



**OIC Course Functional Imaging and Super Resolution  
Rotterdam  
November 8-12, 2021**

TOPICS:	Time Lapse, Lightsheet, FRAP, FRET, FLIM, Single Molecule Localization, SIM, STED, Fluorescent Proteins, Quantitative Data Analysis, and more	
Organizers:	Adriaan Houtsmuller, Gert van Cappellen and Gert-Jan Kremers, Erasmus OIC, Erasmus MC	
Participants:	PhD's, Postdocs, anyone interested	
Venue:	Erasmus MC Rotterdam	
Registration:	<a href="https://erasmusoic.nl/phd-msc-bsc-courses/phd-course">https://erasmusoic.nl/phd-msc-bsc-courses/phd-course</a>	
Costs:	MGC, ONWAR	0 €
	Others (PhD students, Post-docs)	300 €
	Others non-commercial participants	300 €
	Lectures only	0 €

This five day course consists of lecture sessions in the morning and practical sessions in the afternoon. On Monday and Thursday there will also be evening sessions with a dinner. In the final session on Friday afternoon participants will present and discuss the results of their practical work. The practical sessions can be attended by a maximum of 25 participants (5 groups of 5 participants).

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## Program

### Monday 8/11

<u>Registration</u> (Room ???)		9:00 – 9:30
<u>Lectures</u>		
Introduction	Gert van Cappellen, OIC	9:30 – 10:20
Probes for microscopy	Gert-Jan Kremers, OIC	10:20 – 11:10
Coffee/Tea break		11:10 – 11:30
Correlated light and electron microscopy and ColorEM	Ben Giepmans, UMCG	11:30 – 12:20
Lunch		12:30 – 14:00
<u>Practical work</u>		
Hands-on Introduction	OIC-team	14:00 – 16:00
Coffee/Tea break		16:00 – 16:15
Time Lapse Microscopy	OIC-team	16:15 – 17:30
<u>Evening Session:</u>	Participants and OIC	18:00 – 21:00
Dinner in “de Machinist”		
Short introduction by participants (one minute pitch)		

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# Functional and Super Resolution Imaging

## Tuesday 9/11

### Lectures (Room Ce-244)

FLIM/FRET	Jan Willem Borst, WUR	9:30 – 10:20
FRAP	Adriaan Houtsmuller, OIC	10:20 – 11:10
Coffee/Tea break		11:10 – 11:30
Optogenetics	Jeffrey van Haren, EMC	11:30 – 12:20
Lunch		12:30 – 13:30

### Practical work

FRAP		13:30 – 15:15
Coffee/Tea break	Coffee/Tea break	15:15 – 15:45
FRAP		15:45 – 18:00

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## Wednesday 10/11

### Lectures (Room Ae-406)

Multi-photon and Ca <sup>2+</sup> Imaging	Aaron Wong, EMC	9:30 – 10:20
SIM, STORM, STED	Johan Slotman, OIC	10:20 – 11:10
Coffee/Tea break		11:10 – 11:30
Artificial Intelligence in image segmentation	Daniel Bemmerl, Olympus	11:30 – 12:20
Lunch		12:30 – 13:30

### Practical work

SIM/STED/RCM/Lightsheet/SpinSR		13:30 – 15:30
Coffee/Tea break		15:30 – 16:00
SIM/STED/RCM/Lightsheet/SpinSR		16:00 – 18:00

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# Functional and Super Resolution Imaging

## Thursday 11/11

### Lectures (Room OWR-5)

ImageJ / FIJI	Gert van Cappellen, OIC	9:30 – 10:10
Coffee/Tea break		10:10 – 10:30
Data analysis	OIC team	10:30 – 12:15
Lunch		12:15 – 13:00

### Practical work

Demo: SIM/STED/RCM/Lightsheet/SpinSR	OIC team	13:00 – 15:00
Coffee/Tea break		15:00 – 15:15
Data analysis	OIC team	15:15 – 18:00
Dinner + Data Analysis	OIC team	18:00 – 20:00

## Friday 12/11

## Seminar and Presentations by Participants

### Lectures (Room Ce-244)

Preparation presentations		09:30 – 12:15
Lunch		12:15 – 13:00
Presentations by participants ( <u>5 groups; 15 minutes each + 5 minutes discussion</u> )		13:00 – 15:00
Keynote presentation	TBA	15:00 – 16:00
<u>Goodbye Drinks/Snacks</u>		16:00

## Sponsors

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