

DANISH BIOIMAGING NETWORK NEWSLETTER

November 2018: Highlight

NETWORK NEWS

If you still have not participated, please support our new initiative and answer the survey (it takes 1 minute):

We would like to share knowledge in our bioimaging communities. Therefore, we would like to ask you to participate in a very short survey: [Topics you are interested to learn about, see the technique and participate in workshops](#)

Contact Us

info@danishbioimaging.dk

Next Cross-institutional course will take place in the fall semester 2019.

The **Cross Institutional Bioimaging Ph.D. course** will be given by a series of lecturers who are experts within each their field of bioimaging. The course will take place at different institutions to expose the students to different research groups, researchers and experimental research facilities.

The course is relevant for PhD students within medicine, physics, chemistry, biochemistry, molecular biology, nano-bioscience, pharmaceutical sciences, agricultural science or biology. The emphasis of the course is a tour of all bioimaging techniques available in Denmark and will cover subjects like live cell imaging, spinning disk microscopy, electron microscopy, photoactivated localization microscopy, single particle techniques, structured illumination, stimulated emission depletion microscopy, imaging of neurons and cell migration. The course is 10 ECTS points.

More info can be found on the [course webpage](#)

To sign up for the course, please email vita@sdu.dk

CONFOCAL SUPER RESOLUTION

OLYMPUS

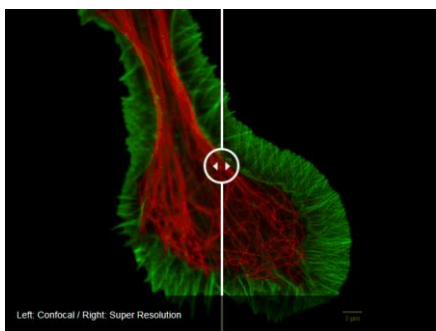


Image courtesy of: Dr. Kaoru Katoh, Biomedical Research Institute, National Institute of Advanced Industrial Sciences and Technology (AIST)

For all live cell samples

- Super resolution down to 120nm XY resolution
- Prolonged cell viability in confocal time-lapse imaging
- Switch between wide-field, confocal and super-resolution observations
- Accurate 3D reconstruction with Olympus silicone oil immersion objectives



Live Cell/
Time-Lapse



3D



High Speed
Confocal



Low
Phototoxicity



Automated
Microscopy



Multi-Channel
Fluorescence



Learn more:

[Laser Scan Confocal](#) | >>

Learn more:

[Spinning Disc Confocal](#) | >>

For more information on our special LSM campaign, call

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Ph.D, Specialist
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There is one advertisement slot in each newsletter, contact info@danishbioimaging.dk to book it.

Cross institutional Bioimaging course program, Fall semester 2019

Date	Title	Location
Monday September 9	Fluorescence Microscopy, two photon and Image Analysis	SDU
Monday September 16	Confocal Microscopy	KU
Monday September 23	Non-invasive imaging modalities (PET-SPECT-CT-R)	SDU/OUH
Monday September 30	Live imaging in yeast, plants and mammalian cells	KU
Monday October 7	Image Analysis	KU
Monday October 21	Single particle & Fluorescent Proteins	AU
Monday October 28	Super-resolution, STED, ICS and Raman	SDU
Monday November 4	Image analysis	DTU
Monday November 11	EM	KU
Monday November 18	Preparation for the exam	Home :)
Monday November 25	Evaluation and Student Talks	KU/SDU

OPEN CALLS (NEW SECTION AT THE WEBPAGE)

- [Janelia Research Campus Undergraduate Scholars Program](#): All living expenses including housing, food, and travel to and from Janelia are covered by the program. Students also receive a stipend of \$5,000 for the 10-week period.
- **#LOCAL** [DBI Open Call 2018/19](#) to promote interactions between network members, for example for courses, meeting and seminars. Applications are welcome for 3.000 – 10.000 DKK.
- [Short Term Scientific Missions \(STSMs\) to support Early Career Investigators \(ECIs\) and Experienced BioImage Analysts](#), NEUBIAS. Applications reviewed at the end of each month.

COURSES (MORE ONLINE)

- **#LOCAL** [Biophotonics PhD course](#), Odense, January 21-25
- [10-Day Practical Course on Advanced Optical Microscopy for Cell Biology](#), Plymouth, UK, March27-April6, 2019
- [Confocal Microscopy Course](#), York, UK, April 2-5, 2019
- [High-Accuracy CLEM: Applications at Room Temperature and in cryo](#), Heidelberg, Germany, April 7-14, 2019
- **#LOCAL** [Cross Institutional Bioimaging PhD course](#), September-November 2019

CONFERENCES AND WORKSHOPS (MORE ONLINE)

- **#LOCAL** [Membrane Imaging: Structure and Dynamics in cells and models](#), December 4, 2018. SDU, Odense, Denmark
- **See EMBL Annual poster in the end of the newsletter**
- [The 3rd NEUBIAS Conference](#), February 2-8, Luxembourg

- [18th Annual Workshop on FLIM and FRET Microscopy](#), March 11-15, Charlottesville, USA
- [Focus on Microscopy 2019](#), London, UK, April 14-17, 2019
- [Frontiers in Imaging Science II](#), Janelia, May 5-8, 2019, Ashburn, VA, USA
- [Seeing is Believing – Imaging the Molecular Processes of Life](#), Heidelberg, Germany, October 9-19, 2019
- #LOCAL [EMC 2020 – European Microscopy Congress 2020](#), Copenhagen, August 23-28, 2020

SEMINARS

- #LOCAL [Superresolution and nanoparticles](#), Mærsk tårnet, KU 20th November 2019

JOB OPPENING

- [Investigator – Cryo-EM Image Analysis](#), Madison, USA
- [Image analyst / Light microscopy specialist](#), Munich, Germany
- For more position visit https://www.danishbioimaging.dk/?post_type=jobs

WORK GROUPS CONTACT INFORMATION

WG1: Image Analysis tools and data management

Sune Darkner, DIKU – darkner(at)di.ku.dk

WG2: Pre-clinical imaging

Eastern Denmark: Henrik El Ali, KU – helali(at)sund.ku.dk

Western Denmark: Michael Pedersen, AU – michael(at)clin.au.dk

WG3: Electron Microscopy

Casper Hempel, DTU, Nanotech – cash(at)nanotech.dtu.dk

Alexander Shulz, KU-SCIENCE – als(at)plen.ku.dk

WG4: Light Microscopy

Aarhus/Aalborg – Morten Nielsen, AU – mn(at)biomed.au.dk

Odense – Jonathan Brewer, SDU – brewer(at)memphys.sdu.dk

WG5: Correlation and connectivity please come forward if you would like to join

WG6: Training and knowledge exchange

Jutta Maria Bulkescher, SUND-KU – jutta.bulkescher(at)sund.ku.dk

DBI coordinator: Vita Solovyeva vita(at)sdu.dk

EMBL 2019

Courses and Conferences

JANUARY

14 – 18 Jan • EMBL Course
Advanced Training with Oxford Nanopore Technologies

22 – 23 Jan • EMBL Course
Bioinformatics for Discovery

29 – 31 Jan • EMBL Course
Exploratory Analysis of Biological Data: Data Carpentry

FEBRUARY

3 – 8 Feb • EMBL Course
Analysis and Integration of Transcriptome and Proteome Data

5 – 8 Feb • EMBL Course
Introduction to Metabolomics Analysis

6 – 8 Feb • EMBL Industry Workshop
Cryo-EM in Industry and Academia

12 – 15 Feb • EMBL Course
Introduction to Multiomics Data Integration

26 – 28 Feb • EMBL Course
Bioinformatics Resources for Protein Biology

MARCH

4 – 8 Mar • EMBL Course
Immunoprofiling of Single Cells

7 – 9 Mar • EMBL–Wellcome Genome Campus Conference
Proteomics in Cell Biology and Disease Mechanisms

11 – 15 Mar • EMBL Course
Data Visualisation

11 – 15 Mar • EMBL Course
Target Engagement in Biology and Drug Discovery

13 – 15 Mar • EMBO Workshop
Visualizing Biological Data (VIZBI 2019)

17 – 20 Mar • EMBO | EMBL Symposium
Synthetic Morphogenesis: From Gene Circuits to Tissue Architecture

17 – 22 Mar • EMBL Course
Genome Engineering: CRISPR/Cas

19 – 20 Mar • EMBL Course
Exploring Human Genetic Variation

25 – 29 Mar • EMBO Practical Course
Optogenetics: From Design to Cell Signalling to Tissue Morphogenesis

26 – 29 Mar • EMBL Course
Introduction to RNA-Seq and Functional Interpretation

27 – 28 Mar • EMBL Course
Transgenic Animals - Micromanipulation Techniques

31 Mar – 3 Apr • EMBO | EMBL Symposium
Reconstructing the Human Past - Using Ancient and Modern Genomics

APRIL

1 – 4 Apr • EMBL Course
Introduction to Bioinformatics with R and Bioconductor

1 – 5 Apr • EMBL Course
Livestock Genomics

7 – 12 Apr • EMBO Practical Course
High-Accuracy CLEM: Applications at Room Temperature and *in cryo*

8 – 12 Apr • EMBL Course
RNA-Sequence Analysis

10 – 13 Apr • EMBO | EMBL Symposium
Probing Neural Dynamics with Behavioural Genetics

MAY

1 – 4 May • EMBO Workshop
Chromatin and Epigenetics

2 – 4 May • EMBL Course
Techniques for Studying Iron in Health and Disease

MAY

5 – 10 May • EMBL Conference
8th Congress of the International Biolron Society

5 – 10 May • EMBO Practical Course
Quantitative Proteomics: Strategies and Tools to Probe Biology

12 – 18 May • EMBO Practical Course
Single-Cell Omics

13 – 17 May • EMBL Course
Fundamentals of Widefield and Confocal Microscopy and Imaging

13 – 17 May • EMBL Course
Functional Insights into Biological Data through Network Analysis

15 – 18 May • EMBO | EMBL Symposium
The Identity and Evolution of Cell Types

19 – 24 May • EMBL Course
Advanced Fluorescence Imaging Techniques

28 – 30 May • EMBL Conference
BioMalPar XV: Biology and Pathology of the Malaria Parasite

JUNE

2 – 7 Jun • EMBO Practical Course
Extracellular Vesicles: From Biology to Biomedical Applications

3 – 4 Jun • EMBL Conference
Biological Solutions for the Global CO₂ Challenge

3 – 7 Jun • EMBL Course
Whole Transcriptome Data Analysis

4 – 6 Jun • EMBL Course
Bioinformatics for Principal Investigators

4 – 6 Jun • EMBL Course
Managing a Bioinformatics Core Facility

10 – 14 Jun • EMBL Course
Metagenomics Bioinformatics

12 – 19 Jun • EMBO Practical Course
Microbial Metagenomics: A 360° Approach

17 – 20 Jun • EMBL Course
Cancer Genomics

24 – 28 Jun • EMBL Course
Summer School in Bioinformatics

JULY

1 – 4 Jul • EMBL Course
Shift Your DNA and RNA Sequencing Library Preparation into Hyper-Drive

2 – 4 Jul • EMBO Workshop (Barcelona)
Limb Development and Regeneration: New Tools for a Classic Model System

2 – 4 Jul • EMBL Course
Microinjection in Zebrafish and Medaka: From Transgenesis to CRISPR

3 – 6 Jul • EMBO | EMBL Symposium
Mechanical Forces in Development

8 – 12 Jul • EMBL Course
Systems Biology: From Large Datasets to Biological Insight

8 – 13 Jul • EMBL Course
Super-Resolution Microscopy

10 – 13 Jul • EMBO | EMBL Symposium
New Approaches and Concepts in Microbiology

15 – 19 Jul • EMBL Course
Bioinformatics for Immunologists

21 – 26 Jul • EMBL Course
Proteomics Bioinformatics

29 Jul – 2 Aug • EMBL Course
Hands-on Flow Cytometry - Learning by Doing!

AUGUST

28 – 29 Aug • EMBL Conference
A Life for Science - Symposium in Memory of Fotis Kafatos

SEPTEMBER

2 – 6 Sep • EMBL Course
Chromatin Signatures During Differentiation: Integrated Omics

4 – 7 Sep • EMBO Workshop
Protein Synthesis and Translational Control

8 – 17 Sep • EMBO Practical Course
Current Methods in Cell Biology

9 – 13 Sep • EMBL Course
Attacking Open Chromatin with ATAC Sequencing

10 – 11 Sep • EMBL Course
Finding Evidence in Research Publications

11 – 13 Sep • EMBO | EMBL Symposium
Multiomics to Mechanisms - Challenges in Data Integration

15 – 22 Sep • EMBO Practical Course
Synthetic Biology in Action: Bridging Natural/Non-Natural

16 – 20 Sep • EMBL Course
Structural Bioinformatics

22 – 25 Sep • EMBO Workshop
Creating is Understanding: Synthetic Biology Masters Complexity

23 – 27 Sep • EMBL Course
Next Generation Sequencing Bioinformatics

23 – 28 Sep • EMBL Course
Liquid Biopsies

29 Sep – 2 Oct • EMBO | EMBL Symposium
Systems Genetics: From Genomes to Complex Traits

30 Sep – 4 Oct • EMBL Course
Whole Transcriptome Data Analysis

OCTOBER

7 – 9 Oct • EMBO Workshop (Hamburg)
Tools for Structural Biology of Membrane Proteins

8 – 10 Oct • EMBL Course
Exploring Biological Sequences

9 – 12 Oct • EMBO | EMBL Symposium
Seeing is Believing – Imaging the Molecular Processes of Life

16 – 18 Oct • EMBL Course
Computing Skills For Reproducible Research: Software Carpentry

16 – 19 Oct • EMBO | EMBL Symposium
The Non-Coding Genome

20 – 25 Oct • EMBL Course
Volume Electron Microscopy by Automated Serial SEM

21 – 25 Oct • EMBL Course
Genomic Data for Surveillance of Communicable Disease

24 – 25 Oct • EMBL Science and Society Conference
Science as Storytelling: From Facts to Fictions

29 – 30 Oct • EMBL Course
Microinjection into Adherent Cells

NOVEMBER

3 – 8 Nov • EMBO Practical Course
Humanized Mice in Biomedicine: Challenges and Innovations

3 – 9 Nov • EMBO Practical Course (Hamburg)
Practical Integrative Structural Biology

4 – 6 Nov • EMBL Conference
Cancer Genomics

11 – 15 Nov • EMBO Practical Course
The Fundamentals of High-End Cell Sorting

13 – 16 Nov • EMBO Workshop
Precision Health: Molecular Basis, Technology and Digital Health

17 – 22 Nov • EMBO Practical Course
Methods for Analysis of Circular RNAs: No Tautology

18 – 22 Nov • EMBL Course
Bioinformatics for Plant Biology

20 – 23 Nov • EMBO | EMBL Symposium
Metabolism Meets Epigenetics

28 – 30 Nov • EMBL Conference
21st EMBL PhD Symposium

DECEMBER

2 – 5 Dec • EMBL Course
Enzymatic Methyl-Seq: Bisulfite-Free Methylation Analysis

8 – 10 Dec • EMBL–Wellcome Genome Campus Conference
Target Validation Using Genomics and Informatics

We would like to thank the members of the EMBL ATC Corporate Partnership Programme:

FOUNDER PARTNERS:

Leica Microsystems, Olympus

CORPORATE PARTNERS:

10x Genomics, BD, Boehringer Ingelheim, Eppendorf, GSK, Miltenyi Biotec, Sartorius, Thermo Fisher Scientific

ASSOCIATE PARTNERS:

Merck, New England Biolabs, Nikon, Promega, Roche, Sanofi

CONFERENCES are held at the EMBL Advanced Training Centre Heidelberg, Germany*

COURSE LOCATIONS: Heidelberg | Hinxton*

(*unless indicated otherwise)

TRAIN ONLINE

- freely accessible online bioinformatics training
 - created by EMBL-EBI experts
 - learn at your own pace
- www.ebi.ac.uk/training/online

For further details visit our website:
www.embl.org/events
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