XXII International Bile Acid Meeting
Hepatic and Extrahepatic Targets of Bile Acid Signaling

September 14 – 15, 2012
Hilton Vienna Hotel
Vienna, Austria

Preliminary Program
CME credits for the Falk Symposium 184 have been applied for at the European Union of Medical Specialists (UEMS) – European Board of Gastroenterology (EBG). The number of credits awarded will be printed in the final program.
Preface

Since the last International Bile Acid Meeting in Freiburg in 2010, bile acid research has continued to flourish and bile acid signaling has become an important area of research. New insight has been gained into the mechanisms responsible for maintaining bile acid homeostasis and bile acid signaling, which involves both nuclear and membrane-bound receptors. Especially relevant is the insight that bile acids act as signaling molecules also in extrahepatic organs and disturbances of bile acid signaling have gained clinical relevance and offer new aspects on the pathogenesis of cholestatic liver disease such as cholestatic itch, primary sclerosing cholangitis and primary biliary cirrhosis and cholestasis in pregnancy.

The XXII. International Bile Acid Meeting will be dedicated to both basic and clinical aspects of bile acid research with focus on the role of bile acids as signal molecules in a variety of organs and in hepatobiliary diseases. Novel therapeutic aspect arising from these discoveries are another focus of the conference. The latest findings will be presented by leading scientists and clinicians in this field. During the symposium a poster session will also take place. In line with the tradition of the International Bile Acid Meeting some of the best poster abstracts will be selected by the scientific committee and the authors will be invited for oral presentations. The organizers of the XXII. International Bile Acid Meeting look forward to welcome you in Vienna.

Dieter Häussinger
XXII International Bile Acid Meeting
Hepatic and Extrahepatic Targets of Bile Acid Signaling

Hilton Vienna Hotel
Vienna, Austria

Registration:
Thursday September 13, 2012
16.00 – 21.00 h
at the congress office

Scientific Organization:
U. Beuers, Amsterdam (The Netherlands)
D. Häussinger, Düsseldorf (Germany)
M. Trauner, Vienna (Austria)

Congress Venue:
Hilton Vienna Hotel
Am Stadtpark
1030 Vienna
Austria

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Official Language:
English

Posters:
For details see page 13

Publication date of final program:
September 2012
The final program will be available on the homepage www.falkfoundation.org one week before
Friday, September 14, 2012

8.00 Welcome and Opening

D. Häussinger, Düsseldorf

**Session I**

**Metabolism and transport of bile acids**

Chair: A. F. Hofmann, La Jolla; K. Schoonjans, Lausanne

8.10 Regulation of canalicular ABC transporters by their membrane microenvironment

B. Stieger, Zurich

8.30 Bile acids are upstream regulators of the Hippo growth control pathway

D. D. Moore, Houston

8.50 Molecular and mechanistic basis of Rotor syndrome

M. Jirsa, Prague

9.10 Oral presentation selected from poster abstract submission

N. N.

9.30 Coffee break with poster session

**Session II**

**Bile acid signaling I**

Chair: P. L. M. Jansen, Amsterdam; D. J. Mangelsdorf, Dallas

10.00 TGR5 and atherosclerosis

K. Schoonjans, Lausanne

10.20 The heart as a target of bile acid signaling

S. J. Karpen, Houston

10.40 The bile acid/FGF 15/19 axis and hepatic metabolism

A. Moschetta, Sta. Maria Imbaro

11.00 Bile acids and nuclear receptor signaling in liver diseases, diabetes and obesity

J. Y. Chiang, Rootstown

11.20 Oral presentation selected from poster abstract submission

N. N.

11.40 Lunch break with poster session
Friday, September 14, 2012

13.30 Presentation of the Adolf Windaus Prize
D. Häussinger, Düsseldorf

13.45 Adolf Windaus Prize Lecture
N. N.

Session III
Bile acid signaling II

Chair: D. Keppler, Heidelberg; I. Björkhem, Stockholm

14.15 Sphingosine-1-phosphate receptor activation by bile acids
P. B. Hylemon, Richmond

14.35 $\alpha_5\beta_1$Integrins act as TUDC receptors in hepatocytes
H. Gohlke, Düsseldorf

14.55 Coffee break with poster session

15.20 TGR5 in the nervous system
V. Keitel, Düsseldorf

15.40 Bile acid signaling in non-canonical targets
V. Shah, Rochester

16.00 Oral presentation selected from poster abstract submission
N. N.

16.20 Poster session
Saturday, September 15, 2012

Session IV
Bile acids and disease

Chair: U. Beuers, Amsterdam; P. A. Dawson, Winston-Salem

8.30 FXR and intestinal inflammation
S. W. C. van Mil, Utrecht

8.50 New insights in the relation between autotaxin and cholestatic itch
R. P. J. Oude-Elferink, Amsterdam

9.10 Update on the genetics of PBC
G. Hirschfield, Birmingham

9.30 Update on ICP genetics
F. Lammert, Homburg

9.50 Update on PSC genetics
T. H. Karlsen, Oslo

10.10 Oral presentation selected from poster abstract submission
N. N.

10.30 Coffee break with poster session

Session V
Therapeutic potential of bile acids I

Chair: A. Stiehl, Heidelberg; M. Trauner, Vienna

11.00 Effects of bile acid sequestrants on FXR and TGR5 signaling
S. Kliewer, Dallas

11.20 Ursodeoxycholic acid in PSC: From evidence-based guidelines back to expert opinion
U. Beuers, Amsterdam

11.40 Oral presentation selected from poster abstract submission
N. N.
Saturday, September 15, 2012

Session VI
Therapeutic potential of bile acids II

Chair: G. Paumgartner, Munich; R. Poupon, Paris

12.00 Therapeutic potential of nor-UCDA and novel FXR/TGR5 agonists in PSC
M. Trauner, Vienna

12.20 FXR agonists in NAFLD therapy
A. J. Sanyal, Richmond

12.40 Oral presentation selected from poster abstract submission
N. N.

13.00 Presentation of Poster Prizes
D. Häussinger, Düsseldorf

13.10 Lunch break with poster session
Adolf Windaus (1876-1959)

Adolf Windaus was born on Christmas Day in 1876 in Berlin, where his father owned a factory. Even as a young student in the Berlin gymnasium, he was fascinated by the epochal discoveries of Koch and Pasteur, and by his 18th birthday he had decided on a scientific career. He entered medical school, taking his pre-clinical year at the University of Freiburg and his clinical years in Berlin. However, he soon realized, especially during the lectures of Emil Fischer, that biological processes could be understood only when the chemical structure of organisms was known. Therefore, as soon as he had finished medical school, he returned to Freiburg to study chemistry under the supervision of Heinrich Kiliani. In 1899, he completed his first research project which dealt with the chemical composition of digitalis. He then spent two years in compulsory military service in Berlin. During this time he also worked in the laboratory of Emil Fischer, carrying out studies on derivatives of aniline. On completing his military service, Windaus returned to the University of Freiburg where he began his life-long work on the structure of cholesterol. His thesis, which qualified him for the position of decent, had the simple title „Über Cholesterin“. The choice of this research topic originated from Windaus’ logical belief that any substance which was so widely distributed in animal and plant tissues must have an important biological function, and that understanding of its structure and function might lead to unifying concepts, a hypothesis he would subsequently prove so brilliantly. In addition to initiating studies on cholesterol, he and his colleague Knoop soon discovered that an amino acid containing the imidazole ring, histidine, was present in proteins, and could be decarboxylated to give histamine. The discovery of histamine opened a vast area of pharmacological research.

In 1913, Adolf Windaus accepted a call to direct the prestigious Institute of Medical Chemistry in Innsbruck, Austria, where earlier Pregl had founded microanalytical chemistry. Two years later, in 1915, he was called to be Director of the Chemical Laboratories of the University of Gottingen, laboratories rich in tradition since the time of Woehler. Here, he could pursue his work on elucidating the structure of cholesterol in a series of integrated investigations that were truly Herculean in scope. In the year 1919 a most significant discovery was made. Windaus found that co-prostane could be oxidized to cholic acid. With the knowledge of this transformation, came the realization of the close structural similarity of cholesterol and bile acids; one could now apply the existing knowledge of cholesterol structure to that of bile acids and that of bile acids to cholesterol. The work of elucidating the exact structure of the condensed steroid rings of steroids was extraordinarily difficult. To understand the structural isomerism of the A / B ring juncture, it was necessary to study the simplest model compounds, cis and trans decalin. This was done with Hueckel, who later became one of the world’s greatest physical chemists.

In the twenties, Adolf Windaus, with his pupils, established the relationships between cholesterol and other important steroids such as sitosterol, the saponins, and the various classes of cardiac steroids. He showed that all shared the cyclopentanophenanthrene nucleus. Inspired by Windaus, his pupil Butenandt isolated and determined the structure of the adrenal steroids whose origins from cholesterol had not been suspected by anyone. Butenandt was able to rapidly determine the structure of estrone, ando-sterone, and progesterone, for which he received the Nobel Prize in 1939.

Probably the climax in the extraordinary research output of Adolf Windaus was his elucidation of the structure and biosynthesis of vitamin D. Hess in New York had made the observation that ultraviolet radiation of a lipid extract induced the formation of active vitamin D. In the next 8 years, Adolf Windaus and his students succeeded in identifying the provitamin as ergosterol and 7-dehydrocholesterol and also in clarifying the structure of vitamin D2 and vitamin D3. The complex steps in photoactivation of the vitamin were clarified, and each intermediate was crystallized and its structure determined.
Thus, the research area of the chemical structure of cholesterol, which Adolf Windaus had selected when still a young decent in Freiburg led to studies spanning over 30 years-studies which opened up a vast, almost limitless field that continues to be active today. His work has been of inestimable significance for the practice of medicine. Adolf Windaus, however, insisted that his research was not aimed at applications, but only at understanding the mysteries of nature.

Adolf Windaus had a legendary reputation among his colleagues and students. He was a man of infinite energy and extraordinary insight, who could reduce scientific problems to their essence. He had the art to ask the right question and do the definitive experiment. Nature disclosed her secrets quickly to a man of such talent. His former associates had continuous admiration for his clarity of speech, both in conversation and scientific discussion. He was a man of modesty and dignity who combined the highest scientific standards with great personal generosity.

For his many discoveries, Adolf Windaus received many honors and awards. Under his leadership, the Chemical Institute in Gottingen became known throughout the world. He was honored by being chosen to receive the Nobel Prize for chemistry in 1928, and his lecture is a masterpiece of erudition, clarity and modesty.

W. Gerok
Adolf Windaus Prize

The „Adolf Windaus Prize“ was founded by the Falk Foundation and will, for the seventeenth time, be presented on the occasion of the XX International Bile Acid Meeting, on September 14, 2012. The prize amounts to € 5,000.- and is awarded for outstanding publications in the field of bile acid research in the last two years.

Members of the Prize Committee:

U. Beuers (Amsterdam)
D. Häussinger (Düsseldorf)
R. P. J. Oude Elferink (Amsterdam)
A. Parés (Barcelona)
R. Poupon (Paris)
M. Trauner (Graz)

Windaus Prize Winners:

1980 - C. Einarsson (Stockholm) & K. Hellstrom (Stockholm)
1982 - E. H. Mosbach (New York) & H. Danielsson (Uppsala)
1984 - M. C. Carey (Boston)
1986 - I. Bjorkhem (Huddinge)
1988 - J. L. Boyer (New Haven)
1990 - P. B. Hylemon (Richmond) & P. J. Meier-Abt (Zurich)
1992 - K. Okuda (Hiroshima)
1994 - Z. R. Vlahcevic (Richmond)
1996 - W. Kramer (Frankfurt)
1998 - P. A. Dawson (Winston-Salem)
2000 - D. J. Mangelsdorf (Dallas)
2002 - D. W. Russell (Dallas)
2004 - K. D. R. Setchell (Cincinnati)
2006 - R. Poupon, (Paris)
2008 - N. Ballatori, (Rochester)
2010 - J. Auwerx & K. Schoonjans (Lausanne)

Coordinator of the Prize Committee:

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Poster Session

Posters will be exhibited on September 14 – 15, 2012, at the „Hilton Vienna Hotel“, Vienna. The authors will be in attendance during coffee and lunch breaks on both days.

Call for posters

Please submit your poster abstract before May 15, 2012. Only one-page abstracts not exceeding 250 words, written in English and saved in Microsoft Word format will be accepted.

Abstracts must be submitted via our Internet Abstract Submission System (http://www.falkfoundation.com/poster) where further information regarding the submission format and the submission process is available.

The abstracts will be selected by the scientific organizers, preference being given to those thematically related to one of the sessions of the program.

The accepted abstracts will be printed and distributed to the participants of the congress together with the documents of the meeting.

The authors will receive notification about acceptance and further instructions in June 2012.

Contact address for further information on the poster session:

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P.O. Box 6529
79041 Freiburg/Germany
Telephone: +49 (0) 761 / 15 14 - 0
Telefax: +49 (0) 761 / 15 14 - 359
Web address for submitting poster abstracts:
http://www.falkfoundation.com/poster

For the first author of an accepted poster, expenses for accommodation (September 13 – 16, 2012) and fees for the scientific program and evening activities will be covered during Falk Symposium 184. Travel expenses will not be covered.

Poster prizes

Three prizes will be awarded for the best presentations.
Prize winners will be presented with a certificate and prize money for € 1.500,-, € 1.000,- and € 500,- respectively. Travel expenses will be covered for the first author of prize winning posters.
List of Speakers, Moderators and Scientific Organizers

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General Information

Prior to the opening of the congress in Vienna

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Congress Office

During Falk Symposium 184

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Opening Hours:
Thursday, September 13, 2012  16.00 – 21.00 h
Friday, September 14, 2012  
7.00 – 17.00 h
Saturday, September 15, 2012  
8.00 – 15.00 h

Congress Fees

Scientific program of the Falk Symposium 184 
€ 200,-
Students and residents 
€ 100,-

Day ticket 
€ 120,-
Students and residents 
€ 60,-

The congress fees include:
- Welcome Evening on September 13, 2012
- Refreshments during coffee breaks
- Lunch on September 14 and 15, 2012
- A copy of the abstract volume
Registration

Congress registrations must reach the Falk Foundation e.V. by **June 30, 2012 at the latest**. Congress fees may be paid by cheque payable to the Falk Foundation e. V. or by bank transfer to Volksbank Freiburg e. G., Germany, Bank No. 680 900 00, Account No. 145 2010, IBAN DE33 6809 0000 0001 4520 10, BIC Genode 61 FR1. Please mark bank transfers with „Falk Symposium 184“.

To ensure correct registration, participants are asked to send in their registration and the fee remittance together.

After receipt of registration form, each participant will be provided with confirmation of his registration. On presentation of this confirmation at the Congress Office in Vienna participants will receive the congress folder containing name badges, admission tickets and the abstract volume.

In the event of registration cancellations, a handling fee of € 20,- will be deducted from the refund. All participants will receive a written confirmation of attendance at the end of the meeting.

Admission to Scientific Events

For admission to scientific events your name badge should be clearly visible.

Congress Report

The official congress report of the Falk Symposium 184 “Hepatic and Extrahepatic Targets of Bile Acid Signaling” will be published in English in the second half of 2013 by Karger, Switzerland. Orders for this book at a reduced subscription price of € 35,- can be placed at the Congress Office during the congress in Vienna.

Hotel Accommodation

Hotel reservations can be made online:
http://www.wien.info/en/hotels

Airport

International Airport Vienna