

PROGRAM DUTCH LIVER RETREAT 2025

Thursday February 6th 2025

10.00 - 10.30 Registration with coffee/tea

Opening Dutch Liver Retreat 2025

10.30 - 10.45 Welcome (Hans Jonker)

Session: Bile acids / FXR

Session Leaders: *tba*

10.45 - 11.00 Mice with humanized Farnesoid X Receptor exhibit increased sensitivity to obeticholic acid activation
J. Li¹, H.D. Vries¹, S. Falcone¹, R. Havinga¹, M.V. Hovingh¹, N.L. Mulder¹, E. Weersing¹, H.J. Verkade¹, F. Kuipers¹, J.F. Boer¹, ¹University Medical Center Groningen (UMCG) Netherlands

11.00 - 11.15 Exploring the role of biomolecular condensates in FXR activation and metabolic regulation
M.D. Appelman¹, N. Sirati¹, R. Heezik¹, J. Schuijers¹, S.W.C. Mil¹, ¹University Medical Center Utrecht and Utrecht University, Netherlands

11.15 - 11.30 Inhibition of hepatic bile salt uptake using the anti-HDV drug Bulevirtide attenuates inflammation in mouse models for colitis and diet-induced steatohepatitis
T.A. Nguyen¹, C.C.J. Groenen¹, R.L.P. Roscam Abbing¹, J.M. Lambooj², P.J. Koelink¹, D.R. Waart¹, I. Bolt¹, E. Vogels¹, S. Duijst¹, J. Verheij¹, B.G.A. Guigas², M.E. Wildenberg¹, C.C. Paulusma¹, W. In het Panhuis¹, S.F.J. Graaf¹, ¹Amsterdam University Medical Center Netherlands, ²Leiden University Medical Center Netherlands

11.30 - 11.45 Activation of peroxisome proliferator-activated receptor alpha ameliorates liver pathology in mice with a human-like bile acid composition by modulating bile acid hydrophobicity independent of Cyp8b1
L. Ke¹, E. Verkade¹, N.L. Mulder¹, M.V. Hovingh¹, R. Havinga¹, E. Weersing¹, V.W. Bloks¹, H.J. Verkade¹, J.F. Boer¹, F. Kuipers¹, ¹University Medical Center Groningen Groningen Netherlands

11.45 – 13.45 **Lunchbreak + optional walk (sponsored by....)**

Keynote Lecture

Session leader: *tba*

13.45 – 14.30 “Cholestasis matters - a long way from hepatobiliary basics to clinical breakthroughs”
Prof. dr. U.H.W. Beuers, Professor of Gastroenterology & Hepatology, Amsterdam UMC

14.30 – 14.45 **Short Coffee/Tea break**

Session: NAFLD/NASH

Session Leader: *tba*

14.45 – 15.00 Branched-Chain Amino Acids (BCAA) as modulators of inflammation, fibrosis, and mitochondrial function in liver cells in an in vitro MASLD model
L.M. Martínez Aguilar¹, M.C. Trillos Almanza¹, A.J. Moshage¹, J. Blokzijl¹, M. Buist-Homan¹, ¹University Medical Center Groningen Netherlands

15.00 - 15.15 Next-generation beneficial bacteria combined with fructo-oligosaccharides and fecal microbiota transplantation attenuates diet-induced metabolic dysfunction-associated steatosis in mice
Q.J.J. Augustijn¹, T. Chen¹, S. Havik¹, P. Groen¹, J. Verheij¹, A.L. Mak¹, I. Gül², J.F.M.L. Seegers², W.M. Vos², P. Suenart³, M. Nieuwdorp¹, H. Herrema¹, A. Grefhorst¹, A.G. Holleboom¹, ¹Amsterdam University Medical Centers, Location AMC Amsterdam Netherlands, ²Caelus Health Amsterdam Netherlands, ³The Akkermansia Company Mont-Saint-Guibert Belgium

15.15 – 15.30 Liver sinusoidal endothelial cell-derived extracellular vesicles contain catalase that induces senescence of activated hepatic stellate cells
J. Wang¹, J. Li¹, M.C. Harmsen¹, H. Moshage¹, M. Buist-Homan¹, J.C. Wolters¹, V. Meijer¹, TransplantLines Investigators¹, H. Blokzijl¹, K.N. Faber¹, ¹University Medical Center Groningen Netherlands

15.30 – 15.45 CRISPR/Cas9-mediated gene editing in adult mice identifies hepatic KLB as a regulator of bile acid synthesis and hepatic lipid metabolism
A.S. Aaldijk¹, D. Struik¹, M. Hovingh¹, C.R.C. Verzijl¹, H. Havinga¹, N.C.A. Huijkman¹, M. Smit¹, A.J.A. Sluis¹, J.W. Jonker¹, ¹University Medical Center Groningen (UMCG) Groningen Netherlands

15.45 – 16.00 **Short Coffee/Tea break**

AI Session

Session leaders: *tba*

16.00 – 16.45 To be determined

16.45 – 18.30 **Drinks and Poster Science**

Evening program

18.30 – 20.00 Dinner

20.00 – 21.00 Social programme

21.00 - 00.00 Dance

Friday February 7th 2025

07.00 – 09.00 Breakfast

Session: Fibrosis/HCC

Session Leaders: *tba*

09.00 – 09.15 The endosomal protein sorting complex Retromer plays an essential role in postnatal liver development and liver cancer development
M.G. Barbosa¹, D.Y. Vos¹, C. Verzijl¹, N. Kloosterhuis¹, D. Struik¹, U. Tharehalli Mathada¹, M. Koster¹, M. Smit¹, H. Jonker¹, R. Thomas², J.A. Kuivenhoven¹, B. van de Sluis¹, ¹University Medical Center Groningen Netherlands, ²Utrecht University Netherlands

09.15 – 09.30 DNA methylation of tumor tissues and circulating tumor DNA in early detection of hepatocellular carcinoma
S. Fu¹, A. Boonstra¹, R.G. Boers¹, J.B. Boers¹, M. Doukas¹, S.M. Wilting¹, J. Gribnau¹, D. Sprengers¹, B. Hansen^{1/2}, J.D. Debes^{1/3}, ¹Erasmus MC Rotterdam Netherlands, ²Toronto Centre for Liver Disease, University of Toronto Canada, ³Department of Medicine, University of Minnesota Minneapolis United States

09.30 – 09.45 Exploring the effects of bile salts on hepatic stellate cell activation in vitro and liver fibrosis in a metabolic dysfunction-associated steatohepatitis mouse model
C.C.J. Groenen¹, T. Nguyen¹, D.R. De Waart¹, I. Bolt¹, E. Vogels¹, D. Terlouw-Tolenaars¹, S. Duijst¹, J. Verheij², C.C. Paulusma¹, W. In het Panhuis¹, S.F.J. van de Graaf¹, ¹Tytgat Institute for Liver and Intestinal Research Amsterdam UMC Netherlands, ²Amsterdam UMC, location AMC, Dept of Pathology, University of Amsterdam Netherlands

09.45 – 10.00 Extracellular cathepsin B is a promising therapeutic target for hepatocellular carcinoma
J. Steeghs¹, H. Mourik¹, A. Westheim¹, C.V. Schneider², L. Stoffels¹, E. Wiczczak³, K.M. Schneider², L. Temmerman¹, E. Biessen^{1/2}, R. Godschalk¹, J. Theys¹, R. Shiri-Sverdlov¹, ¹Maastricht University Maastricht Netherlands, ²Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen Germany, ³University of Gdansk Poland

10.00 – 10.30 **Coffee/Tea break**

Session: Diseases of the Liver

Session leaders: *tba*

- 10.30 – 10.45 HBV cccDNA: The molecular reservoir of hepatitis B persistence and challenges in eradication
G. Sari¹, J. Kreeft-Voermans¹, H.L.A. Janssen¹, A.A. Van der Eijk¹, A. Boonstra¹, ¹Erasmus MC Rotterdam Netherlands
- 10.45 – 11.00 Identifying transporters of the solute carrier (SLC) group involved in cholangiocyte defense against toxic bile acids
Q. Li^{1/2/3}, D.C. Trampert^{1/2/3}, R. Kersten^{1/2/3}, S.F.J. van de Graaf^{1/2/3}, U.H.W. Beuers^{1/2/3}, ¹Amsterdam UMC Netherlands, ²Amsterdam Gastroenterology Endocrinology Metabolism (AGEM) Netherlands, ³Tytgat Institute for Liver and Intestinal Research Amsterdam Netherlands
- 11.00 – 11.15 Targeting translational control to reduce stemness and promote differentiation in cholangiocarcinoma organoids
M. Wunan¹, ¹Erasmus MC Rotterdam Netherlands
- 11.15 – 11.30 Developing Prime Editing Strategies for Gene Repair: Targeting 1 nt Deletion
Y. Chen¹, K. Wojczuk¹, L. Bloemendaal¹, P. Bosma¹, ¹ Amsterdam UMC, University of Amsterdam Netherlands
- 11.30 – 12.30 **Lunch Break**

Session: Trilogy on Crigler-Najjar

Session leader: *tba*

- 12.30 – 12.50 Patient perspective (TBD)
- 12.50 – 13.10 Doctor perspective (**Rob de Knegt**)
- 13.10 – 13.30 Research perspective (**Piter Bosma**)
- 13.30 – 14.00 **Coffee/Tea break**

Session: New liver models

Session leader: tba

- 14.00 – 14.15 Bovine intrahepatic cholangiocyte organoids (ICOs) for food safety and animal welfare
M.D. Delemarre¹, B. Spee¹, M. Strikwold², R. Gehring¹, ¹Utrecht University Netherlands, ²Van Hall Larenstein University of Applied Sciences Leeuwarden Netherlands
- 14.15 – 14.30 Albumin as a therapeutic target for endothelial dysfunction in patients with decompensated cirrhosis
S.E. Fischer¹, R.J. Postma¹, J.C. Kerbert¹, R. Bijkerk¹, V. Duinen^{1,2}, A.J. Zonneveld¹, M.J. Coenraad¹, ¹Leiden University Medical Center Netherlands, ²MIMETAS B.V. Oegstgeest Netherlands
- 14.30 – 14.45 Finding the optimal sterilization method of human decellularized livers for clinical applications
E.V.A. Hengel¹, ¹Erasmus MC Rotterdam Netherlands
- 14.45 – 15.00 Characterization of a novel in vitro rhesus macaque liver model to study malaria infection
L. Uden¹, Y. Tao¹, I. Nieuwenhuis², N. Werff², A. Zeeman², B. Spee¹, ¹Utrecht University Netherlands, ²Biomedical Primate Research Centre Rijswijk Netherlands
- 15.00 – 15.15 **Short Coffee/Tea break**
- 15.15 – 15.30 **Poster and presentation award**
- 15.30 – 15.45 **Final remarks, questionnaire & closure**