“Structural Glycosciences”

Winter Training School
COST Action CM1102 : MultiGlycoNano
« Multivalent Glycosystems for Nanoscience »

4 – 6 november 2013, Grenoble, France

Venue: ESRF / ILL / IBS / CERMAV

Description:
This workshop will give young scientists an integrative/multidisciplinary overview of the different approaches that can be used for characterizing the three-dimensional structures of glycans, glycoconjugates or protein/glycoconjugates complexes. Current methods for analyzing the kinetics and thermodynamics of the interaction between a glycoconjugate and a protein receptor will also be covered.

Scientific committee:
Anne Imberty, CERMAV
Serge Pérez, CERMAV
Franck Fieschi, IBS

Organizing committee:
Annabelle Varrot, Aymeric Audfray, Julie Arnaud, João Ribeiro (CERMAV)
Olivier Renaudet, Baptiste Thomas, Marie Monestier (DCM)
Antoine Royant, Isabelle Petit-Hartlein, Vanessa Porkolab, Michel Thépaut (IBS)
PROGRAM:

Monday 4th November 2013 / CERMAV (University Campus)

13:30- Registration

Chairman: Christelle Breton

14:00-14:15 - Opening and Welcome

Christelle Breton: Opening as head of the Grenoble doctoral school in Chemistry and Life Science
Bruce Turnbull: COST-CM1102 Chair
Anne Imberty: Local organization

14:15-14:45 - Lecture 1. Introduction – Protein carbohydrate interactions
Anne Imberty (CERMAV-Grenoble)

14:45-15:30 - Lecture 2. : Protein-sugar Interaction: Surface Plasmon Resonance
Nicole Thielens (IBS-Grenoble)

15:30-16:30 - Attendees Flash Presentations (3 minutes / 3 slides) 15 presentations

16:30-16:50 - Coffee break

Bruce Turnbull (University of Leeds)

17:35-18:45 - Attendees Flash Presentations (3 minutes / 3 slides) 20 presentations

19:30 - Get together (wine and cheese party) with all participants

Tuesday 5th November 2013 / Site of ESRF-ILL-IBS

8:30 Meeting at ILL/ESRF gate for passing security check (so 8H30 SHARP !!)

Chairman: Annabelle Varrot

8:45 - Welcome by Andrew Harrisson (Director of ILL) / Amphitheater Chadwick

9:00-9:30 - Lecture 4. Monosaccharides to polysaccharides – structural introduction
Serge Pérez (CERMAV-Grenoble)

09:30-10:15 - Lecture 5. X-ray crystallography or protein/carbohydrate complexes
Bauke W. Dijkstra (ESRF- Grenoble)

10:15-10:35 - Coffee break

Antoine Royant (IBS- Grenoble)

11:15-11:55 - Lecture 7. Application of neutron diffraction to glycosciences
Trevor Forsyth (ILL-Grenoble)

12:00-12:10 - Group photo

12:10-13:00 - Buffet lunch /IBS2

13:00-15:20 - Practicals at IBS2 (to be chosen in a list of 5 possibilities)

15:30-18:00 - Visit of ESRF (with beam line to be chosen in a a list of 3 possibilities)
Wednesday 6th November 2013 / CERMAV (University Campus)

Chairman: Olivier Renaudet

9:00-9:45 - Lecture 8. Molecular modeling: building carbohydrate and docking in receptor sites
Alessandra Nurisso. (University of Geneva)

9:45-10:30 - Lecture 9. NMR as tool to decipher "sweet " words between microbe and host
Antonio Molinaro (University of Napoli)

10:30-10:55 - Coffee break

Franck Fieschi (IBS – Grenoble)

11:40-12:30 - Questions and discussion

12:30-13:00 - Evaluation of workshop

13:15-14:15 - Lunch (Cafeteria near CERMAV)

14:15-14:45 - Handling of attendance certificates / Concluding remarks