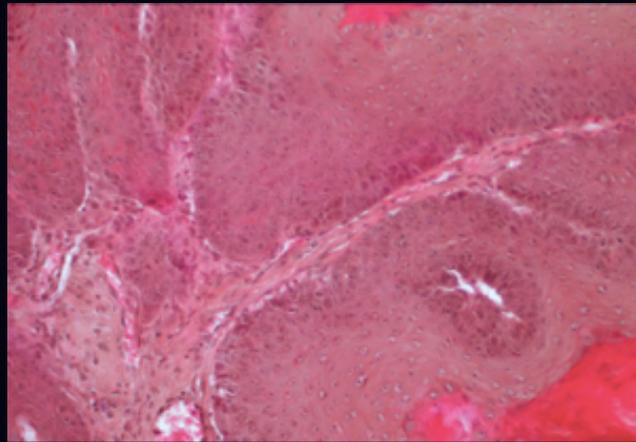




Summer Course

Module III



Mouse Pathology



Copenhagen, Denmark 24th – 28th August , 2020



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 24-28, 2020, the second Mouse Pathology course will take place. This year this course will be via zoom, due to the travel restrictions and social distancing requirements caused by the corona virus pandemic. To assure good contact between teachers and course participants, the number of participants will be limited and the program includes events such as lunch breaks of teachers with small subgroups of participants to facilitate intensive interaction (see preliminary program!).

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. This year, special emphasis will be given to **comparison of mouse and human pathology** and to **digital pathology**, as digital pathology will dramatically facilitate future qualitative and quantitative analysis of histological sections.

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.





General information

There is no fee for this course. Student accepted for the course will receive a zoom link and a password that allows them to participate.

Contact:

In urgent issues you can contact the organizer in addition to E-mail (cord.brakebusch@bric.ku.dk) also by mobile (0046-70 9849849).



Each talk includes a 10 min break per hour to screen dizziness!

Monday, August 24

- 8.30-9.00** **Zoom introduction of all participants
(Introduce yourself without slides. Fun fact?)**
- 9.00-10.00** **The mouse as a model system for human disease
Cord Brakebusch, University of Copenhagen**
- 10-12** **Eye diseases
Jesus Ruberte, Universitat Autònoma de Barcelona**
- 12.00-12.30** **Prepare your lunch (offline)**
- 12.30-13** **Zoom Lunch with speakers
(Several participants meet over lunch in smaller zoom
breakout group with speakers)**
- 13-14** **Introduction to mouse pathology
John Sundberg, JAX**
- 14-15** **Tooth diseases
Peter Vogel, St. Jude's**
- 15-15.30** **Walk and talk with a speaker
(Speaker takes the zoom participants via his mobile on
a short walk around the current location)**
- 15.30-16.30** **Bone diseases
Peter Vogel, St. Jude's**
- 16:30-17:30** **Mouse necropsy
Susan Camilieri, The Centre for Phenogenomics,
Toronto**



Tuesday, August 25

- 8.30-9.30** Spontaneous pathology of juvenile and young adult wild type mice
Alys Bradley, Charles River
- 9.30-10** **Walk and talk with a speaker**
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 10-11** Studying human cancer in mice
Cord Brakebusch, University of Copenhagen
- 11-12** Basic histology of cancer
Cord Brakebusch, University of Copenhagen
- 12.00-12.30** **Prepare your lunch (offline)**
- 12.30-13** **Zoom Lunch with speakers**
(Several participants meet over lunch in smaller zoom breakout group with speakers)
- 13-14** Genetic based skin diseases
John Sundberg, JAX
- 14-15** Mouse Genome Informatics
Karen Svenson, JAX
- 15-15.30** **Walk and talk with a speaker**
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 15.30-17.30** Discussion of selected mice of the participants
John Sundberg, JAX; Alys Bradley, Charles River; Peter Vogel, St. Jude's



Wednesday, August 26

- 8.30-9.30** Spontaneous tumors and pathology of aged wild type mice
Alys Bradley, Charles River
- 9.30-10** Walk and talk with a speaker
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 10-11** Tumorigenicity, Oncogenicity and Oncology studies
Alys Bradley, Charles River
- 11-12** Carcinogenicity studies
Alys Bradley, Charles River
- 12.00-12.30** Prepare your lunch (offline)
- 12.30-13** Zoom Lunch with speakers
(Several participants meet over lunch in smaller zoom breakout group with speakers)
- 13-14** Mouse models and resources
Karen Svenson, JAX
- 14-15** Neuromuscular diseases
Peter Vogel, St. Jude's
- 15-15.30** Walk and talk with a speaker
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 15.30-16.30** The role of the microbiome
Karen Svenson, JAX
- 16:30-17:30** Ciliopathies
Peter Vogel, St. Jude's



Thursday, August 27

- 8.30-9.30** Immune response: human vs mouse
Cord Brakebusch, University of Copenhagen
- 9.30-10** **Walk and talk with a speaker**
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 10-11** Basic histology of inflammation
Cord Brakebusch, University of Copenhagen
- 11-12** Fibrosis
James Baily, Charles River
- 12.00-12.30** **Prepare your lunch (offline)**
- 12.30-13** **Zoom Lunch with speakers**
(Several participants meet over lunch in smaller zoom breakout group with speakers)
- 13-14** Mouse models for diabetes and metabolic syndrome-induced obesity
Julia Calzada-Wack, Helmholtz Institute Munich
- 15-15.30** **Walk and talk with a speaker**
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 15.30-16.30** Introduction to Digital Pathology
Adrian Sanz, Helmholtz Institute Munich
- 16:30-17:30** Ontology and informatics
Paul Schofield, University of Cambridge



Friday, August 28

- 8.30-9.30** Introduction to the Digital Pathology program QuPath (1)
Peter Bankhead, University of Edinburgh
- 9.30-10** Walk and talk with a speaker
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 10-11** Introduction to the Digital Pathology program QuPath (2)
Peter Bankhead, University of Edinburgh
- 11-12** Practical excercises with QuPath (1)
Peter Bankhead, University of Edinburgh
- 12.00-12.30** Prepare your lunch (offline)
- 12.30-13** Zoom Lunch with speakers
(Several participants meet over lunch in smaller zoom breakout group with speakers)
- 13-14** Practical excercises with QuPath (2)
Peter Bankhead, University of Edinburgh
- 14-15** Genetic background and phenotype (1)
Fuad Iraqi, Tel Aviv University
- 15-15.30** Walk and talk with a speaker
(Speaker takes the zoom participants via his mobile on a short walk around the current location)
- 15.30-16.30** Genetic background and phenotype (2)
Fuad Iraqi, Tel Aviv University
- 16.30** Wrap-up and Goodbye
Cord Brakebusch, University of Copenhagen

| SPEAKER | INSTITUTION |
|---------------------|--|
| Bankhead, Peter |  |
| Baily, James |  |
| Bradley, Alys |  |
| Brakebusch, Cord |  |
| Calzada-Wack, Julia |  |
| Camilieri, Susan |  |
| Iraqi, Fuad |  |
| Ruberte, Jesus |  |
| Sanz, Adrian |  |
| Schofield, Paul |  |
| Sundberg, John |  |
| Svenson, Karen |  |
| Vogel, Peter |  |