FRET by all means

Nov 12. – Nov 13., 2026
IMCF at BIOCEV, Průmyslová 595, Vestec

Program

Thursday, Nov 12.

09:00 – 09:10 Welcome and introduction of organizers
Aleš Benda

09:10 – 09:40 General principles of Forster Resonance Energy Transfer
Dalibor Pánek

09:40 – 10:30 How to image FRET? Part I.
Aleš Benda, Piotr Jurkiewicz

10:30 – 10:45 Coffee break

10:45 – 11:10 How to image FRET? Part II.
Aleš Benda, Piotr Jurkiewicz

11:10 – 11:40 FRET by flow cytometry
Ondřej Honc

11:40 – 12:30 Typical applications of FRET
Petra Prokšová

12:30 – 13:30 Lunch

13:30 – 17:00 Hands-on – 1st round

Flexible Coffee break

The course is supported by the National Infrastructure for Biological and Medical Imaging (Czech-BioImaging, Ministry of Education, Youth and Sports – Large Research Infrastructure, LM2023050).

Hands-on sessions:

1. **Spinning disc** – Dalibor Pánek and Petra Prokšová – ***FRET by sensitized emission and acceptor photobleaching*** on Nikon CSU-W1
2. **Confocal** – Aleš Benda and Piotr Jurkiewicz – ***FLIM-FRET*** on Leica SP8
3. **Flow cytometry** – Ondřej Honc – ***FRET using flow cytometry*** on BD LSRFortessaTM SORP and Cytek® Aurora

		Group 1	Group 2
Thursday Nov 12	1st round	Confocal	Flow cytometry
Friday Nov 13	2nd round	Flow cytometry	Spinning disc
	3rd round	Spinning disk	Confocal

Friday, Nov 13.

09:00 – 12:30 Hands-on – 2nd round
Flexible Coffee break
12:30 – 13:15 Lunch

13:15 – 13:45 Absolute FRET quantification in real experiments
Ondřej Havránek

13:45 – 17:30 Hands-on – 3rd round
Flexible Coffee break plus feedback form

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