

MONDAY July 13, 2020 Welcome, Intro, Posters, Exhibits

8am-5pm Registration – Turner Concourse

8am password protected login will begin

845-10am Brayton – Introduction: Phenotyping & Famous Mice

10-11 **Brayton** – Common Phenotypes & Disease (Spontaneous /NON infectious)

11-12 **Brayton** – External Environmental (X) Factors and Reproducibility

12-1 LUNCH – POSTERS, **BREAKOUT SESSIONS: MEET THE PARTICIPANTS**

1-2 C Zeiss – COVID in MICE: options and opportunities

2-3 **Bayton**– Microbial & infectious Research Challenges

3-4 **Brayton** – Immunovariability in (immune sufficient and immune deficient) mice

4-5 **Hutchinson** – Research relevant social life and behaviors of mice

5-6pm VIRTUAL RECEPTION BYOB: MEET THE PARTICIPANTS

TUESDAY July 14, 2020 GEM & Multidisciplinary Phenotyping

9-10 **Hawkins/Reeves** – Making Mice – traditional and new transgenic technologies

10-11 **Aja** – Metabolic Phenotypes and Phenotyping

11-12 **Mitzner** – Pulmonary/Respiratory Phenotypes & Phenotyping

12-130 LUNCH & VIRTUAL Meet the Cores BREAKOUT SESSIONS

CSMR (metabolic), MRB Behavioral, ESC, OTS

130-230 **Doyle** – Ophthalmic Phenotypes and Phenotyping

230-330 **Screven/Lauer** – Auditory Phenotypes and Phenotyping

330-430 Foss/Gabrielson – IMAGING for Phenotyping

WEDNESDAY July 15, 2020 Practical Phenotyping 1

JH Phenotyping Laboratory Manual 5th ed 2019 (PDF 58p ~6MB) free to download

REVIEW by Wednesday AM

9-1030 **LAB 1: Brayton Villano Forbes et al** – Clinical / Physical Exam + DEMO

1030-12 **Brayton** – Clinical Pathology (Hematology Chemistry, etc for research)

12-130 LUNCH & VIRTUAL Meet the Cores BREAKOUT SESSIONS**CSMR (metabolic), AIMS Core, MRB Imaging 1230-50, ESC, OTS**130-3 **LAB 2: Villano Stover Castell et al Specimen collections and common procedures**3-4 **VIRTUAL Faculty/Core breakout Q&A sessions****THURSDAY July 16, 2020 Practical Phenotyping 2**9-1030 **Brayton/Forbes- Anatomic Pathology Phenotyping – Necropsy, examination, tissue collection trimming Lecture**1030-1130 **LAB 3: Forbes / Brayton/ Myers /Powers Anatomic Pathology – Necropsy, examination, tissue collection DEMO/video Q&A****1130-12 OTS CORE Histology Lab****12-1 LUNCH BREAK (on your own)**1-215 **Brayton – Comparative Anatomy/Pathology (human/mouse)**230-330 **Brayton – Research Relevant Mouse Phenotypes & Pathology – interactive REVIEW (Quiz format)**330-4 **Faculty Discussion of participants research questions****FRIDAY July 17, 2020 Practical Phenotyping 3 Advanced Pathology**9-10 **Meeker – Immunohistochemistry – principles and protocol development**10-11 **A Michel – Digital Pathology: options for image analysis and quantitative pathology**11-12 **E Edmondson – NCI Pathology in Preclinical Cancer Research**12-1 **J Ward – Embryo and Developmental Phenotyping****5pm Quizzes Due ! for course ME680.712****PARTICIPATING CORES****Phenotyping Core**

Johns Hopkins Phenotyping and Comparative Pathology Core (MRB)

iLAB information and submission <https://johnshopkins.corefacilities.org/>**Animal Care and Use Committee (ACUC)****Applied Imaging Mass Spectrometry (AIMS) Core****Behavioral Core School of Medicine**

Rodent Behavioral Phenotyping (MRB)

CSMR Centralized Services for Metabolism Research

Indirect calorimetry, food intake (Rangos)

ES Cell and Transgenic Core

Johns Hopkins Transgenic and ES Cell core <https://www.hopkinsmedicine.org/core/Home.htm>

MRB Molecular Imaging Service Center and Cancer Functional Imaging Core

MRI, PET, CT, SPECT, IVIS, Optical Imaging, Ultrasound (MRB)

OTS Oncology Tissue Services Core

TMA, IHC, Slide Scanning, Histology core labs at SKCCC

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Laboratory Manual and Previous Programs