

Program for ILASOL 2006

January 4th, 2007 at the Weizmann Institute of Science, Botnar Auditorium (Belfer Building).

8:30 – 9:00 *Registration and coffee*

9:00-9:05 **Opening Remarks** - Doron Lancet (WIS)

Session 1: Evolution - Eörs Szathmáry, chair

9:05-9:35 Eva Jablonka (TAU)

Epigenetic inheritance in early evolution.

9:35-9:55 Emmanuel Tannenbaum (BGU)

Selective advantage for sexual reproduction.

9:55-10:15 Irit Davidson (Kimron Veterinary Institute)

Generation of diversity in viruses due to molecular recombination between animal viruses and between plant and animal viruses: lessons to be learned from the avian world.

10:15-10:30 *Coffee break*

Session 2: Plenary

10:30-11:30 Eörs Szathmáry (Collegium Budapest)

Metabolists, Geneticists, Compartmentalists, Unite!!!

Session 3: Astrobiology - Gidi Fleminger, chair

11:30-12:10 Akiva Bar-Nun (TAU)

a. How good is our understanding of comets.

b. Titan's Chemistry.

12:10 -12:35 Joe Gale (HUJI)

Problems of teaching multidisciplinary Astrobiology.

12:35 -13:00 Iris Fry (Technion)

Stanley Miller's life and work - Reflections on the state of a scientific discipline.

13:00 – 14:00 Lunch

Session 4: Early Genes - Eva Jablonka, chair

14:00-14:25 Ohad Carny (TAU)

Molecular co-evolution and the emergence of LUCA.

14:25- 14:50 Idan Gabdank (BGU)

Duplex nature of the earliest mini-genes.

Session 5: Thermodynamics - Doron Lancet, chair

14:50 -15:15 Avshalom Elitzur and Goren Gordon (WIS)

The Ski-Lift: A Ubiquitous Biological Pathway between Thermodynamic States.

15:15 - 15:35 Ora Kedem (BGU,WIS)

Primordial active transport.

15:35 - 15:45 **Discussion on thermodynamic principles.**

15:45 - 16:00 Oleg Kupervasser (Technion)

What is life?

16:00 – 16:15 *Coffee break*

Session 6: Lipid World - Barak Shenhav, chair

16:15-16:35 Tony Futerman (WIS)

The Lipid World model for the origin of life: Sticky questions about sticky problems.

16:35-16:50 Barak Shenhav, Aia Oz and Doron Lancet (WIS)

Lipid World – Responses and discussion.

Session 7: Closing

16:50-17:20 Malcolm E. Schrader (HUJI)

Evolution and the Bible: The Non-Traditional Approach.