

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Fatty Liver Disease and Multi-System Complications (X5)

Scientific Organizers: Jay D. Horton, Morris J. Birnbaum and Hannele Yki-Järvinen

Supported by the Directors' Fund

## Hepatobiliary Cancers: Pathobiology and Translational Advances (X6)

Scientific Organizers: Alphonse E. Sirica, Gregory J. Gores and Lopa Mishra

March 21-24, 2021 • Fairmont Hotel Vancouver • Vancouver, BC, Canada

Supported by the Directors' Fund

Scholarship Deadline: December 9, 2020 / Abstract Deadline: January 5, 2021 / Discounted Registration Deadline: January 20, 2021

### SUNDAY, MARCH 21

#### Arrival and Registration

### MONDAY, MARCH 22

#### Welcome and Keynote Session (Joint)

**Helen H. Hobbs**, University of Texas Southwestern Medical Center, USA

*PNPLA3's Role in NAFLD*

**Hashem B. El-Serag**, Baylor College of Medicine, USA  
*Changing Epidemiological Trends in Non-Alcoholic Fatty Liver Disease versus Viral-Associated Hepatobiliary Cancers*

#### Non-Alcoholic Fatty Liver Disease, Liver Inflammation and Fibrogenesis in the Pathogenesis of Hepatobiliary Cancers (Joint)

**Lopa Mishra**, George Washington University, USA  
*TGF-beta Signaling in Liver Fibrosis and Hepatocellular Carcinoma*

Speaker to be Announced

Short Talks Chosen from Abstracts

#### Genetics of NAFLD (X5)

**Elizabeth K. Speliotes**, University of Michigan, USA  
*Use of GWAS to Identify SNPs Associated with NAFLD*

**Hannele Yki-Järvinen**, University of Helsinki, Finland  
*Effects of Genetic Risk Factors for NAFLD on Hepatic Lipid Metabolism*

**Noura S. Abul-Husn**, Icahn School of Medicine at Mount Sinai, USA  
*HSD17B13 and Protection from Liver Disease in Diverse Patient Populations*

Short Talks Chosen from Abstracts

#### The Role of the Microbiome in Hepatobiliary Cancers (X6)

**Maria Rescigno**<sup>†</sup>, Humanitas University, Italy  
*The Gut-Liver Axis in Liver Cancer Risk Conditions*

**Yinying Lu**, Tsinghua University, China  
*China's Innovative Practice on Precision Immunotherapy of Hepatobiliary Carcinoma: From Outcome Prediction to New Therapeutic Approaches*

Speaker to be Announced

Short Talks Chosen from Abstracts

#### Poster Session 1

### TUESDAY, MARCH 23

#### Role of Lipids in NAFLD (X5)

**Mitchell A. Lazar**, Perelman School of Medicine, University of Pennsylvania, USA  
*Circadian Contributions to NAFLD*

**Daniel A. Heller**, Memorial Sloan Kettering Cancer Center, USA  
*Lipid Dysregulation in Inflammation, NASH, and Cancer*

**Catherine Postic**, INSERM, Institut Cochin, France  
*Altered Insulin Signaling and Glucose Toxicity in NAFLD*

**Tobias C. Walther**, Harvard School of Public Health, USA  
*Lipid Droplet Biology in NAFLD*

Short Talks Chosen from Abstracts

#### Tumor Microenvironment and Hepatobiliary Cancers (X6)

**Silvia Affo**, Columbia University, USA  
*The Role of Cancer-Associated Fibroblasts in the Pathogenesis of Hepatobiliary Cancers*

**Amaia Lujambio**, Icahn School of Medicine at Mount Sinai, USA  
*Mechanisms of Immune Escape in Hepatocellular Carcinoma*

**Alphonse E. Sirica**, Virginia Commonwealth University, USA  
*The Desmoplastic Reaction in Intrahepatic Cholangiocarcinoma: Molecular Drivers and Prognostic Implications*

**Gregory J. Gores**, Mayo Clinic, USA  
*Targeting the Tumor Microenvironment for Cholangiocarcinoma Therapy*

Short Talks Chosen from Abstracts

#### NAFLD and CVD (X5)

**Aaron Isaacs**<sup>†</sup>, Maastricht University, Netherlands  
*Relationship between Nonalcoholic Fatty Liver Disease Susceptibility Genes and Coronary Artery Disease*

**Jay D. Horton**, University of Texas Southwestern Medical Center, USA  
*Molecular Mediators of NAFLD and Hyperlipidemia*

**Henry N. Ginsberg**, Columbia University College of Physicians and Surgeons, USA  
*Loss of Function of TorsinA, an ER Localized AAA ATPase Causes Severe Steatosis with Decreased VLDL Secretion and Abnormal ER Lipid Droplets*

Short Talks Chosen from Abstracts

#### Hepatobiliary Cancer Biomarkers (X6)

**Yujin Hoshida**, UT Southwestern Medical Center, USA  
*Liver Cancer Risk-Predictive Molecular Biomarkers Specific to Clinico-Epidemiological Contexts*

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**Irene Oi Lin Ng**, University of Hong Kong, Hong Kong  
*Molecular Biomarkers in Hepatocellular Carcinoma*

**Augusto Villanueva Rodriguez**, Icahn School of Medicine at Mount Sinai, USA

*Liquid Biopsy in Hepatobiliary Cancers*

**Short Talks Chosen from Abstracts**

### Poster Session 2

### WEDNESDAY, MARCH 24

#### Pathways to NASH (X5)

**Speaker to be Announced**

**Mark A. McNiven**, Mayo Clinic, USA

*Lipid Droplet Formation and Lipophagy in Fatty Liver Disease*

**Eran Elinav**, Weizmann Institute of Science, Israel

*Lipid-Associated Macrophages Control Metabolic Homeostasis*

**Speaker to be Announced**

**Short Talks Chosen from Abstracts**

#### Genomic and Epigenomic Heterogeneity in Hepatobiliary Cancers (X6)

**Xin Wei Wang**, NCI, National Institutes of Health, USA

*Causes and Functional Intricacies of Intertumor and Intratumor*

*Heterogeneity in Primary Hepatobiliary Cancers*

**Jessica Zucman-Rossi**, University Paris Descartes-HEGP, France

*Molecular Subtypes of Hepatocellular Carcinoma are Related to*

*Specific Tumor Phenotypes*

**Renumathy Dhanasekaran**, Stanford University, USA

*Complexities of Genetic Heterogeneity in Hepatocellular Carcinoma*

**Bin Tean Teh**, Duke-NUS Medical School, Singapore

*Cholangiocarcinoma in Diverse Populations*

**Short Talks Chosen from Abstracts**

#### Emerging Therapies for NASH-I (X5)

**Morris J. Birnbaum**, Pfizer Inc., USA

*DGAT2 Inhibition for NASH*

**Speaker to be Announced**

**Greg Steinberg**, McMaster University, Canada

*Cellular Energy Sensors and Metabolism*

**Short Talks Chosen from Abstracts**

#### "Omics" for Precision Medicine of Hepatobiliary Cancers (X6)

**Josep Llovet**, Icahn School of Medicine at Mount Sinai, USA

*Integrative "Omics" and Precision Medicine for Hepatocellular*

*Carcinoma*

**Jesper Bøje Andersen**, University of Copenhagen, Denmark  
*Defining Distinct Subtypes of Intrahepatic Cholangiocarcinoma by*

*Molecular Profiling: Diagnostic, Prognostic, and Therapeutic*

*Applications*

**Robert F. Schwabe**, Columbia University, USA

*Discovery of Subgroup-Specific HCC Master Regulators by Systems*

*Biology Approaches*

**Short Talks Chosen from Abstracts**

#### Emerging Therapies for NASH-II (X5)

**Kendra K. Bence**, Pfizer Inc., USA

*Inhibition of Fructose Metabolism for the Treatment of NAFLD*

**Chuhan Chung**, Gilead Sciences, USA

*ACC Inhibitors for NASH*

**Lei Ling**, NGM Biopharmaceuticals, USA

*Therapeutic FGF19 in Non-alcoholic Steatohepatitis*

**Short Talks Chosen from Abstracts**

#### Advances in Molecular and Immune Targeting of Hepatobiliary Cancers (X6)

**Bruno Sangro**, Clinica Universidad de Navarra, Spain

*Targeted Agent and Immune-Based Therapies for Hepatocellular*

*Carcinoma*

**Tim F. Greten**, NCI, National Institutes of Health, USA

*Immunotherapies for Hepatobiliary Cancers: Current Status and*

*Future Perspectives*

**R. Kate Kelley**, University of California, San Francisco, USA

*Developing Clinical Trials of Novel Therapeutic Agents and Treatment*

*Combinations for Intrahepatic Cholangiocarcinoma*

**Short Talks Chosen from Abstracts**

#### Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (X5)

#### Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (X6)

### THURSDAY, MARCH 25

Departure