



美洲華人生物科學學會
Society of Chinese Bioscientists in America



肝病學分會 **Hepatology Division**
(北美華人肝病研究會 **CALS**)

Fourth CALS Annual Symposium

October 29-30, 2021, Time zone: EDT (GMT -4)

Online Zoom Meeting

Meeting ID: 607 443 8562

Passcode: CALS2021

Preliminary Program

Friday, October 29, 2021

6:00 – 6:10 pm Welcome and opening remark

Xin Wei Wang, National Cancer Institute

6:10 – 7:15 pm Session I Liver Physiology

Moderators: Xiao-Ming Yin, Tulane University

Shannon Glaser, Texas A&M University

6:10 – 6:30 pm

X. Charlie Dong, Indiana University

“Sestrins as key signaling regulators in the liver pathophysiology”

6:30 – 6:50 pm

Hongmin Ni, University of Kansas Medical Center

“Regulation of VLDL secretion and lipid metabolism by VMP1”

6:50 – 7:00 pm

Short talk from abstracts

Yu An, University of Texas Health Science Center at Houston

“The mitochondrial dicarboxylate carrier prevents hepatic lipotoxicity”

by inhibiting white adipocyte lipolysis”

7:00 – 7:10 pm Short talk from abstracts
Lirui Wang, China Pharmaceutical University
“Hepatocyte-specific cholinergic receptor nicotinic alpha 4 (Chrna4)
promotes nonalcoholic steatohepatitis”

7:10 – 7:20 pm Sponsorship short talk-1
Jia-Yu (Holly) Ke, Research Diets, Inc.

7:20 – 7:50 pm Keynote Lecture I
Moderator: Bin Gao
Speaker: Hao Zhu, Children’s Research Institute at UT Southwestern
“Assessing cell fitness and competitiveness in liver disease”

7:50 – 9:05 pm Session II Liver Disease - Basic
Moderators: Huiping Zhou, Virginia Commonwealth University
Chris Lau, UCSF

7:50 – 8:10 pm Ekihiro Seki, Cedars-Sinai Medical Center
“New approach to treat alcohol-associated liver disease by targeting
TLR7”

8:10 – 8:30 pm Cynthia Ju, UT Health Science Center at Houston
“Chitinase 3-like-1 in intrahepatic coagulation and acute liver injury”

8:30 – 8:40 pm Short talk from abstracts
Vik Meadows, Indiana University School of Medicine
“Mast cells regulate enterohepatic bile acid and histamine signaling in
mouse model of primary sclerosing cholangitis (PSC)”

8:40 – 8:50 pm Short talk from abstracts
Shicheng Fan, Sun Yat-Sen University
“Fenofibrate induced-hepatomegaly and liver regeneration is PPAR α
dependent and partially related to the activation of YAP pathway”

8:50 – 9:00 pm Sponsorship short talk-2
Liver Research Journal

9:00 – 9:10 pm Sponsorship short talk-3
Dan Wang, Biocytogen

9:10 – 9:15 pm Break

9:15 – 10:15 pm Session III Liver disease - translational

Moderators: Xin Chen, UCSF

Huichang Bi, Sun Yat-Sen University

9:15 – 9:35 pm Lanjing Zhang, Rutgers University
“Integration and analysis of high-dimensional clinical and omic data”

9:35 – 9:55 pm Suthat Liangpunsakui, Indiana University
“FK binding protein 5 in the pathogenesis of alcohol induced liver injury”

9:55 – 10:05 pm Short talk from abstracts
Xinshou Ouyang, Yale University
“m⁶A mRNA methylation directed myeloid cell activation controls progression of obesity and NAFLD”

10:05 – 10:15 pm Short talk from abstracts
Long Xu, University of Texas Health Sciences Center at Houston
“Hepatic recruitment of eosinophils and their protective function during acute liver injury”

10:15 – 11:30 pm Session IV Poster Presentation

10:15 - 11:30 pm Parallel session I. Alcoholic Liver Disease

Moderators: Hua Wang, Anhui Medical University

Hyeong-Geug Kim, Indiana University

10:15 – 10:20 pm Lirui Wang, China Pharmaceutical University
“Aryl hydrocarbon receptor deficiency in intestinal epithelial cells aggravates alcohol-related liver disease”

10:20 – 10:25 pm Xiaowen Ma, University of Kansas Medical Center
“Loss of Drp1-mediated mitochondrial fission accelerates alcohol-induced liver injury in mice through impaired mitophagy”

10:25 – 10:30 pm Guanna Li, University of Texas HSC at San Antonio
“Serine-Arginine Protein Kinase 2 Acts as a Novel Regulator of Lipogenesis in Hepatocytes and Promotes the Progression of Alcohol-Associated Liver Disease”

- 10:30 – 10:35 pm Yudian Zhang, Southwest Medical University, Luzhou, China
“Regulation of cellular senescence of activated hepatic stellate cells in alcohol-associated hepatitis”
- 10:35 – 10:40 pm Chunbao Sun, Tulane University
“Overexpression of microRNA133b inhibits hepatic stellate cell activation and alcoholic fibrosis in mice”
- 10:40 – 10:45 pm Mallika Mathur, School of Medicine, University of Maryland
“Adipose lipolysis is essential for alcohol to induce fatty liver in the NIAAA model of chronic and binge ethanol feeding”
- 10:45 – 10:50 pm Mengwei Jiang, University of Louisville
“Probiotic Lactobacillus rhamnosus GG -Derived Exosome-Like Nanoparticles (LDNPs) Protect Against Alcohol-Associated Liver Disease through Regulation of the Intestinal miR194- FXR-FGF15-mediated Bile Acid Synthesis Pathway in Mice”
- 10:50 – 10:55 pm Shengyi Lai, Virginia Commonwealth University
“The transcriptomic analysis of sphingosine kinase 2 deficiency-mediated alcoholic liver injury”
- 10:55 – 11:00 pm Tianhao Zhou, Indiana University School of Medicine
“Depletion of Secretin Receptor Ameliorates Steatosis and Neutrophil Infiltration in a Mouse Model of Alcoholic Liver Disease”
- 11:00 – 11:05 pm Hyeong-Geug Kim, Indiana University School of Medicine
“PNPLA3 148M Promotes Ductular Reaction on Combine Treatment of High-Fat diet and Multiple Ethanol Binge Mice Model”
- 11:05 – 11:10 pm Xiaojuan Chao, University of Kansas Medical Center
“Loss of Hepatic Transcription Factor EB Attenuates Alcohol-Associated Liver Carcinogenesis”
- 11:10 – 11:30 pm Q & A

10:15 - 11:30 Parallel session II. Non-alcoholic Steatohepatitis-1

Moderators: Ling Yang, University of Iowa
Rongya Tao, Harvard Medical School

- 10:15 – 10:20 pm Tian Lan, Guangdong Pharmaceutical University

“Hepatocyte Glutathione S-Transferase Mu 2 Prevents Nonalcoholic Steatohepatitis by Suppressing ASK1 Signaling”

- 10:20 – 10:25 pm Konstantina Kyritsi, Indiana University School of Medicine
“Inhibition of the Substance P/Neurokinin Receptor (SP/NK1R) Signaling Axis Ameliorates Liver Phenotypes in Non-Alcoholic Fatty Liver Disease (NAFLD)”
- 10:25 – 10:30 pm Rongya Tao, Harvard Medical School
“Hepatic insulin resistance promotes diet-dependent fatty liver diseases through FoxO1-induced Follistatin”
- 10:30 – 10:35 pm Yingdong Zhu, Northeast Ohio Medical University
“Hepatocyte miR-34a is a key regulator in the development and progression of NAFLD”
- 10:35 – 10:40 pm Menghao Huang, Indiana University School of Medicine
“SIRT6 controls hepatic lipogenesis by suppressing LXR, ChREBP, and SREBP1”
- 10:40 – 10:45 pm Fathima Nafrisha Cassim Bawa, Northeast Ohio Medical University
“Retinoic acid receptor alpha mediates the retinoid signaling to protect against diet-induced hepatosteatosis and obesity in mice”
- 10:45 – 10:50 pm Qingwen Qian, University of Iowa Carver College of Medicine
“Disruption of Pituitary-Liver UPR Interaction Contributes to NAFLD”
- 10:50 – 10:55 pm Lirui Wang, China Pharmaceutical University
“Amlodipine, an anti-hypertensive drug, alleviates non-alcoholic fatty liver disease by modulating gut microbiota”
- 10:55 – 11:00 pm Lili Ding, Shanghai University of Traditional Chinese Medicine
“Notoginsenoside Ft1 acts as a TGR5 agonist but FXR antagonist to alleviate high fat diet-induced obesity and insulin resistance in mice”
- 11:00 – 11:05 pm Xiaoxiao Jiang, University of Kentucky Medical Center
“Role of VMP1 in the progression of Non-alcoholic Steatohepatitis”
- 11:05 – 11:30 pm Q & A

10:15 - 11:30 **Parallel session III Non-alcoholic Steatohepatitis-2**
Moderators: Wen Xie, University of Pittsburgh

Lindsey Kennedy, Indiana University

- 10:15 – 10:20 pm Nan Wu, Indiana University School of Medicine
“Down-regulation of the melatonin receptor MT1 ameliorates liver phenotypes of the cholestatic mouse models of bile duct ligated (BDL) and Mdr2^{-/-} mice by reducing orphan GPR50 receptor-promoted constitutive TGF- β 1 receptor signaling”
- 10:20 – 10:25 pm Lindsey Kennedy, Indiana University School of Medicine
“Prolonged secretin treatment restores cholangiocyte function and ameliorates biliary damage and liver fibrosis in a model of late-stage primary biliary cholangitis (PBC)”
- 10:25 – 10:30 pm Hung-Chun Tung, University of Pittsburgh
“Inhibition of heme-thiolate monooxygenase CYP1B1 prevents hepatic stellate cell activation and liver fibrosis”
- 10:30 – 10:35 pm Yeni Ait Ahmed, NIAAA, NIH
“Kupffer cell restoration after partial hepatectomy is mainly driven by their local cell proliferation in autocrine and paracrine IL-6-dependent manners”
- 10:35 – 10:40 pm Keisaku Sato, Indiana University School of Medicine
“Extracellular vesicles secreted from cholangiocytes induce ductular reaction and liver fibrosis during primary sclerosing cholangitis”
- 10:40 – 10:45 pm Wen Xie, University of Pittsburgh
“The anti-fibrotic drug pirfenidone inhibits liver fibrosis by targeting the small oxidoreductase glutaredoxin-1”
- 10:45 – 10:50 pm Lixian Chen, Indiana University School of Medicine
“Free fatty acids induce cholangiocyte α -calcitonin gene-related peptide (α CGRP) secretion via TLR4 in nonalcoholic fatty liver disease (NAFLD)”
- 10:50 – 10:55 pm Chiung-Kuei Huang, Alpert Medical School of Brown University
“TET1 promotes non-alcoholic fatty liver development through altering lipid metabolism”
- 10:55 – 11:00 pm Ming Yang, University of Missouri
“Overexpression of TGFBI promotes the activation of HSCs and NASH progression”

11:00 – 11:05 pm Chaodong Wu, Texas A&M University
“Intestinal inflammation is increased in methionine- and choline-deficient diet-induced non-steatohepatitis”

11:05 – 11:30 pm Q & A

10:15 - 11:30 Parallel session IV Liver Injury

Moderators: Zhi Zhong, Medical University of South Carolina
Zhihong Yang, Indiana University School of Medicine

10:15 – 10:20 pm Zhihong Yang, Indiana University School of Medicine
“Disruption of Rev-Erba and ω -oxidation of fatty acid in the pathogenesis of alcohol-induced liver injury (ALD)”

10:20 – 10:25 pm Yong He, NIAAA, NIH
“Interleukin-20 exacerbates acute hepatitis and bacterial infection by downregulating I κ B ζ target genes in hepatocytes”

10:25 – 10:30 pm Priyanka Ghosh, University of Kansas Medical Center
“Disruption of hepatic small heterodimer partner protects mice against acetaminophen hepatotoxicity through Nrf2 activation”

10:30 – 10:35 pm Fengyuan Li, University of Louisville School of Medicine
“Deficiency of Antimicrobial Peptide Cathelicidin Attenuated High Fat Diet plus Alcohol-induced Liver Injury through Regulation of FGF21/Adiponectin Signaling and Lipolysis in Adipose Tissue in Mice”

10:35 – 10:40 pm Mark Li, University of Iowa
“Hepatic IRE1-mediated Metabolic Adaption Protects Against Cardiac Dysfunction in Sepsis”

10:40 – 10:45 pm Zhi Zhong, Medical University of South Carolina
“Role of TGF- β Signaling and miR23a in Mitochondrial Biogenesis (MB) Suppression after Small-for-Size Liver Transplantation”

10:45 – 10:50 pm Ludovica Ceci, Indiana University School of Medicine
“Prolonged administration of melatonin improved primary sclerosis cholangitis (PSC) phenotypes through clock genes/miR200b/MASPIN/GST signaling pathway”

- 10:50 – 10:55 pm Hui Qian, University of Kansas Medical Center
“Dual role of p62/SQSTM1 in acetaminophen-induced early acute injury and late recovery in mice”
- 10:55 – 11:00 pm Shi-Yu Sun, Nanjing Medical University
“Lansoprazole Activated IP3/Ca²⁺-Induced ERK1/2 And STAT-3 Pathway to Lead to Intrahepatic Bile Duct Injury”
- 11:00 – 11:05 pm Mingjie Fan, Beckman Research Institute of City of Hope
“Bile acid-mediated activation of brown fat protects from alcohol-induced steatosis and liver injury in mice”
- 11:05 – 11:10 pm Bilon Khambu, Tulane University School of Medicine
“NRF2 transcriptionally regulates Caspase-11 expression to activate HMGB1 release by hepatocytes”
- 11:10 – 11:30 pm Q & A

10:15 - 11:30 Parallel session V Metabolism and Liver Diseases

Moderators: Junkai Yan, Shanghai Jiaotong University
Shengmin Yan, Tulane University

- 10:15 – 10:20 pm Junkai Yan, Shanghai Jiaotong University
“Non-canonical IGF2BP1-FGF19 signaling drives metabolic disturbance in a neonatal piglet model of parenteral nutrition-associated liver disease”
- 10:20 – 10:25 pm Derrick Zhao, Virginia Commonwealth University
“Dysregulated sphingolipid metabolism is associated with brain dysfunction in Mdr2 knock out mice”
- 10:25 – 10:30 pm David Fluharty, Virginia Commonwealth University
“The role of lncRNAH19 in regulating miRNA profile in Mdr2 knock out mice”
- 10:30 – 10:35 pm Zhenning Yang, Rutgers University
“The biomarker potential and protective effects of FGF15/19 for circadian disruption of lipid metabolism in the liver in shift workers”
- 10:35 – 10:40 pm Li Xiao, Huazhong University of Science and Technology

“Pyrrolizidine Alkaloids Cooperates with Gut Microbiota to Promote Hepatic Sinusoidal Obstruction Syndrome through Disrupting Gut Barrier”

- 10:40 – 10:45 pm Gang Liu, Tulane University School of Medicine
“Hepatic Autophagy Deficiency Leads to Increased Production of Extracellular Vesicles”
- 10:45 – 10:50 pm Yan Liang, University of California, San Diego
“Temporal Analyses of Postnatal Liver Development and Maturation by Single Cell Transcriptomics”
- 10:50 – 10:55 pm Shengmin Yan, Tulane University School of Medicine
“BID-deficiency alters hepatic metabolome and leads to resistance to diet-induced hepatic steatosis”
- 10:55 – 11:00 pm Jianing Tian, Sun Yat-Sen University
“PXR promotes liver enlargement in mice via the regional induction of hepatocyte enlargement/proliferation”
- 11:00 – 11:05 pm Yuchen Liu, Harvard School of Dental Medicine
“Regulation of bile acid metabolism by hepatic Yap”
- 11:05 – 11:30 pm Q & A

10:15 - 11:30 Parallel session VI Liver Cancer

Moderators: Liqin Zhu, St. Jude Children’s Research Hospital
Lichun Ma, NCI, NIH

- 10:15 – 10:20 pm Lichun Ma, NCI, NIH
“A multiregional single-cell landscape of tumor cell communities in liver cancer”
- 10:20 – 10:25 pm Man Hsin Hu, NCI, NIH
“Reprogramming of methionine metabolism drives T-cell exhaustion in hepatocellular carcinoma”
- 10:25 – 10:30 pm Xiaojuan Chao, University of Kansas Medical Center
“Hepatic p62/Sqstm1 Suppresses Ductular Reaction and Tumorigenesis in Mouse Livers with mTORC1 Activation and Defective Autophagy”

- 10:30 – 10:35 pm Wendy S. Chen, University of California at San Diego
“Single Cell Transcriptomics Reveals Opposing Roles of Shp2 in Myc-driven Liver Tumor Cells and Microenvironment”
- 10:35 – 10:40 pm Ningning Liu, University of Minnesota
“MicroRNA-15a/16-1 Prevent Hepatocellular Carcinoma by Disrupting the Communication between Kupffer Cells and Tregs”
- 10:40 – 10:45 pm Ningning Liu, University of Minnesota
“A c-Myc-YY1-miR-206 Axis Promotes Hepatocellular Carcinoma Progression by Enhancing TGFβ1-mediated Immunosuppression”
- 10:45 – 10:50 pm Yisheng He, The Chinese University of Hongkong
“Dark side of natural products: pyrrolizidine alkaloids and human liver cancer”
- 10:50 – 10:55 pm Xing Liu, Harvard University
“Association of whole grains and dietary fiber intake with risk of liver cancer and chronic liver diseases in the NIH-AARP Diet and Health Study”
- 10:55 – 11:00 pm Taojian Tu, University of Southern California
“Role of CXCL5 in Hepatocellular Carcinoma”
- 11:00 – 11:05 pm Mario Alba, University of Southern California
“PTEN loss regulates SOX9 signal and liver cancer development”
- 11:05 – 11:10 pm Liqin Zhu, St. Jude Children’s Research Hospital
“Temporal and Spatial Dynamics of Hepatic Stellate Cell Activation in Intrahepatic Cholangiocarcinoma”
- 11:10 – 11:30 pm Q & A

Saturday, October 30, 2021

9:00 – 9:50 am Session V Liver cancer - basic

Moderators: Bingning Dong, Baylor College of Medicine
Lisa Zhang, University of Kansas Medical Center

- 9:00 – 9:20 am Wei-Xing Zong, Rutgers University
“Glutamine anabolism in pancreatic and liver cancers”
- 9:20 – 9:40 am Bangyan Stiles, University of Southern California
“Heterogenous liver cancer development promoted by PTEN-regulated liver steatosis”
- 9:40 – 9:50 am Short talk from abstract
Zhihui Li, University of Maryland School of Pharmacy
“Human constitutive androstane receptor represses liver cancer development and hepatoma cell proliferation via erythropoietin signaling”
- 9:40 – 9:50 am Short talk from abstracts
Amanda Jean Craig, NCI, NIH
“Identifying underlying epigenetic regulatory elements in primary liver cancer cell lineage commitment using single cell ATAC sequencing”

9:50 – 10:20 am Keynote Lecture II

Moderator: Cynthia Ju (UT Houston)
Speaker: Anna Lok, University of Michigan
“Prevention and Early Detection of Hepatocellular Carcinoma”

10:20 – 11:20 am Session VI Liver cancer - translational

Moderators: Yingzi Yang, Harvard University
Guisheng Song, University of Minnesota

- 10:20 – 10:40 am Shi-Mei Zhuang, Sun Yat-Sen University
“Vessels encapsulating tumor clusters (VETC) and its clinical significance for HCC”
- 10:40 – 12:00 pm Guangfu Li, University of Missouri
“Development of immune-based therapeutic strategies for liver cancer”

12:00 – 12:10 pm Short talk from abstracts
Yaojie Fu, NIAAA, NIH
“microRNA-223 prevents hepatocellular carcinoma development by limiting hypoxia-mediated tumor immunosuppression and angiogenesis”

12:10 – 12:20 pm Short talk from abstracts
Dan Li, NCI, NIH
“A novel PD-L1-targeted shark VNAR single domain-based CAR-T strategy for treating breast cancer and liver cancer”

12:20 – 12:30 pm Break

12:30 – 12:45 pm Session VII Award Presentation

Moderator: Xin Wei Wang, Cynthia Ju, Huiping Zhou, Bin Gao, Xiao-Ming Yin

12:45 – 1:30 pm Session VIII Business Reports

Moderator: Xin Wei Wang
Treasurer’s report, Wen-Xing Ding, Yuxia Zhang
Secretary’s report, Yanqiao Zhang
Introduction of the next President: Cynthia Ju
Wrap-Up led by Conference Organizers: Xin Wei Wang, Wen-Xin Ding, Charlie Dong, Grace Guo, Cynthia Ju, Lisa Zhang, Yanqiao Zhang

1:30 – 2:30 pm Virtual ‘Happy Hour’