

# WORKSHOP

## “STRUCTURAL GLYCOSCIENCE”

GRENOBLE, 28<sup>th</sup> JUNE and 30<sup>th</sup> JUNE 2016

Glycoscience is a rapidly expanding and exciting field that is relevant to many areas of chemistry, biology and medicine. Structures of Glycan or Protein/Glycans complexes are of direct importance since they are key structural elements in cell and in signalling events on their surface.

The workshop will introduce and train young scientists, from a chemistry or biology background, in the most up-to-date approaches for determining the structural and dynamic properties of carbohydrates, glycan binding receptors, and analysis of their complexes.

This workshop will be validated by 2 credits by the EDCSV doctoral school.



INSTITUT DE BIOLOGIE STRUCTURALE (IBS)



ESRF/ILL

### Confirmed Speakers

**Dr Christine EBEL** IBS (Grenoble, France)

**Pr Antonio MOLINARO** University of Napoli (Napoli, Italy)

**Dr Antoine ROYANT** ESRF (Grenoble, France)

**Pr Bruce TURNBULL** University of Leeds (Leeds, UK)

**Dr Trevor FORSYTH** ILL (Grenoble, France)

**Pr Jaroslav KOČA** Masaryk University (Brno, Czech Rep.)

**Dr Serge PEREZ** DPM (Grenoble, France)

**Dr Nicole THIELENS** IBS (Grenoble, France)

**Dr Guy SCHOEHN** IBS (Grenoble, France)

**Pr Michaela WIMMEROVA** Masaryk University (Brno, Czech Rep.)

**Deadline for registration : 29 April 2016**



Surface Plasmon  
resonance



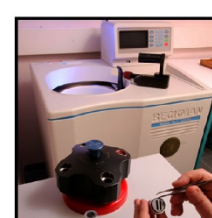
RMN 950 MHz



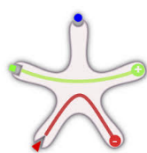
Electron  
Microscopy



ITC



Analytical  
Ultracentrifugation



<http://immunoshape.eu>  
“Development of selective  
carbohydrate immunomodulators  
Targeting C-type Lectin receptors on  
antigen presenting cells”



**Bison**

Scientific committee:  
Franck Fieschi  
Anne Imberty  
Serge Perez

Contact and Information:  
Gwendoline Vallez  
gwendoline.vallez@ujf-grenoble.fr



## Workshop Preliminary Program

**Tuesday 28<sup>th</sup> June 2016**

Morning: Arrival of participants.

Registration from 10h30 to 12h in IBS entrance hall.

*Lunch at the ESRF restaurant*

13h30 Welcome by local university & research institutes colleagues

Introduction by the Organisers.

14h15 *Dr Serge Pérez* - From monosaccharide to polysaccharides, from structures to database 3D

15h15 *Dr Christine Ebel* - Solution studies : Analytical ultracentrifugation, SAXS, SANS, MALS

*Coffee Break.*

16h30 Poster Session

19h *Wine & Cheese party*

**Wednesday 29<sup>th</sup> June 2016**

8h30 *Dr Antoine Royant* – Protein crystallography and kinetic crystallography : a case study with a glycosyl transferase

9h10 *Dr Trevor Forsyth* - Application of neutron diffraction to glycoscience

*Coffee Break*

10h05 *Dr Nicole Thielens* - Protein-sugar interaction: Surface Plasmon Resonance

11h00 *Pr Bruce Turnbull* - Protein-sugar interactions: IsoThermal Micro-Calorimetry

*Lunch at the ESRF restaurant*



## Workshop Preliminary Program

**Wednesday 29<sup>th</sup> June 2016**

### **Practicals (visits and/or demonstration)**

13h30-14h00 *Visiting center of ESRF : presentation of the Synchrotron.*

Practicals are organized for 40 participants in two parallel sessions :

- Visit of a beamline at the ESRF + Visit of IBS platform (NMR, MS and EM)
- One practical among a group of 3 possibilities : SPR (N°1), ITC (N°2), or AUC (N°3). Attendees will have to choose 1 activity among the 3 proposed.

14h15-16h15 Group 1 – ESRF beamline/ IBS (platforms) / Group 2 - IBS practicals

*Coffee Break / Site Change*

16h45-18h45 Group 2 – ESRF beamline/ IBS (platforms) / Group 1 - IBS practicals

*Gala Diner*

**Thursday 30<sup>th</sup> June 2016**

8h30 *Pr Antonio Molinaro* – NMR of oligosaccharide and protein oligosaccharide complex

9h10 *Pr Jaroslav Koča* - Structural Bioinformatics and Molecular Modeling

*Coffee Break.*

10h05 *Dr Guy Schoen* – Electron microscopy : new opportunities

10h45 *Closing Seminar* – Michaela Wimmerova- title to be defined.

11h30 Delivering Certificates of attendance

11h45 Concluding remarks.

*Lunch-End*

**Scientific committee :** Anne Imberty, Serge Perez, Franck Fieschi

**Organizing committee :** Michel Thépaut, Jérôme Dupuy, Corinne Vives, Isabelle Petit Haertlein, Silvia Achilli (IBS); Annabelle Varrot (CERMAV)



# WORKSHOP

## “STRUCTURAL GLYCOSCIENCE”

### Registration Form

- Registration is free but participants are limited to 40.
- Lunches, gala diner, coffee breaks are provided.

**First Name:** ..... **Name:** .....

**Age:** ..... **Nationality :** ..... **Organization:** .....

**Date of birth:** ..... **Place of Birth:** .....

**Address:** .....

**Postal code:** ..... **Location:** ..... **Country:** .....

**Email:** ..... **Tel:** .....

**Position:** PhD ☐ Post-doc ☐ Others ☐

**Name of the principal investigator of the group:**

**Order of preference for practicals** (label from 1 to 3, maximum to minimum interest):

SPR: ITC: AUC:

I want to candidate for a Poster presentation : ☐ Yes ☐ No

I want to participate to the Gala diner : ☐ Yes ☐ No

Indicate any diet requirement for Lunches: .....

#### Include with the application the following documents:

- short curriculum vitae
- a letter of interest for the workshop
- an abstract of your poster (for selection)

This form and the corresponding documents should be sent by e-mail before  
**the 29<sup>th</sup> of April to:**

Gwendoline Vallez : [gwendoline.vallez@ujf-grenoble.fr](mailto:gwendoline.vallez@ujf-grenoble.fr)

#### Contacts for information:

Dr Corinne Vives: [corinne.vives@ibs.fr](mailto:corinne.vives@ibs.fr)

Dr Annabelle Varrot (CERMAV-CNRS): [varrot@cermav.cnrs.fr](mailto:varrot@cermav.cnrs.fr)

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