MOLECULAR PATHOLOGY AND IMAGING CORE

Newsletter Update Spring 2015

The Molecular Pathology and Imaging Core (MPIC) is excited about the upcoming year and being able to continue working with the labs of Penn. Please feel free to stop by and see if there is anything we can do to help you. Additionally, we continue to maintain an average turn around of 5 working days for orders, which gets you results quicker.

We have access to a recently upgraded microscope capable of wide field fluorescence and life cell imaging. This microscope is a great addition to the MPIC facility and a great benefit to researchers. The microscope is located on the 9th floor of BRB.

A human GI cancer tissue bank is maintained by MPIC, which paraffin embedded samples. The bank is a service that is provided by the MPIC and can be used at no additional charge to sectioning. The majority of tissues also have a pathology report. If you are interested in seeing what is available please contact Adam Bedenbaugh, blakebe@mail.med.upenn.edu, for more information.

THE TRANSGENIC & CHIMERIC MOUSE FACILITY

The Transgenic & Chimeric Mouse Facility has been involved in injecting CRISPR's for several months now. Some projects used purified RNA's (for guides and Cas9) for cytoplasmic injections while others used DNA plasmids (for in vivo transcription) for pronuclear injections. The success rate of generating positive mice ranges from 10-50% and included KO (few bp to few Kb), KI (short tag) or KO with repair. Most recently, the use of SCR7 have facilitated the knock-in of 2 LoxP sequences in its targeted site. This drug has been shown to inhibit Ligase IV which mediates NHEJ, thereby improving the chances of HDR. Users interested in pursuing such strategies can contact Dr. Jean Richa (jricha@mail.med.upenn.edu) for more information.

CENTER SYMPOSIUM

Save the date
June 17, 2015
for our
2015 GI Center Symposium
“Innovative perspectives on pancreatitis and pancreatic cancer”
To be held at the National Constitution Center in Philadelphia.

Please remember to cite the Center (NIH-P30-DK050306) and its core facilities (Molecular Pathology and Imaging Core, Molecular Biology/Gene Expression Core, Transgenic and Chimeric Mouse Core, and Cell Culture Core) in your publications.
SELECTED RECENT PUBLICATIONS

FROM CENTER MEMBERS:

A genetic screen reveals Foxa3 and TNFR1 as key regulators of liver repopulation. Wangensteen KJ, Zhang S, Greenbaum LE, Kaestner KH. Genes Dev. 2015 May 1;29(9):904-9


FROM PILOT GRANT RECIPIENTS:


CONGRATULATIONS

Congratulations to Jim Lewis, MD MSCE, the 2015 recipient of the Lindback teaching award, the highest such award at the University of Pennsylvania. Dr. Gary Lichtenstein is former recipient as well.

Congratulations to Amanda Muir, MD, Bryson Katona, MD, PHD, Kelly Whelan, PhD, and Kirk Wangensteen, MD, PhD on their NIH kgrants.

Congratulations to Dr. Ben Stanger for being the 2015 recipient of the Department of Cancer Biology Teaching Award. Of note, Dr. Jonathan Katz is past recipient as well.

THE MOLECULAR BIOLOGY CORE

The Molecular Biology Core would like to introduce Erika Panfen, who joined us in May 2015.

Erika brings with her, extensive biobanking knowledge and understands our needs to make the Human Biospecimen Respository an essential resource to Center Investigators interested in both biobanking and the collection of clinical information.

We are confident she will be a welcome addition to the Molecular Biology Core.

The growing importance of human subject research has necessitated an increase in the capabilities of the Core to provide a solution to Center Investigators focused on both biobanking and the collection of annotated clinical information. As a result, the Core has recently aligned with the university-based LabVantage Laboratory Information System (LIMS) to integrate its current biobanking database platform via 2-D barcoding of samples and with the purchase of two new -80°C freezers to expand storage space.
The NIH Center for Molecular Studies in Digestive and Liver Diseases
The Penn/CHOP Center for Digestive, Liver & Pancreatic Medicine
Division of Gastroenterology

16th Annual Symposium
"Innovative perspectives on pancreatitis and pancreatic cancer"
Co-Sponsored by the:
Pancreatic Cancer Translational Center of Excellence
The Tumor Biology Program of the Abramson Cancer Center

Wednesday, June 17, 2015
National Constitution Center
Independence Mall, 525 Arch Street
Philadelphia, Pennsylvania 19106

8:00 am Registration and Continental Breakfast
8:30 am-8:45 am Welcome and Introduction
Anil K. Rustgi, MD
T. Grier Miller Professor of Medicine and Genetics
Chief, Division of Gastroenterology
Director, Center for Molecular Studies in Digestive and Liver Diseases
University of Pennsylvania Perelman School of Medicine

Session I: Moderated by Fred S. Gorelick, MD
8:45 am-9:15 am Aida Habtezion, MD, MSc
Assistant Professor of Medicine in Gastroenterology and Hepatology, Stanford University School of Medicine
"Immune pathways in pancreatitis"

9:15 am-9:45 am Fred S. Gorelick, MD
Professor of Medicine in Digestive Diseases and Cell Biology, Deputy Director
Yale University School of Medicine MD, PhD Program
"Effects of metabolic factors on pancreatitis"

9:45 am-10:15 am Steven D. Freedman, MD, PhD
Chief, Division of Translational Research, BIDMC, and Professor of Medicine
Harvard University Medical School
"New insights into the CFTR gene and its impact on the diagnosis and treatment of pancreatitis"

10:15 am-10:45 am Break

10:45 am-11:15 am Session II: Moderated by Robert H. Vanderheide, DPhil, MD
Ravikanth Maddipati, MD
Instructor of Medicine, Division of Gastroenterology, University of Pennsylvania Perelman School of Medicine
"Origin of clonal heterogeneity in metastatic pancreatic cancer"

11:15 am-11:45 am Gregory L. Beaty, MD, PhD
Assistant Professor of Medicine, Division of Hematology/Oncology
University of Pennsylvania Perelman School of Medicine
"Targeting inflammatory monocytes for therapy in pancreas carcinoma"

11:45 am-12:30 pm Keynote Lecture
Elizabeth M. Jaffee, MD
The Dana and Albert "Cubby" Broccoli Professor of Oncology, Co-Director of the Gastrointestinal Cancers Program, Associate Director for Translational Research, The Sidney Kimmel Cancer Center at Johns Hopkins
"Tipping the balance from a pro carcinogenic to an anticancer microenvironment to treat and prevent pancreatic cancer"

12:30 pm-2:00 pm Lunch and Poster Session

2:00 pm-2:30 pm Session III: Moderated by Ben Z. Stanger, MD, PhD
Rodger A. Liddle, MD
Professor of Medicine, Division of Gastroenterology, Duke University School of Medicine
"Neurogenic Basis of Pancreatitis"

2:30 pm-3:15 pm Keynote Lecture
Timothy C. Wang, MD
Dorothy L. and Daniel H. Silberberg Professor of Medicine
Chief, Division of Digestive and Liver Diseases, Columbus University, College of Physicians and Surgeons
"Role of stress and neurons in the development of pancreatic cancer"

3:30 pm Adjourn

Register online at: http://www.med.upenn.edu/molecular/symposium_register.shtml
Information about the Center for Molecular Studies in Digestive and Liver Diseases and the Division of Gastroenterology can be found at:
http://www.med.upenn.edu/molecular/ and http://www.med.upenn.edu/gastro/