



FRISBI user meeting

December 13, 2018, CNRS Campus Gif/Yvette

User Committee members : Xavier Manival, Aurélie Albertini, Françoise Guerlesquin, Laurent Terradot, Yves Mechulam, Lionel Mourey, Marc Delarue, Michael Nilges, Eric Durand

Executif Committe members : Gilles Labesse, Alain Roussel, Jean-Baptiste Charbonnier, Yves Bourne, Bruno Klaholz, Cécile Breyton, Julie Ménétrey, Jean Cavarelli, Marie-Christine Poterszman

Apologies: Stéphane Betzi, Darren Hart, Clotilde Policar, William Bourguet

137 participants

The day was organized with scientific presentation from users having access on the FRISBI infrastructure (see the program in annex).

Participation of Bruno Robert (Director of GIS IBiSA, Infrastructure in Biology, Health & agronomy) to the Introduction, some points:

- IBiSA had the mission to collect several national roadmaps for different scientific communities. The “National Roadmap for Integrated Structural Biology” was coordinated by FRISBI. The roadmap including FRISBI centers, IBiSA plaforms and non IBiSA structures was submitted in November 2018.
- All the national infrastructures will have an international evaluation in 2019, this evaluation is key for the future of the IR.
- He pointed out the importance of the user committee feedback for the future of the IR, including potential future funding. There are discussion with the minister to fund the IR after 2019.
- There are discussions for a future call PIA3 (Projet d’Investissement d’Avenir) “Structuring Equipment”. If a call with funding is open France cryo-EM is a good project.



Minutes of the General Discussion

Laurent Terradot presented results of the survey organized by the user committee.

The user committee has organized an online survey aiming to consult the user community to:

- 1) Prepare the next annual FRISBI user day on December 13
- 2) Improve the FRISBI platforms
- 3) Prepare the future of FRISBI

The survey was open for 7 weeks from October 1, to November 19, 2018. 108 people have answered the survey. The results are summarized on the ppt in annex.

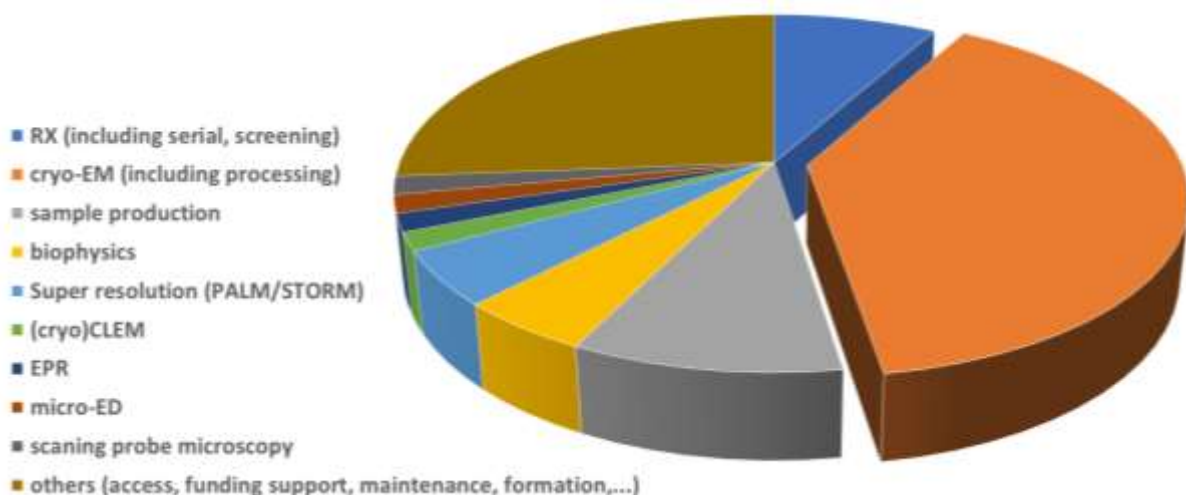
It appears that mostly people having access on the FRISBI infrastructure have participated to the survey, for a future survey this point has to be improved to aim all the community including people having not access to FRISBI.

In summary people are globally satisfied of FRISBI in term of access (quality of service, expertise, delay of access, access payment), in term of training and in term of communication with the Hub.

Concerning the question: **What should be the priorities for the years coming?** The first priorities (see the figure below) are for:

- 1) Development for Cryo-EM (including processing)
- 2) Others including access, funding support, maintenance, training
- 3) Development for sample preparation

Followed by X-ray (including serial, screening), super resolution (PALM/STORM), biophysics





The participants ask the FRISBI committees: What can the national scientific community do to push our government to fund the France-cryo-EM project?

A letter signed by the national scientific community could be sent to our ministry and tutelles.

Question concerning the increasing of FRISBI centers.

There are several points:

- The five FRISBI centers will be evaluated by the FRISBI SAB in January 2019
- FRISBI is discussing to identify technologies which are missing in the current infrastructure. The idea is to open a call with criteria of service technologies, scientific expertise, and open access
- The future of FRISBI after the international evaluation in 2019: FRISBI is aiming to continue and is in contact with the ministry and tutelles for funding after 2019 to maintain and develop the activities of the infrastructure.

What is the relationship with industry?

FRISBI is open to industry.

FRISBI needs to push and develop contact with industry to have access from industry.

An idea is to invite industry to the next FRISBI user committee in 2019.

Next FRISBI user committee?

A discussion is open to FRISBI to join the National Congress on Integrative Structural Biology co-organized by AFC/SFB in Toulouse in October 7-11, 2019 and have time dedicated with the national user community.

AFC: French Association for Crystallography

SFB: French Society for Biophysics



Program 4rd FRISBI Users Meeting

Thursday December 13, 2018 – CNRS Campus Gif sur Yvette

09.00 - 09.45 *Registration*

09.45 – 10.00 Welcome/Introduction (Bruno Robert et Bruno Klaholz)

10.00 - 10.45 **Sample Preparation** (moderator Marc Delarue / Xavier Manival)

10.00 - 10.10 Working Group Sample Preparation, **Renaud Vincentelli**, AFMB, Marseille

10.10 - 10.25 Deciphering the structure and function of lipid transporters after overexpression in *Saccharomyces cerevisiae*, **Cédric Montigny**, I2BC, Gif/Yvette

10.25 - 10.40 Biophysical determinants of the adhesion strength of gap junctions, **Arin Marchesi**, Inserm U1067, Marseille

10.45 - 11.30 **Crystallography** (moderator Laurent Terradot / Aurélie Albertini)

10.45 - 10.55 Working Group Crystallography, **Gilles Labesse**, CBS, Montpellier

10.55 – 11.10 Getting the structure of transfer proteins to map lipid roads throughout the cell, **Guillaume Drin**, IPMC, Sophia-Antipolis

11.10 – 11.25 Cracking the N-Myristoylation code at structural and genome scales, **Cyril Dian**, I2BC, Gif/Yvette

11.30 - 12.15 **Biophysical characterization** (moderator Lionel Mourey)

11.30 - 11.40 Working Group Biophysical characterization **Christine Ebel**, IBS, Grenoble

11.40 - 11.55 Use of Analytical centrifugation to understand the complex interaction relationships within DBHS proteins **Sébastien Fribourg**, ARNA Inserm U1212, Bordeaux

11.55 - 12.10 Mechanistic investigation of a fluorescent protein suggests how to rationally engineer a super-resolution microscope **Dominique Bourgeois**, IBS, Grenoble

12.15- 13.00 **Poster session**

13.00-14.10 *Lunch*

14.15 - 15.00 **NMR** (moderator Michael Nilges / Françoise Guerlesquin)

14.15 - 14.25 Working Group NMR **Carine Van Heijenoort**, ICSN, Gif/Yvette

14.25 - 14.40 Fluoroprolines as a tool to explore Intrinsically Disordered Regions of Proteins by NMR, **Davy Sinnaeve**, UGSF, Lille

14.40 - 14.55 Combining xtallography, cryo-EM and NMR to study the trigger for siphophage DNA ejection, **Cécile Breyton**, IBS, Grenoble

15.00 - 15.45 **Electron microscopy** (moderator Yves Mechulam / Eric Durand)

15.00 - 15.10 Working Group EM **Bruno Klaholz**, IGBMC, Strasbourg

15.10 - 15.25 Structure of the type 6 secretion system, dissecting its components by cryo-EM **Chiara Rapisardia**, IECB, Bordeaux

15.25 - 15.40 Maturation of small ribosomal subunits followed by cryo-EM analysis, **Célia Plisson**, LBME, Toulouse

15.45-16.45 **General discussion**