

The International Society for Hepatic Sinusoidal Research

# Welcomes you to ISCHS 2017

19<sup>th</sup> International Symposium on Cells of the Hepatic Sinusoid 40<sup>th</sup> Anniversary of the First International Kupffer Cell Symposium

June 14th ~ June 17th 2017

Aula Maxima National University of Ireland, Galway

www.ischs2017.ie

# **Acknowledgements**

We would like to thank













for their support of the 19th International Symposium on Cells of the Hepatic Sinusoid (ISCHS2017)

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# Welcome

19th International Symposium on Cells of the Hepatic Sinusoid, Galway, Ireland 14th-17th June, 2017, Aula Maxima, National University of Ireland, Galway, Ireland



Céad Míle Fáilte go ISCHS 2017!

Dear all,

It gives me great please to welcome you to the 19th International Symposium on Cells of the Hepatic Sinusoid! The conference will be held in the National University of Ireland Galway, Aula Maxima, one of the University's most historic buildings (it was built in 1845)! The Aula Maxima is located in the Quadrangle on the University Campus.

As with previous symposia, the main aim of the 19th ISCHS Symposium is to provide a forum for basic scientists and clincal researchers to meet and discuss recent developments in research on the biology of the cells of the hepatic sinusoid in health and disease. A second and equally important aim is to provide of forum for young investigators to present their work in a friendly and supportive environment. I am happy to announce that we have approximately 100 delegates at ISCHS2017 from around the world, including, the USA, Japan, Australia, New Zealand, Malaysia and also from several countries in Europe.

I am sure you will agree that the local organising committee has put together a great scientific programme! We have 9 invited speakers and a total of 9 scientific sessions spread over 3 days, so you are going to be busy! In addition, I hope that our one poster session, on Friday lunch time, will be one of the highlights of the conference.

We have also organised a social programme for you, including a free barbecue and music in the College bar on Wednesday evening, the conference dinner with Irish music & dance on Thursday, and an excursion on Friday afternoon! Galway is an old city with a long history, so be sure to visit the Spanish Arch on the River Corrib – and if you like the pub &traditional music scene, then Galway has much to offer!

Céad Míle Fáilte!

Antony Wheatley, PhD

Tony Wheatley

President of the International Society for Hepatic Sinusoidal Research

# **Local Organising Committee**

Jordi Gracia-Sancho IDIBAPS, Barcelona, Spain / Inselspital, Bern, Switzerland.

Patricia Lalor Birmingham, UK

Beth Mallard Galway, Ireland

Marlini Muhamad Galway, Ireland/Kuala Lumpur, Malaysia

> Aiden McCormick Dublin, Ireland

> Robert McCuskey Tuscon, USA

Krista Rombouts London, UK

Antony Wheatley Galway, Ireland







# **General Information**

# **Registration Desk**

The registration desk is located on the 1st Floor of the Aula Maxima, Quandrangle.

Wednesday, June 14<sup>th</sup> 16.00 – 17.50 Thursday, June 15<sup>th</sup> 08.00 – 16.00 Friday, June 16<sup>th</sup> 08.00 – 14.30 Saturday, June 17<sup>th</sup> 08.30 – 12.00

# Conference Venue – Aula Maxima, The Quadrangle

The conference sessions will take place on Ground Floor of the Aula Maxima, The Quadrangle.

The registration desk and posters will be located on the 1st Floor of the Aula Maxima. Tea/coffee breaks and lunch will be served on the 1st Floor of the Aula Maxima.

### Wifi Access

The following is wifi codes for access for all delegates (NUIGWIFI). Please note this logs out when inactive.

User ID: 9876001T Password: Htpbs4729

# **Parking on Campus**

Please note there are restrictions on parking on the campus from Monday to Friday. There are no restrictions at the weekends. All illegally parked vehicles, will be clamped. There is a pay and display car park located at the Aula Maxima, The Quadrangle, as well as at the Cathedral, approximately a 5 minute walk from the Aula Maxima. There are also a limited number of pay and display parking areas on the main campus (blue lined spaces). Payment is required if you park in blue lined spaces.

### **Mobile Phones**

Delegates are requested to switch off their mobile phones in all meeting rooms during sessions.



# Wednesday 14<sup>th</sup> June: Welcome Reception - Sult, College Bar, NUI Galway

After the opening lecture, please join us for a welcome reception in the College Bar (D on Campus map). This is an opportunity to meet colleagues and fellow delegates in an informal setting. Delegates will enjoy a delicious BBQ and be entertained by the best of traditional Irish music.

# Thursday 15<sup>th</sup> June: Conference Dinner – Irish Entertainment – Hotel Meyrick, 19.30

Enjoy a contemporary Irish show featuring an electrifying mix of music, song and dance led by Carmel Dempsey a well know musician and singer from Galway. A talented fiddle player, Brenda Curtin, accompanies Carmel. Brenda was one of the soloists from Michael Flatley's world renowned Lord of the Dance show. After dinner a troupe of Irish Dancers will captivate the audience performing the very best of Irish dancing. Delegates are encouraged to participate in the dancing and will be taught some steps by our talented dancers.

Cost: €75 per ticket. Please book your ticket at the registration desk.

# Friday 16<sup>th</sup> June: Scenic Cruise of Lough Corrib Ireland's 2<sup>nd</sup> largest lake

We will start from the Aula Maxima at 14.30 and walk to Woodquay, where we will board the Corrib Princess for an exclusive guided cruise of the River Corrib and Lough Corrib on board. Lough Corrib is the second largest fresh water lake in Ireland and there is an abundance of wildlife including birds, hawks, otters, mink, stoat, and much more to see. This cruise takes passengers along the majestic River Corrib and onto the lake providing visitors with unsurpassed views of the historic monuments and natural amenities that make this the most spectacular waterway in Ireland. We will also enjoy an Irish Coffee making demonstration on board. We will return to Woodquay at 17.00.



# **USEFUL INFORMATION**

# **Telephone Information**

The local area code for Galway is 091. Omit this prefix if you are dialling from a fixed landline within the area.

If you are dialling an Irish number from your mobile (cell phone), you need to firstly dial the international code for Ireland (00353), followed by the local area code (omit 0) and then the number.

### **Taxi Services**

Galway Taxis Tel: (091) 561111 Big O Taxis Tel: (091) 585858

# **Tourist Information Board, Galway**

Fáilte Ireland West, Áras Fáilte, Forster Street, Galway. Tel: (091) 537700 info@irelandwest.ie www.discoverireland.ie

# **Public Transport**

National Bus Service operated by Bus Eireann www buseireann ie

Galway Bus Station Tel: (091) 562000

National Train Service operated by Irish Rail

www.irishrail.ie

Galway Train Station Tel: (091) 537582

Private Bus Service from Dublin Airport to Galway

www.GoBus.ie www.CityLink.ie

### **Police**

In Ireland, the police force is called the Garda Siochana. Garda Siochana, Mill Street, Galway. Tel: (091) 538000



# **Banks & Foreign Exchange**

The nearest banks to the conference venue are:

Bank of Ireland, University Branch, Distillery Road, Galway. This is located at the end of the Concourse in the Arts Science Building.

Allied Irish Bank, University Branch, Newcastle Road.

Normal opening times: Monday to Friday 10.00 - 16.00. Closed at weekends.

There are ATM cash dispensers located outside each of these branches.

# **Medical Emergencies / Doctors**

University College Hospital Galway. Tel: (091) 544544

# **General Practitioners**

Newcastle Medical Centre Tel: (091) 524085 Regional Medical Centre Tel: (091) 520340 Claddagh Medical Centre Tel: (091) 582321

Westdoc Galway (out of hours service) Tel: 1850 365000

# **Pharmacy**

The nearest Pharmacy (500m) to the conference venue is:

University Pharmacy, Junction of University Road/Newcastle Road

Tel: (091) 520115

There is also a pharmacy in the Hardiman Building (Library) on campus

Tel: (091) 495044

There are also a number of pharmacies located along the main street of the pedestrianised city centre (Shop St).

### **INVITED SPEAKERS**

# **Prof. Fergus Shanahan**Alimentary Pharmabiotic Centre, University College Cork.



Fergus
Shanahan is
Professor and
Chairman of the
Department of
Medicine and
Director of the
Alimentary

Pharmabiotic Centre at University
College Cork (UCC), National University
of Ireland. He attended medical school
at University College Dublin (UCD), and
after internship and residency in
internal medicine at the Mater Hospital,
Dublin, he completed fellowships in
clinical immunology at McMaster
University, Canada, and in
gastroenterology at University of
California, Los Angeles (UCLA), after
which he rose to the rank of Associate
Professor at UCLA before returning to
Ireland in 1993.

Title of presentation: Translating microbiome science.

# **Prof. Eddie Wisse University of Maastricht.**



Eddie Wisse was born in The Hague, The Netherlands and studied biology at Leiden University. In 1963 he joined

the Laboratory for Electron Microscopy (Medical School) where he started the study of sinusoidal cells. Endothelial fenestrae, the distinction between endothelial and Kupffer cells and the new pit cells were the result of applying

perfusion fixation to rat liver. After his PhD he became full professor at the Laboratory for Cell Biology and Histology at the University of Brussels (VUB), Belgium. The team published over 25 papers on sinusoidal cells in Hepatology and more in other journals. He organized three Kupffer Cell Symposia and produced 10 Proceedings (4,900 pages). After retirement he works at Maastricht University, Nanoscopy Division. The present focus is on the ultrastructure of sinusoidal cells in NASH and fibrosis in needle and wedge biopsies of intact human liver. fixed by new methods preserving the sinusoids and their cells.

Title of presentation: Cells of the hepatic sinusoid - then and now: Forty years since the 1st Kupffer International Cell Symposium

**Prof. Eiji Hara**The Cancer Institute, Japanese
Foundation for Cancer Research.



Eiji Hara obtained his PhD at the Tokyo University of Science in 1993 and moved to the Lawrence Berkeley

Laboratory, University of California (Berkeley, USA) as a Postdoctoral Fellow to work with Dr. Judith Campisi on cellular senescence. In 1995, he joined the Imperial Cancer Research Fund Laboratories (London, UK) as a Postdoctoral Fellow to work with Dr. Gordon Peters on cell cycle control, and then became a Group Leader at the Cancer Research UK-Manchester Institute (formerly called: Paterson Institute for Cancer Research)

(Manchester, UK) in 1998.

In 2003, he returned to Japan as a Professor at the University of Tokushima (Tokushima, Japan) and moved to the Japanese Foundation for Cancer Research (Tokyo, Japan) as a Division Chief in 2008. In 2015, he moved to Osaka University (Osaka, Japan) as a Professor.

Title of presentation: The roles and mechanisms of SASP in senescent hepatic stellate cells.

# Prof. Laurie D. DeLeve Keck Medicine of USC, Division of Gastrointestinal and Liver Diseases.



Prof. Laurie DeLeve calls herself an LSEC (liver sinusoidal endothelial cell) biologist. She received her MD from Erasmus

University of Rotterdam in The Netherlands and her PhD from the University of Toronto in Ontario, Canada, Prof. DeLeve then completed her internal medicine residency at the University of Michigan in Ann Arbor and her gastroenterology fellowship at the University of California, Los Angeles (UCLA). She has been on the faculty at the University of Southern California since 1990 and is currently Professor of Medicine and Senior Associate Chair for Scientific Affairs. Her laboratory has demonstrated the role of LSEC injury in models of drug induced liver injury. discovered intrahepatic and bone marrow sinusoidal endothelial cell progenitor cells ("sprocs"), uncovered that bone marrow sprocs are the major source of LSEC repair after LSEC injury, described the signaling that recruits bone marrow sprocs to the liver, showed that recruitment of bone

marrow sprocs is essential for normal liver regeneration, and elucidated the role of LSECs in hepatic fibrosis. Prof. DeLeve has served on and chaired many AASLD committees and groups and will serve as Associate Editor on the incoming editorial board for Hepatology. She is proud to be a member of the ISHSR, the only society devoted to studying cells of the hepatic sinusoid.

Title of presentation: The liver sinusoidal endothelial cells - the scrappy underdogs of hepatology.

# **Prof. Robert F. Schwabe**Division of Digestive and Liver Diseases, Columbia University.



Following medical school at the University of Heidelberg and LMU Munich, and residency in internal

medicine at the University of Heidelberg, Dr. Schwabe joined the Brenner lab at University of North Carolina at Chapel Hill for a postdoctoral fellowship. In 2003, Dr. Schwabe was recruited to Columbia University where he currently works as Associate Professor in the Division of Digestive and Liver Diseases.

Dr. Schwabe's lab investigates mechanisms by which chronic liver injury promotes the development of liver fibrosis and liver cancer. A particular focus of his lab is understanding the role of damage-associated molecular patterns (DAMPs) in stellate cell activation as well as the role of hepatic stellate cells in the development of liver cancer.

Title of presentation: Links between injury, fibrosis and cancer in the liver.

### **Dr. Raffaella Maria Gadaleta** Interdisciplinary Dept of Medicine, University of Bari.



Raffaella Gadaleta studied Biological Science with a specialization in Physiopathology at the University of Bari. She

carried out her doctoral studies at the University Medical Centre of Utrecht where she studied the involvement of FXR in the pathogenesis of Inflammatory Bowel Diseases.

Afterwards, she moved to Imperial College, London as a Junior Research Fellow, and is now a researcher at the University of Bari where she continues her studies on various aspects of bile acid homeostasis and related diseases of the gut-liver axis.

Title of presentation: FGF19 analogue protects from spontaneous hepatocarcinogenesis in mice.

# **Prof. Bernd Schnabl**University of California, San Diego.



Prof. Schnabl is a trained gastroenterologist and physicianscientist. He received his MD degree from the University

Freiburg in Germany. After finishing his residency in internal medicine, he completed a gastroenterology fellowship at Columbia University in New York City. He joined the Division of Gastroenterology at UC San Diego in 2008 and he is currently an Associate Professor in Residence. His lab is particularly interested in the

contribution of the gut microbiome to the onset and progression of liver disease. He is using system biology approaches to better understand the interaction between the intestinal microbiome and the liver during chronic liver disease. Prof. Schnabl is the principal investigator of a VA Merit Award and several NIH grants. He serves as Associate Editor for Digestive Diseases and Sciences, which is the oldest continuously published GI journal in North America.

Title of presentation: Hostmicrobiome interactions in alcoholic liver disease.

### Prof. Hellmut G. Augustin Medical Faculty Mannheim, Heidelberg University.



Hellmut Augustin is Professor of Vascular Biology at the Medical Faculty Mannheim of Heidelberg

University and Head of the Division for Vascular Oncology and Metastasis Research at the German Cancer Research Center (DKFZ) in Heidelberg, Germany, since 2006. Trained as a Veterinary Pathologist at the University of Veterinary Medicine Hannover, Germany (1987) and as PhD in Experimental Pathology at Cornell University, Ithaca, NY, USA (1992), he worked previously as Assistant Professor at the University of Göttingen, Germany (1993-2000) and as Department Head at the Tumor Biology Center in Freiburg, Germany (2001-2006).

His laboratory (www.angiolab.de) studies 1.) the molecular mechanisms of physiological blood vessel formation,

assembly, and maturation focusing on angiogenesis regulating receptor tyrosine kinases, most notably on the Angiopoietin-Tie ligand-receptor system as well as on other selected novel candidate molecules, 2.) the mechanisms of organotypic vascular differentiation and angiocrine signaling studying the lung and liver vasculature as prototypic vascular beds. 3.) the molecular mechanisms of tumor progression focusing on tumor-vessel interactions during metastasis, and 4.) translational tumor angiogenesis experiments aimed at defining the therapeutic window of stromal targeted therapies.

Title of presentation: Mechanisms of angiocrine signaling in the liver.

**Prof. George K. Michalopoulos** University of Pittsburgh.



George Michalopoulos is Professor and Chairman of the department of Pathology, University of Pittsburgh. Dr.

Michalopoulos led the studies associated with the discovery of Hepatocyte Growth Factor (HGF) and its receptor (c-Met). His research covers molecular events involving growth factor and biomatrix signaling leading to initiation and termination of liver regeneration; the capacity of hepatocytes and cholangiocytes to function as facultative stem cells for each other when regeneration is compromised; genomic alterations associated with hepatocellular carcinomas and their relation to signaling involved in termination of liver regeneration. Awards and distinctions include a Merit Award from NIH; Chair

of the Board of Scientific Counselors of NIH/ NIAAA: induction as fellow of the American Association for the Advancement of Science: Rous-Whipple Award in Experimental Pathology; Distinguished Research Award by the American Liver Foundation: Distinguished Alumnus Award from the University of Wisconsin (Madison); Honorary Doctorate degree from the University of Athens, Greece: Distinguished Research Professor, University of Pittsburgh. He is a member of AASLD since 1985 and became an inaugural fellow of AASLD in 2014. He is associate editor of Lab Investigation, Human Pathology, J. Cell. Physiology and has been conducting multiple reviews on areas of his expertise for Hepatology. Gastroenterology, J. of Hepatology, Science, Nature, Cell, etc.

Title of presentation: Liver regeneration: healing acute injury and exacerbating chronic disease.

# PROGRAMME AT A GLANCE

# Wednesday, June 14th

16.00 - 17.50

Registration

Venue: Aula Maxima, 1st Floor

17.50 - 18.00

Welcome Address

Prof. Antony Wheatley

Venue: Aula Maxima, Ground Floor

18.00 - 18.30

Guest Speaker:

Prof. Fergus Shanahan

Venue: Aula Maxima, Ground Floor

18.30 - 19.00

Guest Speaker:

Prof. Em, Dr. Eddie Wisse

Venue: Aula Maxima, Ground Floor

19.00 - 19.45

Session 1 President's Choice

Venue: Aula Maxima, Ground Floor

19.45 - 22.00

Welcome BBQ and Entertainment

Venue: College Bar - Sult

# Thursday, June 15th

8.00 - 16.00

Registration

Venue: Aula Maxima, 1st Floor

8.30 - 9.00

Guest Speaker Prof. Eiji Hara

Venue: Aula Maxima, Ground Floor

9.00 - 10.15

Session 2 Gut Microbiota & LSEC

Venue: Aula Maxima, Ground Floor

10.15 - 10.45

Coffee Break

Venue: Aula Maxima, 1st Floor

10.45 - 11.15

Guest Speaker: Prof. Laurie D. DeLeve

Venue: Aula Maxima, Ground Floor

11.15 - 12.45

Session 3 LSEC

Venue: Aula Maxima, Ground Floor

12.45 - 13.45

Lunch

Venue: Aula Maxima, 1st Floor

13.45 - 14.15

Guest Speaker:

Prof. Robert F. Schwabe

Venue: Aula Maxima, Ground Floor

14.15 - 15.30

Session 4 Liver Fibrosis - 1

Venue: Aula Maxima, Ground Floor

15.30 - 16.00

Coffee Break

Venue: Aula Maxima, 1st Floor

16.00 - 16.30

Guest Speaker:

Dr. Raffaella Maria Gadaleta

Venue: Aula Maxima, Ground Floor

16.30 - 17.30

Session 5 Bile Acids & Liver Cancer

Venue: Aula Maxima, Ground Floor

19.30 - 23.00

Conference Dinner & Entertainment

Venue: Hotel Meyrick

# PROGRAMME AT A GLANCE

Friday, June 16th

8.00 - 14.30

Registration

Venue: Aula Maxima, 1st Floor

8.30 - 9.00

Guest Speaker Prof. Bernd Schnabl

Venue: Aula Maxima, Ground Floor

9.00 - 10.15

Session 6 Alcohol & Other Liver Injuries

Venue: Aula Maxima, Ground Floor

10.15 - 10.45

Coffee Break

Venue: Aula Maxima, 1st Floor

10.45 - 11.15

Guest Speaker

Prof. Hellmut G. Augustin

Venue: Aula Maxima, Ground Floor

11.15 - 12.45

Session 7 Liver Fibrosis - 2

Venue: Aula Maxima, Ground Floor

12.45 - 14.15

Poster Session and Lunch

Venue: Aula Maxima, 1st Floor

14.15 - 14.30

Conference Photograph

Venue: Aula Maxima, 1st Floor

14.30 - 17.00

**Excursion** 

Venue:

Meet at Aula Maxima, 1st Floor

Saturday, June 17th

8.30 - 12.00

Registration

Venue: Aula Maxima, Ground Floor

9.00 - 9.30

Guest Speaker:

Prof. George K. Michalopoulos

Venue: Aula Maxima, Ground Floor

9.30 - 11.00

Session 8 Liver Regeneration

Venue: Aula Maxima, Ground Floor

11.00 - 11.30

Coffee Break

Venue: Aula Maxima, Ground Floor

11.30 - 12.30

Session 9 Hepatic Stellate Cells

Venue: Aula Maxima, Ground Floor

12.30 - 12.40

Farewell and handout to Sydney

Venue: Aula Maxima, Ground Floor

12.40 - 13.00

Lunch & farewell

Venue: Aula Maxima, Ground Floor

# **Detailed Programme ISCHS 2017**

Venue Information: Aula Maxima, The Quandrangle

**Oral Presentations:** Ground Floor of the Aula Maxima. **Poster Presentations:** 1st Floor of the Aula Maxima.

Registration, Coffee Breaks and Lunch: 1st Floor of the Aula Maxima.

# Wednesday, June 14th

16.00 - 17.50	Registration			
17.50 - 18.00	.00 Welcome Address: Prof. Antony Wheatley			
Guest Speaker: Prof. Fergus Shanahan				
Session Chair: Prof. Aiden McCormick				
18.00 - 18.30	Translating microbiome science			
Guest Speaker: Prof. Em. Dr. Eddie Wisse				
Session Chair: Prof. Em. Dr. Robert S. McCuskey				
18.30 - 19.00	Cells of the hepatic sinusoid - then and now : Forty years			
	since the 1st Kupffer International Cell Symposium			

Session 1 Presi	dent's Choice				
Session Chairs: Prof. Em. Dr. Robert S. McCuskey and Dr. Beth Mallard					
19.00 - 19.15	Rhamm is required for liver repair after acute injury				
	Michele Pritchard				
19.15 19.30	Simvastatin ameliorates sinusoidal				
	microcirculatory phenotype, fibrosis and portal				
hypertension in aged cirrhotic rats					
	Raquel Maeso Díaz				
19.30 - 19.45	Imaging the cellular crosstalk of sinusoidal endothelium				
	Donato Inverso				
19.45 - 22.00	Welcome BBQ and Entertainment				

# Thursday, June 15<sup>th</sup>

8.00 - 16.00	Registration			
Guest Speaker:	Prof. Eiji Hara			
8.30 - 9.00	The roles and mechanisms of SASP in senescent hepatic stellate cells			
Session 2 Gut M	icrobiota & LSEC			
<b>Session Chairs:</b>	Prof. Laura Nagy and Prof. Laurie DeLeve			
9.00 - 9.15	Acceleration of the activation of hepatic stellate cells by bacteria via ROS <b>Soichi Kojima</b>			
9.15 - 9.30	SCARF-1 mediates recruitment of CD4+ T cells to the hepatic sinusoidal endothelium: a new player in the gut-liver axis?  Daniel Patten			
9.30 - 9.45	Absence of cytoglobin, a novel marker of hepatic stellate cells, promotes multiple organ abnormality in aged mice via nitric oxide induced senescence <b>Le Thi Thanh Thuy</b>			
9.45 - 10.00	Liver tissue-resident natural killer cells <b>Wayne Yokoyama</b>			
10.00 - 10.15	Liver injury and intestinal permeability attenuation in antibiotics pretreatment following Concanavalin A administration in mice <b>Ngatiman M. Hairulhisyam</b>			
10.15 - 10.45	10.15 - 10.45 Coffee Break			
Guest Speaker:	Prof. Laurie D. DeLeve			
10.45 - 11.15	The liver sinusoidal endothelial cells- the scrappy underdogs of hepatology  Prof. Laurie D. DeLeve			
Session 3 LSEC				
Session Chairs:	Dr. Jordi Gracia-Sancho and Prof. Hellmut Augustin			
11.15 - 11.30	Towards understanding the dynamic structure of fenestrations in living liver sinusoidal endothelial cells <b>Karolina Szafranska</b>			
11.30 - 11.45	The liver sinusoidal endothelial cell – an endothelial cell with a macrophage-like identity  Sabin Bhandari			
11.45 - 12.00	Functionality based method for simultaneous isolation of rodent hepatic sinusoidal cells  Leslie Stradiot			
12.00 - 12.15	Nanomechanical profiling of the liver sinusoidal endothelial cells in the context of non-alcoholic fatty liver disease  Karolina Owczarczyk			

# 19th International Symposium on Cells of the Hepatic Sinusoid

12.15 - 12.30	Obtaining functionally intact primary human liver sinusoidal endothelial cells (hLSECs) <b>Bård Smedsrød</b>			
12.30 - 12.45	Disruption of rat liver sinusoidal endothelial cell morphology by oxidized low–density lipoproteins <b>Peter McCourt</b>			
12.45 - 13.45	Lunch			
<b>Guest Speaker:</b>	Prof. Robert F. Schwabe			
13.45 - 14.15	Links between injury, fibrosis and cancer in the liver			
Session 4 Liver	Fibrosis - 1			
<b>Session Chairs:</b>	Dr. Patricia Lalor and Prof. Norifumi Kawada			
14.15 - 14.30	The effects of methoxamine on increased intrahepatic vascular resistance in a rat model of non-alcoholic fatty liver disease  Denise van der Graaff			
14.30 - 14.45	Role of matrix rigidity on hepatocytes and liver sinusoidal endothelial cells in hepatic fibrogenesis  Srivatsan Kidambi			
14.45 - 15.00	Partial regression of experimental decompensate cirrhosis after causal agent discontinuation. Vascular characterization and possible therapeutic targets to potentiate regression Erica Lafoz			
15.00 - 15.15	Regulation of endogenous CYGB expression in human hepatic stellate cells  Norifumi Kawada			
15.15 - 15.30	Gender-specific development of experimental autoimmune cholangitis induced by double-stranded RNA <b>Kenichi Ikejima</b>			
15.30 - 16.00	Coffee Break			
Guest Speaker:	Dr. Raffaella Maria Gadaleta			
16.00 - 16.30	FGF19 analogue protects from spontaneous hepatocarcinogenesis in mice			
Session 5 Bile A	cids & Liver Cancer			
<b>Session Chairs:</b>	Prof. Eiji Hara and Dr. Raffaella Gadaleta			
16.30 - 16.45	Bile acids amplify the gender gap in hepatocellular carcinoma <b>Sayeepriyadarshini Anakk</b>			
16.45 - 17.00	Reprogramming of pro-inflammatory human macrophages to an anti-inflammatory phenotype by bile acids  Marianne Wammers			
17.00 - 17.15	Wnt-SCD-LRP5/6 Loop links liver fibrosis with cancer <b>Keane Lai</b>			

17.15 - 17.30	IL-33 from senescent hepatic stellate cells promotes obesity-associated liver cancer development by suppressing antitumor immunity  Naoko Ohtani	
19.30 - 23.00	Conference Dinner & Entertainment	
<b>Venue:</b> Hotel Meyrick, Eyre Square, Galway		

# Friday, June 16th

Friday, June 16 <sup>th</sup>			
8.00 - 14.30	Registration		
Guest Speaker:	Prof. Bernd Schnabl		
8.30 - 9.00	Host-microbiome interactions in alcoholic liver disease		
Session 6 Alcoh	ol & Other Liver Injuries		
<b>Session Chairs:</b>	Prof. Bernd Schnabl and Prof. Hartmut Jaeschke		
9.00 - 9.15	Small specific-sized hyaluronic acid 35 normalizes		
	TLR4 signaling in Kupffer cells from ethanol-		
	fed via microRNA291b-3 and its target Tollip		
0.45 0.00	Laura Nagy		
9.15 - 9.30	Exacerbated LPS/GalN-induced liver injury in the stress sensitive Wistar Kyoto rat: possible		
	role of the endocannabinoid system?		
Marykate Killilea			
9.30 - 9.45	Blockade of platelet function modifies		
	the outcome of acute liver injury		
	Patricia Lalor		
9.45 - 10.00	Reactive oxygen species mediated activation of		
	autophagy in liver sinusoidal endothelial cells is a key requlator of liver ischaemia-reperfusion injury		
	Ricky Bhogal		
10.00 - 10.15	Alcohol-induced macrophage apoptosis		
modulates the intrahepatic inflammatory			
	phenotype and limits liver inflammation		
	Zhuan Li		
10.15 - 10.45	Coffee Break		
	Prof. Hellmut G. Augustin		
10.45 - 11.15	Mechanisms of angiocrine signaling in the liver		
Session 7 Liver			
	Prof. Hellmut G. Augustin and Prof. Robert F. Schwabe		
11.15 - 11.30	Involvement of liver macrophages in the pathogenesis of		
	MCD-diet induced NASH in an immunodeficient mouse model		
	Sandra Winkler		

# 19<sup>th</sup> International Symposium on Cells of the Hepatic Sinusoid

11.30 - 11.45	Simultaneous induction of glycolysis and oxidative		
	phosphorylation during activation of hepatic stellate		
	cells reveals novel targets to treat liver fibrosis		
	Natalia Smith-Cortinez		
11.45 - 12.00	Autophagy regulates endothelial dysfunction		
	and hepatic fibrosis development		
	Maria Ruart		
12.00 - 12.15	Glycine minimizes murine autoimmune cholangitis		
	and pancreatitis caused by double-stranded RNA		
	through modulation of innate immune responses		
	Akira Uchiyama		
12.15 - 12.30	Whole transcriptome analysis of ductular reaction		
	from patients with alcoholic hepatitis. Similarities		
	to ductular reaction in DDC mouse model		
	Beatriz Aguilar		
12.30 - 12.45	Apoptosis signal-regulating kinase (ASK1) is		
	a novel therapeutic target for NASH		
	Grant Budas		
12.45 - 14.15 Pc	oster Session and Lunch		
Session Chairs	: Prof. Victoria Cogger, Prof. Krista Rombouts		
and Prof. Bård			
PS.01	The substance P encoding gene preprotachykinin		
1 3.01	A modulates fenestrations in the liver sinusoidal		
	endothelial cells in polymicrobial sepsis in mice		
	Ravinder Reddy Gaddam		
PS.02	The effect of dietary macronutrients on fenestrations		
1 3.02	in the aging liver sinusoidal cells		
	Mashani Mohamad		
PS.03	Intimate cross-talk between HSC and LSEC contributes to		
1 3.00	activation and deactivation of hepatic sinusoidal cells		
	Marina Vilaseca		
PS.04	Expression of microRNA-155 in myeloid cells		
1 3.04	modulates liver inflammatory response to injury		
	Delia Blaya		
PS.05	Adipocyte fatty-acid binding protein is overexpressed		
1 3.00	in cirrhosis and correlates with clinical outcomes		
	Elisa Pose Mendez		
PS.06	Kupffer cell dysfunction in patients with chronic		
1 3.00	liver disease: Investigating the phagocytic function		
	using ultrasound contrast microbubbles		
	Jiro Fujimoto		
PS.07	Epigenetics during hepatic stellate cell activation		
1-3.07	Claus Kordes		
DC 00			
PS.08	Nitric oxide and prostanoids in early- and late-stages		
	of liver sinusoidal endothelial cells (LSECs) dysfunction		
	in non-alcoholic fatty liver disease (NAFLD)		
	Edyta Kus		

PS.09	Targeting the LSEC to prevent age related disease  Victoria Cogger		
PS.10	The role of the endothelial cell-derived		
	semaphorin3a in non-alcoholic hepatic steatosis,		
	insulin sensitivity and glucose tolerance		
	Daniel Eberhard		
PS.11	C5a receptor antagonist treatment in TLR4		
	mutant C3H/HeJ mouse negatively effects the		
	liver regeneration after partial hepatectomy		
	Rahiman Faiyaz		
PS.12	Common features of hepatic and pancreatic stellate		
	cells copper-deficient model of injury in rat		
	Kadriia Saifullina		
PS.13	Hypoxia-inducible factor-2α protects liver ischemia-		
	reperfusion injury by affecting regulatory T cells		
	Jiang Zhang		
PS.14	Effect of betaine on alcohol-induced gut dysbiosis		
	Kusum Kharbanda		
PS.15	Alcohol affects the cross-talk between hepatocytes		
	and hepatic stellate cells in HCV infection		
	Murali Ganesan		
PS.16	Is the "Liver Sieve Concept" still water-		
	tight in research into atherogenesis?		
	Robin Fraser		
PS.17	Maintenance of human hepatocytes metabolism in culture		
	using a newly-formulated solid shipping medium		
	Lourdes Gombau		
PS.18	The pancaspase inhibitor emricasan improves the		
	phenotype of hepatocytes from human and rat		
	cirrhotic livers without evidence of hepatotoxicity		
	Martí Ortega-Ribera		
PS.19	Human amniotic epithelial stem cells as a new therapeutic		
	option for portal hypertension and cirrhosis		
	Anabel Fernández-Iglesias		
PS.20	Phenotypic changes in rat liver sinusoidal endothelial		
cells during early stages of in vitro culture			
	Ruomei Li		
14.15 - 14.30	Conference Photograph		
<b>Venue:</b> Aula Maxi			
14.30 - 17.00	Excursion		
<b>Venue:</b> Meet at A	ula Maxima, 1st Floor		

# Saturday, June 17<sup>th</sup>

8.30 - 12.00	Registration (Ground Floor)			
Guest Speaker: Prof. George K. Michalopoulos				
9.00 - 9.30	Liver regeneration: Healing acute injury and exacerbating chronic disease			
Session 8 Liver	Regeneration			
Session Chairs: Prof. Krista Rombouts and Prof. George Michalopoulos				
9.30 - 9.45	Human pluripotent stem cell-derived mesenchymal stem cells contribute to liver regeneration in Gunn rats  Claus Kordes			
9.45 - 10.00	A systems biology pursuit for identifying control points to counteract chronic alcoholmediated impairment of liver regeneration Rajanikanth Vadigepalli			
10.00 - 10.15	The hepatic stellate cells as potential regional hepatic progenitor cells  Anisa Gumerova			
10.15 - 10.30	Delayed liver regeneration in germ-free mice is normalised following colonisation with conventional mouse microbiota  Muhamad Marlini			
10.30 - 10.45	Activation of an early postnatal splicing program by ESRP2 is critical for liver regeneration  Auinash Kalsotra			
10.45 - 11.00	Deletion of the Hippo core kinases MST1 and MST2 by siRNA rescues liver regeneration in aged mice. <b>Deborah Stroka</b>			
11.00 - 11.30	Coffee Break (Ground Floor)			

Session 9 Hepatic Stellate Cells			
Session Chairs	Session Chairs: Prof. Krista Rombouts and Prof. Massimo Pinzani		
11.30 - 11.45	Direct differentiation of hepatic stellate cells from ips cells.  Julia Vallverdu		
11.45 - 12.00	Mucosal- associated invariant T (MAIT) cells are significantly decreased and exhausted in patients with autoimmune liver disease, but promote primary hepatic stellate cell (HSC) activation Katrin Böttcher (nee Schölzel)		
12.00 - 12.15	Protective role of cytoglobin in liver injury and fibrogenesis in bile duct ligation-induced cholestatic mice; possible involvement of nitric oxide Le Thi Thanh Thuy		
12.15- 12.30	Laminin-521 promotes quiescence in hepatic stellate cells Friederike Rohn		
12.30 - 12.40	Farewell and handout to Sydney (Ground Floor)		
12.40 - 13.00	Lunch & Farewell		

# **Delegate List**

			1
Name	Surname	Affiliation	Country
Beatriz	Aguilar	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS)	Spain
Sayeepriyadarshini	Anakk	University of Illinois, Urbana-Champaign	USA
Hellmut G.	Augustin	Heidelberg University	Germany
Sabin	Bhandari	The Arctic University of Norway	Norway
Ricky	Bhogal	University of Birmingham	UK
Delia	Blaya	Institut d'investigacions Biomèdiques August Pi i Sunyer (IDIBAPS)	Spain
Katrin	Böttcher (nee Schölzel)	University College	UK
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Victoria	Cogger	C.E.R.A., University of Sydney	Australia
Willeke	de Haan	KU Leuven	Belgium
Laurie	DeLeve	Keck Medicine of USC	USA
Daniel	Eberhard	Heinrich-Heine University Düsseldorf	Germany
Rahiman	Faiyaz	National University of Ireland, Galway	Ireland
Anabel	Fernández- Iglesias	Liver Vascular Biology Research Group - IDIBAPS - CIBEREHD	Spain
Robin	Fraser	University of Otago-Christchurch	New Zealand
Jiro	Fujimoto	Hyogo College of Medicine	Japan
Raffaella Maria	Gadaleta	University of Bari	Italy
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Anisa	Gumerova	Kazan Federal University	Russian Federation
Ngatiman M.	Hairulhisyam	National University of Ireland, Galway	Ireland
Eiji	Hara	Research Institute for Microbial Diseases, Osaka University	Japan
Kenichi	Ikejima	Juntendo University School of Medicine	Japan
Donato	Inverso	German Cancer Research Center KFZ)	Germany

Name	Surname	Affiliation	Country	
Hartmut	Jaeschke	University of Kansas Medical Center	USA	
Auinash	Kalsotra	University of Illinois, Urbana-Champaign	USA	
Norifumi	Kawada	Osaka City University	Japan	
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Srivatsan	Kidambi	University of Nebraska-Lincoln	USA	
Marykate	Killilea	National University of Ireland, Galway	Ireland	
Soichi	Kojima	RIKEN CLST	Japan	
Claus	Kordes	University of Duesseldorf, Heinrich Heine University	Germany	
Edyta	Kus	Jagiellonian Centre for Experimental Therapeutics, JCET	Poland	
Erica	Lafoz	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS)	Spain	
Keane	Lai	University of Southern California (USC)	USA	
Patricia	Lalor	University of Birmingham	UK	
Niamh	Leonard	National University of Ireland, Galway	Ireland	
Ruomei	Li	UiT/The Arctic University of Norway	Norway	
Zhuan	Li	University of Kansas Medical Center	USA	
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Muhamad	Marlini	National University of Ireland, Galway	Ireland	
Aiden	McCormick	St Vincent's University Hospital	Ireland	
Peter	McCourt	UiT/The Arctic University of Norway	Australia	
Robert	McCuskey	University of Arizona	USA	
Rachel J.	Meyer	Midland University, , Fremont, NE	USA	
George	Michalopoulos	University of Pittsburgh	USA	
Mashani	Mohamad	Universiti Teknologi MARA	Malaysia	
Han	Moshage	University Medical Center Groningen	The Netherlands	
Laura	Nagy	Cleveland Clinic	USA	
Toshitaka	Odamaki	Morinaga Milk Industry Co. Ltd.	Japan	
Naoko	Ohtani	Dept. of Pathophysiology, Graduate School of Medicine, Osaka City University	Japan	
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Gerard	Palau	ReadyCell	Spain	
Daniel	Patten	University of Birmingham	UK	

# 19<sup>th</sup> International Symposium on Cells of the Hepatic Sinusoid

Name	Surname	Affiliation	Country	
Massimo	Pinzani	University College London	UK	
Elisa	Pose Mendez	Universitat de Barcelona	Spain	
Michele	Pritchard	University of Kansas Medical Center	USA	
Friederike	Rohn	University of Duesseldorf, Heinrich Heine University	Germany	
Krista	Rombouts	University College London	UK	
Maria	Ruart	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS)	Spain	
Kadriia	Saifullina	Kazan State Medical University	Russian Federation	
Bernd	Schnabl	University of California San Diego	USA	
Robert F.	Schwabe	Columbia University	USA	
Fergus	Shanahan	Alimentary Pharmabiotic Centre, University College Cork (UCC)	Ireland	
Bård	Smedsrød	UiT/The Arctic University of Norway	Norway	
Natalia	Smith- Cortinez	University Medical Center Groningen	The Netherlands	
Karen Kristine	Sørensen	UiT/The Arctic University of Norway	Norway	
Leslie	Stradiot	Vrije Universiteit Brussel	Belgium	
Deborah	Stroka	University of Bern	Switzerland	
Karolina	Szafranska	Jagiellonian University	Poland	
Le Thi Thanh	Thuy	Osaka City University	Japan	
Dimitar	Tonev		UK	
Akira	Uchiyama	Juntendo University School of Medicine	Japan	
Rajanikanth	Vadigepalli	Thomas Jefferson University	USA	
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Denise	van der Graaff	University of Antwerp	Belgium	
Marina	Vilaseca	Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS)	Spain	
Marianne	Wammers	University of Duesseldorf, Heinrich Heine University	Germany	
Antony	Wheatley	National University of Ireland, Galway	Ireland	
Sandra	Winkler	University of Leipzig	Germany	
Eddie	Wisse	Maastricht University	The Netherlands	
Wayne	Yokoyama	Washington University in St. Louis	USA	
Jiang	Zhang	Department of Medicine II, Hospital of the Ludwig-Maximilians University (LMU) of Munich	Germany	

NOTES							

# 19th International Symposium on Cells of the Hepatic Sinusoid **NOTES**



# The International Society for Hepatic Sinusoidal Research (ISHSR)

The International Society for Hepatic Sinusoidal Research (ISHSR) was established in December, 2008 to serve as a non-profit organization to promote education, basic and translational research on the cells of the hepatic sinusoid including liver parenchymal cells. It promotes science on cell and molecular biology of each cell type and cross-talk among these cell types in health and disease during an entire life span. The ISHSR supports the international scientific symposium on liver sinusoidal cells formally called International Kupffer Cell Symposium (1977-1988) and International Symposium on Cells of the Hepatic Sinusoid: ISCHS (1990-2008).

The ISHSR currently has more than 150 members from 20 nations who are primarily interested in hepatic sinusoidal cells such as sinusoidal endothelial cells, Kupffer cells, NKT cells, NK cells, hepatic stellate cells, and hepatocytes.

www.ishsr.net

### **Conference Website**

www.ischs2017.ie

### **Conference Venue**

Aula Maxima, National University of Ireland, Galway

# International Society for Hepatic Sinusoidal Research

https://ishsr.net/

### **Conference Secretariat**

Go West Conference & Event Management, Galway. www.gowest.ie









