



2nd cryoNET course on advanced single particle cryoEM analysis

Dates: 20-24 May 2024

Venue:
SciLifeLab, Solna

Organising committee

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Tutors assisting organizers and speakers during the course

Mathieu Coinçon, Stockholm University
Daniel Larsson, Uppsala University
Michael Hall, Umeå University
Dustin Morado, Stockholm University
Piotr Draczkowski, Stockholm University
Tim Schulte, Stockholm University
Stefan Fleischmann, Stockholm University

Course program

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20-24 May 2024

	Monday, 20 May	Subject	Venue
8h30	<i>Coffee/tea, poster hang-up & name tags</i>		<i>Air & Fire</i>
9h00	Welcome by organizers	Opening remarks & practicalities	<i>Air & Fire</i>
9h05	Katerina Naydenova (MRC Laboratory of Molecular Biology)	<i>"Microscopy physics and image formation"</i>	<i>Air & Fire</i>
10h20	<i>Coffee/tea break</i>		<i>Air & Fire</i>
10h50	Katerina Naydenova (MRC Laboratory of Molecular Biology)	<i>"Specimen preparation for cryoEM"</i>	<i>Air & Fire</i>
11h45	Ben Apker MiTeGen	<i>"Tools and instruments for cryo-EM sample preparation" -Zoom talk</i>	<i>Air & Fire</i>
12h30	<i>Lunch & coffee/tea break</i>		<i>Air & Fire</i>
13h45	Oliver Clarke (Columbia University Medical Center)	<i>"Dealing with difficult datasets: understanding and overcoming heterogeneity in cryoEM data using cryoSPARC"</i>	<i>Lunch room G2</i>
	Oliver Clarke (Columbia University Medical Center)	Practical session	<i>Lunch room G2</i>
15h30	<i>Coffee/tea & cake break</i>		<i>Lunch room G2</i>
16h00	Oliver Clarke (Columbia University Medical Center)	Practical session	<i>Lunch room G2</i>
17h15	Tour of cryoEM facilities		
19h00	Speaker/organizer/tutors dinner <i>Course participants dine on their own</i>	Aifur- Västerlånggatan 68	

	Tuesday, 21 May	Subject	Venue
9h00	Ambroise Desfosses IBS, Grenoble	<i>Helical processing</i>	<i>Air & Fire</i>
10h00	<i>Coffee/tea break</i>		<i>Air & Fire</i>
10h30	Ambroise Desfosses IBS, Grenoble	<i>Helical processing- Practical session</i>	<i>Air & Fire</i>
12h00	Group photo		<i>Air & Fire</i>
12h30	<i>Lunch & coffee/tea break</i>		<i>Air & Fire</i>
13h45	Björn Forsberg (University of Oxford)	<i>Relion theory: “Practical perspectives and tools for cryo-EM analysis”</i>	<i>Lunch room G7</i>
15.15	<i>Coffee/tea & cake break (when it suits in the practical session)</i>		<i>Lunch room G7</i>
	Björn Forsberg (University of Oxford)	Practical session	<i>Lunch room G7</i>
17h15	Poster session <i>with snacks & drinks</i>	<i>Group A presents their poster</i>	<i>Air & Fire</i>
18h30	<i>Free time</i>		

	Wednesday, 22 May	Subject	Venue
9h00	Rubén Sanchez-Garcia (University of Oxford)	<i>"Map postprocessing with deepEMhancer (and others)"</i>	<i>Air & Fire</i>
10h00	<i>Coffee/tea break</i>		<i>Air & Fire</i>
10h30	Rubén Sanchez-Garcia (University of Oxford)	<i>Practical session</i>	<i>Air & Fire</i>
11h30	Oliver Raschdorf (Thermo Fisher Scientific)	<i>"Optimizing cryo-EM Data Collection with Energy Filter and Direct Electron Detector"</i>	<i>Air & Fire</i>
12h30	<i>Lunch & coffee/tea break</i>		<i>Air & Fire</i>
13h45	Jack Turner (EMBL's European Bioinformatics Institute)	<i>"EMDB & EMPIAR - Archiving of EM data"</i>	<i>Air & Fire</i>
15h15	<i>Coffee/tea & cake break</i>		<i>Air & Fire</i>
15h30	Jose Miguel de la Rosa Trevin (St. Jude Children's Research Hospital)	<i>EMHub and on-the-fly processing</i>	<i>Air & Fire</i>
16h30	Jose Miguel de la Rosa Trevin (St. Jude Children's Research Hospital)	<i>EMHub and on-the-fly processing</i> <i>Practical session</i>	<i>Air & Fire</i>
17h30	<i>Free time / walk to restaurant</i>		
19h00 - 21h30	<i>Course dinner</i>	<i>Ethiostar -Saltmätargatan 19A</i>	

	Thursday, 23 May	Subject	Venue
9h00	Bernhard Lohkamp (Karolinska Institutet)	<i>"Cryo-EM model-building with Coot"</i>	<i>Air & Fire</i>
10h00	<i>Coffee/tea break</i>		<i>Air & Fire</i>
10h30	Bernhard Lohkamp (Karolinska Institutet)	Practical session	<i>Air & Fire</i>
12h00	<i>Lunch & coffee/tea break</i>		<i>Air & Fire</i>
13h15	Brady Johnston (University of Western Australia)	<i>"Blending Proteins: Democratising Access to Beautiful Molecular Landscapes"</i>	<i>Air & Fire</i>
	<i>Short break</i>		
14h15	Brady Johnston (University of Western Australia)	<i>"Making Movies with Blender and Molecular Nodes"</i> Practical session	<i>Air & Fire</i>
15h15	<i>Coffee/tea break</i>		<i>Air & Fire</i>
15h45	Rishwanth Raghu Princeton University	cryoDRGN	<i>Air & Fire</i>
	Ryan Feathers Princeton University	<i>"CryoDRGN: Heterogeneous reconstruction for cryo-EM"</i> Practical session	<i>Air & Fire</i>
17h45	Poster session <i>with snacks & drinks</i>	<i>Group B presents their poster</i>	<i>Air & Fire</i>
19h00	<i>Free time</i>		

	Friday, 24 May	Subject	Venue
9h00	Gerhard Hofer, (Stockholm University)	MicroED	<i>Air & Fire</i>
10h00	<i>Coffee/tea break</i>		<i>Air & Fire</i>
10h30	Gerhard Hofer, (Stockholm University)	MicroED - Practical session	<i>Air & Fire</i>
12h30	<i>Lunch & coffee/tea</i> <i>Thanks for now & goodbye</i> <i>Poster take-down</i>	<i>Sandwiches and coffee/tea</i>	<i>Air & Fire</i>

cryo
NET

*Knut och Alice
Wallenbergs
Stiftelse*

 SciLifeLab

novo nordisk
fonden


Stockholms
universitet



AARHUS UNIVERSITET


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ThermoFisher
SCIENTIFIC

MiTeGen