PITTSBURGH LIVER RESEARCH CENTER
A partnership of University of Pittsburgh & UPMC

Membership Application

Name & Degree(s)_____

Department/Division _____

Office location_____

Mailing address_____

Phone _____

Assistant's name and email (if applicable) _____

In which Special Interest Group(s) you would like to be included:

☐ Repair ☐ Transformation ☐ Injury

Please provide a brief description of the liver-specific aspects of your work and on-going projects and their funding source (if applicable). You may attach a separate sheet if needed. Please include information such as:

1. Your main clinical and/or research interests

2. Collaborations with other liver clinicians and researchers

3. Any special techniques or unique resources that are available through your lab or clinic that could be useful to other liver clinicians and scientists.

The PLRC currently has four Scientific Research Cores available to its members. The descriptions of the services are available on the PLRC website (www.livercenter.pitt.edu). Please indicate which Core(s) you are currently using or anticipate using in your liver-related work.

Advanced Cell and Tissue Imaging Core (ACTIC):

- ☐ Standard Light/Fluorescence Microscopy
- ☐ Confocal Microscopy: Single optical section and/or confocal reconstructions
- ☐ Live Cell Microscopy
- ☐ Advanced Imaging: FRET, FRAP, TIRF, Super resolution (STED, SIM, STORM)
- ☐ Large area/Whole organ clearing, imaging, reconstruction
- ☐ Live animal/Multiphoton Imaging
- ☐ Electron Microscopy (SEM/TEM)
- ☐ Advanced EM imaging techniques: Immuno-TEM/Immuno-SEM, Freeze Fracture, platinum replicas, correlative light and electron microscopy (CLEM)
- ☐ Image processing/quantitative image analysis/computer processing
- ☐ Cell/tissue processing and labeling done by the facility technicians

Clinical Biospecimen Repository and Processing Core (CBRPC):

- ☐ Pathologic interpretation of investigator supplied slides
- ☐ Human liver H&E (processing and embedding) with clinicopathologic metadata
- ☐ Human liver processing only
- ☐ Human liver recut H&E and associated clinicopathologic metadata
- ☐ Human liver unstained blanks
- ☐ Human liver TUNEL assay
- ☐ Human liver special stains
- ☐ Human liver IHC (clinical antibody)
- ☐ Human liver IHC (investigator provided antibody)
- ☐ Human liver in situ hybridization assay with pathologic interpretation and scoring
- ☐ Human liver digital imaging
- ☐ Human liver neoplastic and non-neoplastic TMA construction (up to 100 cores per slide)
- ☐ Human hepatocytes and/or NPCs
- ☐ Human liver frozen tissue with associated clinicopathologic metadata
- ☐ Human liver-related serum samples with associated clinicopathologic metadata
- ☐ Multispectral imaging (NEW 2023)

Genomics and Systems Biology Core (GSBC):

- ☐ Consultation and Project Setup/ Pilot Analysis (statistical consulting, power calculation, data quality control, etc)
- ☐ Liver sample microarray (mRNA expression)
- ☐ Liver sample microarray (SNP, CytoscanHD, Oncoscan)
- ☐ Liver Bulk RNA sequencing
- ☐ hepatic MicroRNA sequencing
- ☐ Liver whole genome sequencing
- ☐ Liver whole exome sequencing
- ☐ Liver whole genome bisulfite sequencing
- ☐ Bisulfite-free epigenetic sequencing of liver samples (5mc, 5hmc, RIP, etc)
- ☐ Liver chip sequencing, CUT&RUN seq. and other epigenetic sequencing of liver tissue
- ☐ Microbiome sequencing
- ☐ 10X genomics single-cell of liver samples (scRNA-seq, scATAC-seq, sc Multiome, CITE-seq, single-nuclei RNA-seq)
- ☐ Mass cytometry (CyTOF) and other single-cell data of the liver
- ☐ Long-read sequencing (PacBio, Oxford Nanopore, etc)
- ☐ Public data mining of liver disease or liver model databases
- ☐ Meta and integrative analysis
- ☐ Other advanced genomic/proteomic/metabolimic data modeling
- ☐ Grant application (writing/LOS)

Human Synthetic Liver Biology Core (HSLBC):

- ☐ Isolation of human hepatocytes from explanted diseased livers (NASH, Ethanol, metabolic diseases, etc)
- ☐ Isolation of human hepatic Non-parenchymal Cells from diseased livers
- ☐ Isolation of human Fibroblasts from diseased livers
- ☐ Generation of human iPSCs derived from diseased livers by non-integrating vectors-based reprogramming
- ☐ CRISPR/Cas9-based genetic editing of human fibroblast and/or iPSCs from diseased livers
- ☐ 3D Biomimetic Systems

Please return this completed form to the PLRC Administrator (Dr. Aaron Bell; bellaaro@pitt.edu), along with your:

- ☐ NIH Biosketch
- ☐ Updated CV
- ☐ Other Support Page
- ☐ Headshot (photo) for the website (at least 400 dpi)