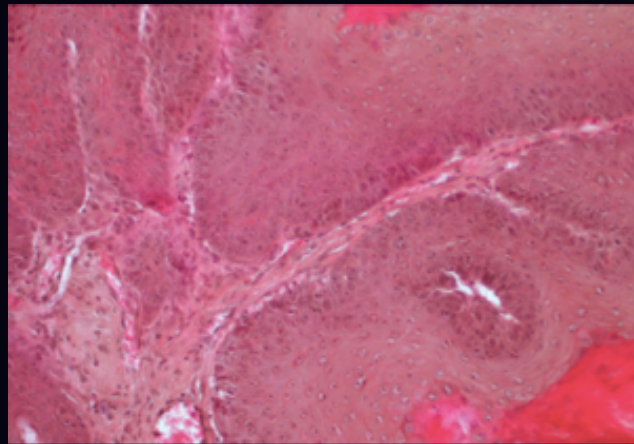




Summer Course

Module III



Mouse Pathology



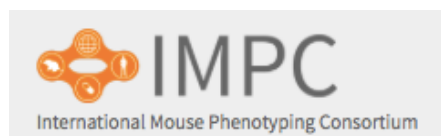
Copenhagen, Denmark 23rd– 27th August , 2021

PATHBIO (pathbio.org) is an EU-funded ERASMUS Knowledge Alliance for “Precision Pathobiology for Disease Models”, including major European Universities, 5 European “Mouse clinics” for high-throughput phenotyping of mice, and major mouse providers (Charles River, JAX, TCP). Supported by the INFRAFRONTIER network (infrafrontier.eu) and the IMPC (mousephenotype.org), PATHBIO will provide courses and online teaching material for mouse embryology and anatomy, mouse pathology, and for imaging.

August 23-27, 2021, the third Mouse Pathology course will take place. This course will be via zoom, due to the travel restrictions and social distancing requirements caused by the corona virus pandemic.

Aim is to provide Master Students, PhD students, and post docs with **basic and expert knowledge in mouse pathology**, helping them to better analyze mice with disease phenotypes. Special emphasis will be given to **comparison of mouse and human pathology** and to **digital pathology**.

At this course expert pathologists and researchers from Europe, US, and Canada will give lectures and discuss with the participants different aspects of mouse pathology including specific disease phenotypes and models, quantitative digital pathology, mouse genome informatics, and basic histology. There will be also an opportunity for the participants to discuss the phenotype of their mice with expert pathologists.



**Application**

Please send an E-mail with your CV and a short description of your interest in the course to Cord Brakebusch (cord.brakebusch@bric.ku.dk). You will then be provided later with a zoom link and a password to attend the course and with the final course program.

Discuss your mouse

If you are interested to discuss pathological issues of mice of your interest with the course experts please contact Cord Brakebusch (cord.brakebusch@bric.ku.dk).

Monday, August 23

| | |
|--------------------|---|
| 8.30-9.00 | Introduction |
| 9.00-10.00 | The mouse as a model system for human disease Cord Brakebusch, University of Copenhagen |
| 10-11 | Studying human cancer in mice Cord Brakebusch, University of Copenhagen |
| 11-12 | Basic histology of cancer Cord Brakebusch, University of Copenhagen |
| 12-13 | Lunch break |
| 13-14 | Introduction to mouse pathology John Sundberg, JAX |
| 14-15 | Genetic based skin diseases John Sundberg, JAX |
| 15-15.30 | Walk and talk with a speaker (John Sundberg) |
| 15.30-16.30 | Bone diseases Peter Vogel, St. Jude's |
| 16:30-17:30 | Mouse necropsy Cory Brayton, Johns Hopkins |

Tuesday, August 24

- | | |
|--------------------|--|
| 8.30-9.30 | Spontaneous juvenile pathologies James Bailey, Charles River |
| 9.30-10 | Walk and talk with a speaker (Cord Brakebusch) |
| 10-12 | Eye diseases Jesus Ruberte, Universitat Autònoma de Barcelona |
| 12-13 | Lunch |
| 13-14 | Tooth diseases Peter Vogel, St. Jude's |
| 14-15 | Mouse Genome Informatics Karen Svenson, JAX |
| 15-15.30 | Walk and talk with a speaker (Karen Svenson) |
| 15.30-16.30 | "Off-target effects" in xenotransplanted mice Laura Janke, St. Jude's |
| 16.30-17.30 | Discussion of selected mice of the participants John Sundberg, JAX; Alys Bradley, Charles River; Peter Vogel, St. Jude's |

Wednesday, August 25

| | |
|--------------------|---|
| 8.30-9.30 | Spontaneous cancers Alys Bradley, Charles River |
| 9.30-10 | Break |
| 10-11 | Tumorigenesis studies Alys Bradley, Charles River |
| 11-12 | Tumor PDX models Alys Bradley, Charles River |
| 12-13 | Lunch |
| 13-14 | Neuromuscular diseases Peter Vogel, St. Jude's |
| 14-15 | Mouse models and resources Karen Svenson, JAX |
| 15-15.30 | Walk and talk with a speaker (Peter Vogel) |
| 15.30-16.30 | Ciliopathies Peter Vogel, St. Jude's |

Thursday, August 26

8.30-9.30

Immune response: human vs mouse

Cord Brakebusch, University of Copenhagen

9.30-10

Break

10-11

Basic histology of inflammation

Cord Brakebusch, University of Copenhagen

11-12

Fibrosis

James Baily, Charles River

12-13

Lunch

13-14

Mouse models for diabetes and metabolic syndrome-induced obesity

Julia Calzada-Wack, Helmholtz Institute Munich














15-16

The role of the microbiome

Karen Svenson, JAX

Friday, August 27

- | | |
|--------------------|---|
| 8.30-9.30 | Ontology and informatics Paul Schofield, University of Cambridge |
| 9.30-10 | Walk and talk with a speaker (Paul Schofield) |
| 10-11 | Ontology exercises Paul Schofield, University of Cambridge |
| 11-12 | Introduction to Digital Pathology Adrian Sanz, Helmholtz Institute Munich |
| 12.00-13.00 | Lunch |
| 13-15 | Genetic background and phenotype Fuad Iraqi, Tel Aviv University |
| 15-15.30 | Walk and talk with a speaker (Fuad Iraqi) |
| 15.30-16.30 | Spatial Transcriptomics Kyyoung Jae Won, University of Copenhagen |
| 16.30 | Wrap-up and Goodbye Cord Brakebusch, University of Copenhagen |

| SPEAKER | INSTITUTION |
|---------------------|---|
| Baily, James |  charles river |
| Bradley, Alys |  charles river |
| Brakebusch, Cord |  UNIVERSITY OF COPENHAGEN |
| Calzada-Wack, Julia |  GMC German Mouse Clinic |
| Brayton, Cory |  JOHNS HOPKINS MEDICINE |
| Iraqi, Fuad |  TEL AVIV UNIVERSITY אוניברסיטת תל אביב |
| Janke, Laura |  St. Jude Children's Research Hospital |
| Ruberte, Jesus |  UAB Universitat Autònoma de Barcelona |
| Sanz, Adrian |  GMC German Mouse Clinic |
| Schofield, Paul |  UNIVERSITY OF CAMBRIDGE |
| Sundberg, John |  The Jackson Laboratory |
| Svenson, Karen |  The Jackson Laboratory |
| Vogel, Peter |  St. Jude Children's Research Hospital |

Won, Kyoung Jae

