

Protein folds in infectious and neurodegenerative diseases

Aussois (Savoie), France, 25-29 April 2009

Deadline for application: February 15, 2009

Chair: Alasdair C. STEVEN Bethesda, USA

Vice-Chair: Andrey V. KAJAVA Montpellier, France

Invited Speakers

Susan BUCHANAN (Bethesda, USA) Patricia CLARK (South Bend, USA) Andrea DESSEN (Grenoble, France) Joel JANIN (Orsay, France) Andrey KAJAVA (Montpellier, France) Ralf LANGEN (Los Angeles, USA) Sonia LONGHI (Marseille, France) Eckhard MANDELKOW (Hamburg, Germany) Michael ROSSMANN (West Lafayette, USA)

Beat MEIER (Zürich, Switzerland) Anna MITRAKI (Heraklion, Greece) Alexey MURZIN (Cambridge, UK) Ruth NUSSINOV (Frederick, USA/TelAviv, Israel) Louise SERPELL (Sussex, UK) Anne POUPON (Nouzilly, France) Sheena REDFORD (Leeds, UK) Felix REY (Paris, France) Human REZAEI (Jouy-en-Josas, France)

Rob RUIGROK (Grenoble, France) Sven SAUPE (Bordeaux, France) Robert SECKLER (Potsdam, Germany) Alasdair STEVEN (Bethesda, USA) Joel SUSSMAN (Rehovot, Israel) Peter TOMPA (Budapest, Hungary) Vladimir UVERSKY (Indianapolis, USA) Vincent VILLERET (Lille, France)

2009

The past few years have seen an efflorescence of information on the 3D structures of virulence factors, toxins, and adhesins of pathogenic bacteria and viruses, as well as of prion and amyloid fibrils. It has also become apparent that many natively unfolded protein regions represent precursors to many of disease-related folds outlined above. This conference will focus on the structures, stability, functions and pathogenicity of these folds. It will bring together a critical mass of internationally recognized experts who will lead discussions that are intended to distinguish the characteristic structural features of the pathogenic folds, chart their notable diversity, dissect their sequence-structure relationships, and explore novel pathways to drug and vaccine discovery.

The conference will have four sessions:

- 1). Structures of virulence- and infectivity-associated proteins of microbial pathogens and their commonality with amyloid fibrils; strategies of drug and vaccine development.
- 2). Process and end-products of amyloidogenesis; new approaches to obtain structural details of amyloid fibrils; prediction of amyloidogenic regions; strategies for the development of inhibitors of fibrillogenesis.
- 3). Viral surface proteins; their roles in membrane fusion and infection; survey of pathogenic and toxic proteins in general.
- Properties of natively unfolded protein regions as precursors 4). of disease-related folds.

The conference will be held in Aussois which is a ski resort situated close to Modane in the Maurienne Valley between Chambery (France) and Torino, (Italy).

Registration fee (including board and lodging)

* 385 € for PhD students * 575 € for other participants

Application for registration

The total number of participants is limited to about 115 and participants are expected to attend for the duration of the conference. Selection is made on the basis of the affinity of potential participants with the topics of the conference. Scientists and PhD Students interested in the meeting should send:

- * their curriculum vitae (students only) * the abstract of their presentation

to the Vice-Chair (andrey.kajava@crbm.cnrs.fr) before the deadline. Except in some particular cases approved by the Chairperson, it is recommended that all selected participants present their work during the conference, either in poster form or by a short platform talk (to be selected from abstracts). No payment should be sent with application. Information on how and when to pay will be mailed in due time to those selected.

INFORMATION

Secrétariat des conférences Jacques-Monod, CNRS, Département Sciences du Vivant 3, rue Michel-Ange, F-75794 Paris Cedex 16, France; Phone: +33 2 47282611; E-mail: conf.monod@cnrs-dir.fr http://www.cnrs.fr/sdv/cjm/