MONDAY, MARCH 22

Welcoming Remarks and Keynote Session (Joint) (8am Denver/Mountain Time Start)

* Jay D. Horton, University of Texas Southwestern Medical Center, USA
  * Alphonse E. Sirica, Virginia Commonwealth University, USA
  * 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) (9:10am Denver/Mountain Time Start)

* Jay D. Horton, University of Texas Southwestern Medical Center, USA
  * Alphonse E. Sirica, Virginia Commonwealth University, USA
  * Lopa Mishra, George Washington University, USA
  * Maria Rescigno, Humanitas University, Italy
  * Daniel A. Heller, Memorial Sloan Kettering Cancer Center, USA

TGF-beta Signaling in Liver Fibrosis and Hepatocellular Carcinoma

The Gut-Liver Axis in Liver Cancer Risk Conditions

Daniel A. Heller, Memorial Sloan Kettering Cancer Center, USA

Lipid Dysregulation in Inflammation, NASH, and Cancer

Juan R. Sanabria †, Marshall University, USA

Short Talk: The α1-Na/K-ATPase/Src-p/PI3K Pathway Modulates the Survivin-SMAC Apoptotic “Switch” in NASH Related Hepatocellular Carcinoma: A Translational Study

Tumor Microenvironment and Hepatobiliary Cancers (3pm Denver/Mountain Time Start) (EK29)

* Lopa Mishra, George Washington University, USA
  * Silvia Afco, Columbia University, USA
  * Amaia Lujambio, Icahn School of Medicine at Mount Sinai, USA
  * Alphonse E. Sirica, Virginia Commonwealth University, USA
  * Gregory J. Gores, Mayo Clinic, USA

Yuhua Xue, University of Pittsburgh, USA

Short Talk: p-Ezrin (Thr567) Synergizes with Akt Signaling to Accelerate Yap Mediated Cholangiocarcinogenesis but Correlates with a Favorable Prognosis in Human Intrahepatic Cholangiocarcinoma (ICC) Patients

Wen-Xing Ding, University of Kansas Medical Center, USA

Short Talk: SQSTM1/p62 Inhibits whereas Nrf2 Promotes Tumorigenesis by Inducing Cell Population Remodeling and Metabolic Reprograming in Mouse Livers with mTORC1 Activation and Defective Autophagy

Haichuan Wang †, University of California, San Francisco, USA

Short Talk: Requirement of Hippo Signaling Cascade during AXIN1 Mutation Driven Hepatocarcinogenesis

Juan Pablo Unfried, University of Navarra, Spain

Short Talk: Long Non-Coding RNA NIHCOLE Promotes the DNA Damage Repair of Hepatocellular Carcinoma Cells

Genetics of NAFLD (3pm Denver/Mountain Time Start) (EK28)

Elizabeth K. Speliotes, University of Michigan, USA

Use of GWAS to Identify SNPs Associated with NAFLD

Noura S. Abul-Husn, Icahn School of Medicine at Mount Sinai, USA

Genomics and Liver Disease in Diverse Populations: From Biobanks to Patients

Karthickeyan Chella Krishnan, , USA

Short Talk: Mouse and Human Population Studies Revealed Sex-Specific Roles of Liver Pyruvate Kinase in Promoting NAFLD/NASH

Mohammad Kabbani, Rockefeller University, USA

Short Talk: Human Hepatocyte PNPLA3 148M Exacerbates Rapid Non-Alcoholic Fatty Liver Disease Development in Chimeric Mice

Neil A. Youngson †, Institute of Hepatology, UK

Short Talk: Acetyl-CoA Metabolism Drives Epigenome Change in Steatosis Leading to Widespread Abnormal Transcription and DNA Damage

Petra Hirsova, Mayo Clinic, USA

Short Talk: Hepatocyte-Specific Deletion of ROCK1 Prevents Liver Inflammation and Fibrosis in Murine Nonalcoholic Steatohepatitis

TUESDAY, MARCH 23

NAFLD and CVD (5:10pm Denver/Mountain Time Start) (EK28)

Henry N. Ginsberg, Columbia University College of Physicians and Surgeons, USA

The AAA Atpase Torsin A, a New, Potent Player in VLDL Secretion, NAFL, and NASH

Jay D. Horton, University of Texas Southwestern Medical Center, USA

Molecular Mediators of NAFLD and Hyperlipidemia

* Session Chair † Invited but not yet accepted     Program current as of March 7, 2021.
For the most up-to-date details, visit https://www.keystonesymposia.org.

KEYSTONE SYMPOSIA
on Molecular and Cellular Biology

Hepatobiliary Cancers: Pathobiology and Translational Advances (EK29)
Scientific Organizers: Alphonse E. Sirica, Gregory J. Gores and Lopa Mishra

Supported by the Directors' Fund

Fatty Liver Disease and Multi-System Complications (EK28)
Scientific Organizers: Jay D. Horton, Morris J. Birnbaum and Hannele Yki-Järvinen

March 22-24, 2021 • Virtual at your computer
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Hepatobiliary Cancer Biomarkers and Molecular Subtypes (8am Denver/Mountain Time Start) (EK29)
*Gregory J. Gores, Mayo Clinic, USA
*Alphonse E. Sirica, Virginia Commonwealth University, USA
Yujin Hoshida, UT Southwestern Medical Center, USA
Liver Cancer Risk-Predictive Molecular Biomarkers Specific to Clinico-Epidemiological Contexts
Augusto Villanueva Rodriguez, Icahn School of Medicine at Mount Sinai, USA
Liquid Biopsy in Hepatobiliary Cancers
Jessica Zucman-Rossi, University Paris Descartes-HEGP, France
Mechanisms of Liver Carcinogenesis Define Specific Molecular and Phenotypic HCC Subgroups
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
Kerstin Seidel, Genentech, USA
Short Talk: Notch Inhibition Regresses Progenitor-Like HCCs by Inducing Hepatocyte Differentiation through Controlling C/EBPα Expression and HNF4a Activity
Sungjin Ko, University of Pittsburgh, USA
Short Talk: Short Talk: Short Talk: Short Talk: Regressing Progenitor-Like HCCs by Inducing Hepatocyte Differentiation through Controlling C/EBPα Expression and HNF4a Activity

Role of Lipids in NAFLD (8am Denver/Mountain Time Start) (EK28)
Mitchell A. Lazar, Perelman School of Medicine, University of Pennsylvania, USA
Circadian Contributions to NAFLD
*Catherine Postic, INSERM Institut Cochin, France
Altered Insulin Signaling and Glucose Toxicity in NAFLD
*Hannele Yki-Järvinen, University of Helsinki, Finland
Effects of Genetic Risk Factors for NAFLD on Hepatic Lipid Metabolism
Eran Elinaov, Weizmann Institute of Science, Israel
Host Microbiome Interactions in Health and Disease
HongMin Ni, University of Kansas Medical Center, USA
Short Talk: Short Talk: Lack of VMP1 Impairs Hepatic Lipoprotein Secretion and Promotes Nonalcoholic Steatohepatitis in Mice
Joanne Hsieh, Columbia University, USA
Short Talk: Sexually Dimorphic Mechanisms of Action of TTC39B in Hepatic Lipogenic Gene Expression
Xiao-Wei Chen, Peking University, China
Short Talk: An ER Lipid Scramblase (ELS) Safeguards Lipoprotein Biogenesis and Lipid Homeostasis
Zhaoyue Zhang, Princeton University, USA
Short Talk: Serine Catabolism Generates NADPH to Support Hepatic Lipogenesis

Meet the Editors (Joint) (12:30pm Denver/Mountain Time Start)
Genomics, Molecular Heterogeneity, and Precision Medicine in Hepatobiliary Cancers (3pm Denver/Mountain Time Start) (EK29)
*Lopa Mishra, George Washington University, USA
*Alphonse E. Sirica, Virginia Commonwealth University, USA
Irene Qi Lin Ng, University of Hong Kong, Hong Kong
Molecular Biomarkers in Hepatocellular Carcinoma
Xin Wei Wang, NCI, National Institutes of Health, USA
Causes and Functional Intricacies of Intertumor and Intratumor Heterogeneity in Primary Hepatobiliary Cancers
Renemathy Dhanasekaran, Stanford University, USA
Complexities of Genetic Heterogeneity in Hepatocellular Carcinoma
Bin Tean Teh, Duke-NUS Medical School, Singapore
Genomic and Epigenomic Studies of Cholangiocarcinoma and their Clinical Implications

Pathways to NASH (3pm Denver/Mountain Time Start) (EK28)
Mark A. McNiven, Mayo Clinic, USA
Lipid Droplet Formation and Lipophagy in Fatty Liver Disease
Tobias C. Walther, Harvard School of Public Health, USA
Lipid Droplet Biology in NAFLD
Annelise Poss, University of Utah, USA
Short Talk: Short Talk: Ceramides as Mediators of Endoplasmic Reticulum Stress in NASH
Cholsoo Jang, University of California Irvine, USA
Short Talk: The Small Intestine Shields the Liver from Fructose-Induced Steatosis

* Session Chair † Invited but not yet accepted Program current as of March 7, 2021.
For the most up-to-date details, visit https://www.keystonesymposia.org.
Kahealani Uehara, University of Pennsylvania, USA
Short Talk: Activation of Hepatic mTORC1 Protects Against NASH via Dual Regulation of VLDL-TAG Secretion and De Novo Lipogenesis

Sabine Daemen, Washington University in St. Louis, USA
Short Talk: The Hepatic Crown-like Structure in NASH: A Nexus between Monocyte-Derived Macrophages, Hepatic Stellate Cells, and Tissue Fibrosis

Samar Ibrahim, Mayo Clinic, USA
Short Talk: Lipid-Induced Endothelial Vascular Cell Adhesion Molecule 1 Promotes Nonalcoholic Steatohepatitis Pathogenesis

Wenke Jonas, German Institute of Human Nutrition, Germany
Short Talk: Immunity-Related GTPase IFGGA2 Induces Degradation of Hepatic Lipids by Lipophagy

Chuhan Chung, Gilead Sciences, USA
Combination Therapies for NASH Cirrhosis

Morris J. Birnbaum, Pfizer Inc., USA
DGAT2 Inhibition for NASH

Greg Steinberg, McMaster University, Canada
Role of ATP Citrate Lyase (ACLY) in NASH and HCC

Kendra K. Bence, Pfizer Inc., USA
Inhibition of Fructose Metabolism for the Treatment of NAFLD

Lei Ling, NGM Biopharmaceuticals, USA
Therapeutic FGF19 in Non-Alcoholic Steatohepatitis

Aimee L. Edinger, University of California, Irvine, USA
Short Talk: A Drug-Like Sphingolipid Opposes Mitochondrial Fragmentation and Corrects the Metabolic Sequelae of Obesity

Brian Rady, Janssen R&D, USA
Short Talk: Inhibition of Hepatocyte Inflammasome Improves Features of NASH in foz/foz Mice

Haressh Sajiir, University of Queensland - Mater Research Institute, Australia
Short Talk: Development of Liver-Targeted Interleukin-22 for Fatty Liver Disease

Madhulika Tripathi†, Duke-NUS Medical School Singapore, Singapore
Short Talk: HHcy is a Feature and Mediator of NASH that Permits B12 and Folate to be an Effective Therapy for NASH

Closing Remarks (10:50am Denver/Mountain Time Start) (EK29)

Closing Remarks (10:50am Denver/Mountain Time Start) (EK28)