
10:00 – 10:30	Coffee break
10:30 – 11:30	Ueli Aebi (University of Basel) "Actin in and out of the nucleus - from structural plasticity to functional diversity"
11:30 – 12:00	Coffee break
12:00 – 13:30	lunch
13:30 – 18:00	Tour of the Old City of Jerusalem
18:30	Farewell dinner at Eucalyptus restaurant