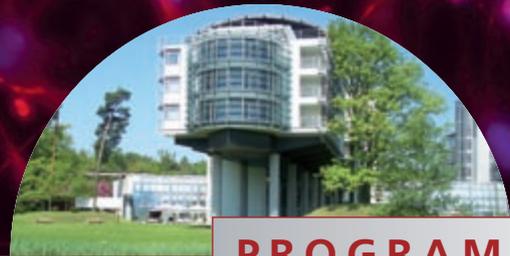


Organotypic Tissue Culture for Substance Evaluation



PROGRAMME



September 22 – 25, 2009

Kongresshotel Potsdam am Templiner See,
Potsdam/Germany



DECHEMA
Gesellschaft für Chemische Technik
und Biotechnologie e.V.
Ms. Heike Geiling
Theodor-Heuss-Allee 25
D-60486 Frankfurt am Main

Phone: +49 (0)69/7564-280
Fax: +49 (0)69/7564-304
Email: geiling@dechema.de



DECHEMA e.V.

www.dechema.de/tissue09

www.dechema.de/tissue09

MEMBERS OF THE SCIENTIFIC COMMITTEE

Christa Burger	Merck KGaA, Darmstadt/D
Hansjörg Hauser	HZI Braunschweig/D
Andreas Lendlein	GKSS Teltow/D
Uwe Marx	ProBioGen AG, Berlin/D (Chairman)
Heike Mertsching	FhlGB, Stuttgart/D
Andreas Scriba	DECHEMA e.V., Frankfurt am Main/D

ACKNOWLEDGEMENT

The organisers convey their sincere thanks for financial support to



Association of German Biotechnology Companies, Frankfurt am Main/D



Federal Ministry of Education and Research

Federal Ministry of Education and Research, Berlin/D



Doerenkamp-Zbinden-Foundation, Küsnacht/CH

CONTENTS

■ INVITATION	4
■ LECTURE PROGRAMME	
Tuesday, September 22, 2009	5
Wednesday, September 23, 2009	6
Thursday, September 24, 2009	7
Friday, September 25, 2009	8
■ EXHIBITION	9
■ SOCIAL EVENTS	10
■ GENERAL INFORMATION	
The City of Potsdam	11
Conference Venue	12
Conference Office	12
Room Reservation	12
Registration	13
Registration Fees	13
Remittance of Fees	13
Cancellation and Refunds	14
Visa Formalities	14
Insurance	14
How to get to the Kongresshotel Potsdam	14

INVITATION

The Symposium brings together latest state of the art of in vitro organ culture. It challenges the problem of multi-organ in vitro systems and tries to estimate, how far in vitro organs are from being valid systems for industrial high content substance testing.

The development of dynamic macroscale bioreactor systems is regarded as breakthrough in cell culture technology. With several commercially available liver bioreactor systems for acute liver failure, tissue engineers were able to emulate functions of a complex human organ in vitro for the first time in the hundred years of cell culture technology. This achievement coincided with an embarrassing gap with regard to the devices to predict safety and mode of action of existing and new compounds (chemicals, cosmetics, air particles or pharmaceuticals). This was recognized through some eye-opening disasters and substance recalls. Neither animal testing nor conventional human cell line or tissue assays have been able to reflect the complex interaction of the substances at organ level. New efforts initiated in response to this situation have already led to a few impressive human in vitro systems, reduced in size and able to provide research data on individual aspects of substance interaction with human organisms.

We would like to welcoming you in Potsdam!



U. Marx

Regularly updated information about the conference programme can be found on the symposium website at www.dechema.de/tissue09

LECTURE PROGRAMME

Tuesday, September 22, 2009

18:00 OPENING REMARKS
U. Marx, ProBioGen AG, Berlin/D

*Chair: S. Dickman, CBT advisors,
Cambridge, MA/USA*

18:15 **EVENING LECTURE**
Controlling cell function: what have we overlooked in Nature's toolbox?
P. Shastri, Vanderbilt University, Nashville, TN/USA

19:00
21:30 **Get-together with drinks and snacks**



Wednesday, September 23, 20099:00 **Welcome address and introduction****Scaffolds emulating ECM of various organs***Chair: H. Hauser, HZI Braunschweig/D*9:10 **Biomaterials and scaffolds for tissue regeneration**

A. Lendlein, GKSS Research Centre Geesthacht GmbH, Teltow/D

9:50 **Monolithic (composite) materials for tissue engineering**

M. Buchmeiser, Leibniz Institute of Surface Modification e.V. (IOM), Leipzig/D

10:30 COFFEE BREAK AND EXHIBITION

11:00 **Pancreatic organotypic cultures**

H. Kocher, John Vane Science Centre, London/GB

11:40 **Prediction of the in vivo role of drug transport from in vitro data**

H. Kroemer, University of Greifswald/D

12:20 **Nanoparticulate opioid preparations – a new approach for wound healing and local pain reduction?**

M. Schäfer-Korting, Freie Universität Berlin/D

13:00 LUNCH BREAK AND EXHIBITION

3D organ culture for substance testing*Chair: H. Mertsching, Fraunhofer IGB Stuttgart/D*15:00 **In vitro co-culture models of the human airway barrier: 24-transwell screening of substance interaction**

I. Hermanns, University of Mainz/D

15:40 **Testing hormones during generation of renal tubules**

W.M. Minuth, University Hospital Regensburg/D

16:20 COFFEE BREAK AND EXHIBITION

16:40 **Multicellular spheroids: an underestimated tool is catching up again**

L.A. Kunz-Schughart, TU Dresden/D

17:20 **Immunological substance testing on human lymphatic microorganoids in vitro**

C. Giese, ProBioGen AG, Berlin/D

18:00 **EVENING LECTURE****Delivering skin models to consumers – many years of science and entrepreneurship**

B. de Wever, De Wever Consulting, Monte Carlo/MC

18:45 **End of the lecture programme****Thursday, September 24, 2009**9:00 **Introduction****In vitro vascularisation and multi-organ systems***Chair: A. Lendlein, GKSS, Teltow/D*9:10 **In vitro screening assays for the discovery of regulators of angiogenesis and tumor growth**

R. Roy, Children's Hospital Boston and Harvard Medical School, Boston, MA/USA

9:50 **Mimicking tissue's on a microscale**

J. Kelm, University of Zurich/CH

10:30 COFFEE BREAK AND EXHIBITION

11:00 **Cellular models to study angiogenesis**

H.G. Augustin, German Cancer Research Center (DKFZ), Heidelberg/D

11:40 **A 3D human vascularised test system**

H. Mertsching, Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB, Stuttgart/D

12:20 **Body-on-a-Chip: applications to pharmacological and toxicological studies**

M. Esch, Cornell University, Ithaca, NY/USA

13:00 LUNCH BREAK AND EXHIBITION

Microsystems technologies for in vitro organ culture*Chair: U. Marx, ProBioGen AG, Berlin/D*15:00 **Novel 3D-biochip based high content-screening systems for real time monitoring of organotypic tissues**

A. Robitzki, Center for Biotechnology and Biomedicine, University of Leipzig/D

15:40 **Approaches for tissue culture-based tests with higher throughput**

H. Tielecke, Fraunhofer Institut for Biomedical Engineering (IBMIT), St. Ingbert/D

16:20 COFFEE BREAK AND EXHIBITION

16:40 **Prototyping of chip-based multi-tissue culture systems**

F. Sonntag, Fraunhofer Institute for Material and Beam Technology (IWS), Dresden/D

17:20 **End of the lecture programme**

19:00

Conference Dinner at "Krongut Bornstedt"

23:30

Friday, September 25, 2009

9:00 **Introduction**

Substance exposure in vitro – how to cope with industrial requirements?

Chair: C. Burger, Merck KGaA Darmstadt/D

9:10 **German in vitro organ map – a survey on activities in industry and academia**
R. Pörtner, Hamburg University of Technology/D

9:30 **Applications of stem cells in the early drug discovery process**
S. Lohmer, Axxam SpA, Milan/I

10:10 **Cellular mechanisms and cell-tissue interactions explored with validated microfluidic flow assays**
V. Williams, Cellix Ltd., Dublin/IRL

10:50 **Screening towards pharmacological relevance**
M. Jurzak, Merck Serono Research/Discovery Technologies, Darmstadt/D

11:30 COFFEE BREAK AND EXHIBITION

Visions and future trends

Chair: S. Dickman, CBT advisors, Cambridge, MA/USA

12:00 **In vitro and in silico approaches to safety – synergies or competition?**
C. Westmoreland, Unilever – Safety & Environmental Assurance Centre, London/GB

12:40 **Homunculus²⁰²⁰ for substance testing?!**
U. Marx, ProBioGen AG, Berlin/D

13:20 **Symposium Summary**
S. Dickman, CBT advisors, Cambridge, MA/USA

14:00 **Closing remarks**
U. Marx, ProBioGen AG, Berlin/D

14:15 **End of the Symposium**

Embedded into the scientific programme, companies are invited to present their products and services.

The company presentations will give all participants an outstanding opportunity to inform themselves and to communicate with exhibitors and colleagues. The registration fee for a net presentation space of 6sq metres is 1500,00 Euro plus 7% VAT including one free ticket for the scientific programme. For further details concerning application for stands and the organisation of the exhibition please contact Dr. Andreas Scriba (scriba@dechema.de).



Aerial view of the Kongresshotel Potsdam am Templiner See

Tuesday, September 22, 2009

18:00 – 21:30 h

Welcome Reception – Get-together

After the welcome and the evening lecture of Prasad Shastri, Vanderbilt University, Nashville, TN/USA a get-together to welcome the conference participants will take place at the “Kongresshotel Potsdam am Templiner See”. Drinks and snacks will be served by invitation of the organiser.

Ticket: free of charge, registration necessary

Thursday, September 24, 2009

19.00 – 23:30 h

Conference Dinner

The Conference Dinner will take place at the „Krongut Bornstedt“ (Bornstedt Crown Estate) which is a unique ensemble of Prussian history. It is a testimony to the passion Prussian kings had for all Italian things. In 1867 King Frederic William IV is reputed to have said “I now have my Italian village – at long last!” after, he had made Bornstedt into what it is today: a piece of Italy under the Prussian sky. Since 2002, after several years of extensive restoration, the „Krongut Bornstedt“ shines anew in its original radiance. We invite you to experience and enjoy Prussian history. At the end of an interesting conference day a bus is waiting to take you to „Krongut Bornstedt“ or you may enjoy a 20 minutes walk through the beautiful landscape of Potsdam to get there. After a special welcome you may start with a glass of home-brewed beer called “Bornstedt Buffalo” which is brewed since 1689 only at the „Krongut Bornstedt“ and which is one tradition of Prussian handicrafts performed here. You are welcome to enjoy the more culinary delights among friends and colleagues in the historical scenery.



Aerial view of the Krongut Bornstedt

Ticket: 58.00 EUR (incl. VAT)

Registration necessary

Meeting Point: Kongresshotel Potsdam, Entry Hall

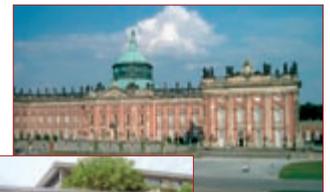
Bus departure 19:00 h; a bus from the Krongut back to the Conference Hotel will be available from 23:00 h – 23:30 h.

Potsdam – A truly European City

Without any doubt, Potsdam is one of the most beautiful cities in Germany. Integrated into the attractive cultural ambience, the capital city of the State of Brandenburg is a natural destination to satisfy the most varied interests and demands. Potsdam’s most popular sight is the Sanssouci Palace located in the park to which it gives its name. However, there are far more than the former summer residency of Frederick the Great and the Sanssouci park to make your visit worthwhile. The Alexandrowka, the „Holländisches Viertel“ (the Dutch quarter) and the Weaver’s quarter – the historic sections of the city – provide the flair of a city steeped in European tradition.



The Babelsberg Filmpark, the Biosphäre nature experience exhibition, the National Horticulture Show park, known as the BUGA park, built for the National Horticulture Show in 2001, the tourist cruise ships and the crown estate, the Krongut Bornstedt, are all special attractions which will make your visit to Potsdam a very pleasurable experience.



For more information please visit: www.potsdam.de

GENERAL INFORMATION

CONFERENCE VENUE

The Conference will be held at:
Kongresshotel Potsdam am Templiner See
Am Luftschiffhafen 1
14471 Potsdam
www.kongresshotel-potsdam.de

CONFERENCE OFFICE

Ms. Heike Geiling
Theodor-Heuss-Allee 25
D-60486 Frankfurt am Main
Phone: +49 (0)69/7564-280
Fax: +49 (0)69/7564-304
Email: geiling@dechema.de
Internet: www.dechema.de/tissue09

DURING THE CONFERENCE

from Tuesday, September 22, 2009

Kongresshotel Potsdam am Templiner See
Am Luftschiffhafen 1
14471 Potsdam,
Phone: +49 (0)162 4141-162

Office hours

Tuesday	September 22, 2009	16:00 – 21:30
Wednesday	September 23, 2009	08:00 – 18:45
Thursday	September 24, 2009	08:30 – 18:00
Friday	September 25, 2009	08:30 – 14:00

ROOM RESERVATION

To book accommodation please contact:
Kongresshotel Potsdam am Templiner See
Am Templiner See
Reservation Office
Phone: +49 (0)331/907-0
Fax: +49 (0)331/907-70777
Email: info@hukg.de

Please use the keyword „tissue09“ to get the prize of 80 EUR per single room/night. Reservation for that special prize must be made until **July 20, 2009** at the latest.

GENERAL INFORMATION

REGISTRATION

Please complete the appropriate sections of the registration form attached and provided at: www.dechema.de/tissue09 and return it to DECHEMA e.V. Please use a separate copy for each participant. Online registration is also possible. Confirmation of registration and the invoice will be sent after receipt of the registration form. The conference ticket, list of participants, book of abstracts and name tag will be available at the conference office in Potsdam. In general there is no registration deadline as long as free capacity is available. Please note: registrations made after **September 2, 2009** are not guaranteed to appear in the list of participants.

REGISTRATION FEES*

For participants from industry	
Personal DECHEMA members and EFC/EFCE passport holders	580 EUR
Non-members	595 EUR

For participants from universities	
Personal DECHEMA members and EFC/EFCE passport holders	360 EUR
Non-members	375 EUR

For students**/pensioners	
Personal DECHEMA members and EFC/EFCE passport holders	120 EUR
Non-members	135 EUR

* No VAT requested according to § 4.22UstG

** Proof of status required

The fee includes book of abstracts, list of participants, catering during the coffee breaks and lunch, but no dinner.

REMITTANCE OF FEES

Fees should be remitted on receipt of the invoice in favour of DECHEMA e.V., to one of the DECHEMA accounts as stated on the invoice. When you authorise the payment, please make sure to note as the reason for payment your complete invoice number.

GENERAL INFORMATION

CANCELLATION AND REFUNDS

30 EUR for administrative costs will be charged for cancellations received by **September 2, 2009**. Thereafter 80% of the registration fee will be invoiced; however the book of abstracts will be mailed. Only written cancellations will be accepted.

VISA FORMALITIES

Participants from a number of countries may need an entry visa for Germany. It is recommended to apply for a visa well in advance of the symposium. If a formal invitation letter is needed please contact the conference office at DECHEMA e.V. in good time.

INSURANCE

The organisers cannot accept responsibility for loss or damage to the private property of participants and accompanying persons which may occur either during or arising from the symposium. Participants should therefore take whatever steps they consider necessary regarding insurance.

HOW TO GET TO THE KONGESSHOTEL POTSDAM AM TEMPLINER SEE

For detailed information how to reach the conference venue by public transport or by plane please visit

www.kongresshotel-potsdam.com/en/directions.html