PROJECT PROPOSITION - Lab1- 2023

(M1, second semester)

Supervisor(s): Emmanuel Margeat

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Hosting lab: CBS

Period of proposed project (put **x** instead of □) :

□ Only 1st slot

□ One slot, but I have no preference on which

X Only 2nd slot

□ Both slots (with different groups)

1st slot: 12 days to be selected later between 1/16/2023 to 2/24/2023- see next page for info
2nd slot: 12 days to be selected later between 3/6/2023 to 5/12/2023- see next page for info

Measuring fluorophore properties at low concentration : toward structural biology with single molecule FRET

Subject (5 lines max for the description)

The objective of the project is to establish a method to measure the quantum yield of fluorophores attached to proteins with Fluorescence Correlation Spectroscopy. The aim is to use this information to convert the information from smFRET experiments to interfluorophore distances, for the determination of the structure of macromolecular complexes.

Technical tools to be used:

Ensemble absorbance and fluorescence spectroscopy on microplate reader
Fluorescence correlation spectroscopy
Data analysis

Objectives:

Establish a method to dermine fluorescence quantum yield at low concentration
Compare with established standards
Apply to distance measurements by smFRET on metabotropic glutatamte receptors.

		Lundi	Mardi	Mercredi	Jeudi	Vendredi
Periode 1	16 au 20/01					
	23 au 27/01					
	30/01 au 03/02					
	06 au 10/02					
	13 au 17/02					
	20 au 24/02					

		Lundi	Mardi	Mercredi	Jeudi	Vendredi
Periode 2	06 au 10/03					
	13 au 17/03					
	20 au 24/03					
	27 au 31/ 03					
	03 au 07/04					
	10 au 14/04					
	17 au 21/04					
	24 au 28/04					
	02 au 05/05					
	08 au 12/05					