

## **Autumn Retreat 2009**

### **Balatonföldvár**

Program

#### **Friday, Nov 27**

##### **Session 1: Keynotes Chair: Mihály Kovács**

9:45-9:55 Mihály Kovács: Welcome, overview and perspectives

9:55-10:25 Miklós Kellermayer: Keynote messages

##### **Session 2: Molecular biophysics Chair: Miklós Kellermayer**

10:40-10:55 Ricardo Pires: Mechanisms of transthyretin amyloid fibrillogenesis

10:55-11:10 Zsolt Mártonfalvi: Manipulation of the giant muscle protein titin with force-clamp optical tweezers

11:10-11:25 Balázs Kiss: Nanomechanics of desmin intermediate filaments

11:25-11:40 Tamás Bozó: Liposomes as drug delivery vehicles

11:40-11:55 Mátyás Kolsofszki: Thermal stability of the amyloid beta25-35 fibrillar network

##### **Session 3: Structural dynamics of macromolecules Chair: András Málnási-Csizmadia**

12:10-12:25 István Lőrincz: Protein backbone rotational dynamics

12:25-12:40 Anna Rauscher: Internal friction in protein conformational changes

12:40-12:55 Zhenhui Yang: Structural modeling of the lever arm swing in actomyosin

13:00-14:30 *Lunch*

##### **Session 4: Methodical developments Chair: András Málnási-Csizmadia**

14:30-14:45 Boglárka Várkuti: Gene gun in *C. elegans*

14:45-15:00 Balázs Jelinek, László Végner: Lab robot

15:00-15:15 Miklós Képíró: Synthesis of photoinducible molecules

##### **Session 5: Drug design Chair: Péter Hári**

15:30-16:00 Péter Hári: Overview of drug design projects

16:00-16:15 Vitalii Stadnyk: Human dopamin receptors in *C. elegans*

16:15-16:30 Margit Smeller: PCA analysis of drugs processed in MIF

16:30-16:45 Ágnes Peragovics: PCA analysis of proteins processed in MIF

16:45-17:00 Zoltán Simon: Our drug design approaches

17:00-19:00 *Jacuzzi*

19:00- *Dinner and wine tasting*

#### **Saturday, Nov 28**

8:00-10:00 *Breakfast*

##### **Session 6: Nucleic acid motors Chair: Mihály Kovács**

10:00-10:15 Kata Sarlós: Progress on the RecQ helicase mechanism

10:15-10:30 Gábor Harami: Cooperation between RecQ helicase and SSB protein in genome maintenance

10:30-10:45 Máté Gyimesi: Analytical method for determination of functional parameters of nucleic acid motors

10:45-11:00 Zsuzsa Kocsis: Functional and mechanistic differences between ssDNA- and dsDNA-translocating motors

##### **Session 7: Motivational discussions Chair: András Málnási-Csizmadia**

11:15-12:30 András Málnási-Csizmadia:  $\Psi$

12:30- *Lunch*