1st ISMST BASIC Research Meeting

"Composing a Symphony in Shock Wave Science"

> January 22-23, 2010 Vienna

SMST 20

SCIENTIFIC PROGRAM

ORGANIZING COMMITTEE: MICHAEL GRIMM. JOHANNES HOLFELD, WOLFGANG SCHADEN

Welcome to the 1st ISMST Basic Research Meeting!

Dear Colleagues,

UNIVERSITY

"Composing a symphony" means to unite different resonances to a concerted appearance. As a theme of this meeting it means to us to consolidate our individual efforts in shock wave basic research. We want to abstract what is already known in the special fields of shock wave science and find out what would be the most important steps for future experiments. Thereby hopefully some cooperations will be established. This meeting is rather meant to be a workshop than a congress.

We feel privileged that many of the leading investigators in the field have accepted our invitation to actively participate by giving review lectures and many others sent us their highly interesting abstracts on emerging fields. We want to encourage you as well to bring your own slides about your most recent research work even if it is very preliminary to discuss it with other specialists. (See "Your Short Presentation" stated below.)

We are very much looking forward to meeting you in January 2010 in Vienna!

Organizing Committee:

Michael Grimm, Johannes Holfeld, Wolfgang Schaden, Daniel Zimpfer



Contact: www.ismst.com, mailto: johannes.holfeld@meduniwien.ac.at

Meeting Fee

Scientists, Physicians: Euro 200,-Industry Members: Euro 400,-Meeting fee includes coffee breaks, lunch and social evening. Methods of payment (in Euro): Cash or credit card, both on-site at the registration desk!

Venue and Accommodation



Mercure Grand Hotel Biedermeier Landstrasser Hauptstrasse 28 1030 Vienna, Austria Phone : (+43) 1/716710 Fax: (+43) 1/71671503

Travel Information

Vienna International Airport (VIE) is located approximately 20 km from the city. Airport transfers are either 25 min. by taxi or 20 min. by City Airport Train. Its terminal called "Wien-Mitte" is about 5 min. walking distance to the hotel. www.cityairporttrain.com

Your Short Presentation

After each review lecture we want to have an open discussion to achieve a consensus on the most interesting questions and decide who will work on these issues till the next meeting. Therefore we kindly ask you to prepare 3 to 5 slides if your research fits to one of the review lectures. Everyone who can share some interesting - even with very preliminary - data is welcome to support this discussion. Your experience shall be the basis to plan future research steps together. Please provide your slides at media check times at the venue.

Media Check

Please prepare your slides as a Microsoft PowerPoint presentation and provide it on a USB stick during registration times at the beginning of the meeting (Thursday evening and Friday morning, see program!). For video presentations please use common file formats only!



1st ISMST Basic Research Meeting, January 22-23, 2010

Scientific Program

Thursday, January 21

18:00 - 20:00	Registration, Media Check
19:00	Welcome Cocktail

Friday, January 22

08:30 - 09:00	Registration, Media Check	
09:00 - 09:30	Opening words, Introduction	
09:30 - 10:00	Mechanotransduction - Wilhelm Bloch (Germany)	
	Chairmen: Sergio Russo (Italy), Wolfgang Schaden (Austria)	
10:00 - 10:30	Discussion	
10:30 – 11:00	Coffee Break	
11:00 - 11:45	Molecular Reactions - Ching-Jen Wang (Taiwan)	
	Chairmen: Carlos Leal (Columbia), Helmut Neuland (Germany)	
11:45 - 12:30	Discussion	
12:30 - 14:00	Lunch	
14:00 – 14:30	Free Radicals - Hans-Jürgen Duchstein (Germany)	
	Chairmen: Roberto Frairia (Italy), Johannes Holfeld (Austria)	
14:30 - 15:00	Discussion	
15:00 – 15:30	Angiogenesis - Carlos Leal (Columbia), Manuel Brañes (Chile) Chairmen: M. Cristina d'Agostino (Italy), Michael Grimm (Austria)	
15:30 - 16:00	Discussion	
16:00 – 16:30	Coffee Break	

Scientific Program

1st ISMST Basic Research Meeting, January 22-23, 2010

Scientific Program

Saturday, January 23

<u>Friday, January 22</u>

16:30 - 17:00	Repair versus Regeneration - Rainer Mittermayr (Austria)	09:00 - 09:30	Osteogenesis and Bone Turnover - M. Cristina d'Agostino (Italy)
	Chairmen: Hans-Jürgen Duchstein (Germany), Robert Schmidhammer (Austria)		Chairmen: Donald J. Ferguson (Dubai), Heinz Kuderna (Austria)
17:00 - 17:30	Discussion	09:30 - 10:00	Discussion
17:30 - 19:00	Emerging Fields – In Vitro	10:00 - 10:30	Coffee Break
	Chairmen: Richard Thiele (Germany), Wolfgang Schaden (Austria)		
		10:30 - 11:00	Stem and Progenitor Cells - Johannes Holfeld (Austria)
	Johannes Holfeld (Austria)		Chairmen: Ludger Gerdesmeyer (Germany), Rainer Mittermayr (Austria)
	Introduction: Rationale for In Vitro Shock Wave Trials (IVSWT)	11:00 - 11:30	Discussion
	There is that is the Char W. Walder to Dellar A. Den area (UCA)		
	Thomas J. Matula, H. Chen, W. Kreider, M. Bailey, A. Brayman (USA)	11:30 - 13:00	Round Table: "Treatment Parameters" – moderation: Wolfgang Schaden (Austria)
	Interaction of cavitation bubbles with blood vessels and surrounding tissue		Ludger Gerdesmeyer (Germany), Thomas J. Matula (USA), Helmut Neuland (Germany),
	Anna Weihs, S. Wolbank, D. Rünzler (Austria)		Sergio Russo (Italy), Richard Thiele (Germany), Ching-Jen Wang (Taiwan)
	Establishment of an In Vitro Experimental Set-up to Evaluate the Biological		
	Effects of Extracorporeal Shock Wave Treatment	13:00 – 14:30	Lunch
	Sandra Münch, C. Ottomann, C. Belíekroun, B. Petschke, M. Smith, B. Hartmann (Germany)	14:30 - 15:00	Malignant Tumors - Roberto Frairia (Italy)
	Influence of Extracorporeal Shock Waves on In Vitro Keratinocytes –		Chairmen: Ching-Jen Wang (Taiwan), Wolfgang Schaden (Austria)
	Preliminary Results	15:00 - 15:30	Discussion
	Barbara Kapeller, J. Holfeld, C. Tepeköylü, F. Hack, B. Thometich, W. Schaden, M. Grimm, K. Macfelda (Austria)	15:30 - 16:00	Translational ESWT: experimental ⇔ clinic - Ludger Gerdesmeyer (Germany)
	Influence of Shock Wave Treatment on Connexine Expression of Cardiac Cells		Chairmen: Wilhelm Bloch (Italy), Daniel Zimpfer (Austria)
	In Vitro	16:00 - 16:30	Discussion
	Discussion about In Vitro Models	16:30 - 17:00	Coffee Break

20:00 Social Evening at "Stadtwirt"

Scientific Program

Saturday, January 23

17:00 - 18:30 Emerging Fields – In Vivo Chairmen: Sergio Russo (Italy), Vinzenz Auersperg (Austria)

Donald J. Ferguson (Dubai)

Osteopenic Response to Alveolar Stimulation & Implications for Shockwave

Olav P. Van der Jagt, J.H. Waarsing, N. Kops, W. Schaden, J.A.N. Verhaar, H. Weinans (The Netherlands)

Unfocused Extracorporeal Shock Waves as a Potential Treatment for Osteoporosis

Thomas Hausner, K. Pajer, W. Schaden, G. Halat, H. Redl, A. Nógrádi, R. Schmidhammer (Austria)

Treatment with de-focused Low Energy Shock Wave Applied Immediately after Nerve Repair Enhances Axonal Elongation and Improves Functional Outcome in an Experimental Study in the Rat

Daniel Zimpfer, J. Holfeld, J. Dumfarth, S. Aharinejad, H. Tschernich, M. Czerny, W. Schaden, M. Grimm (Austria)

Direct Epicardial Shock Wave Therapy in Humans

19:30

Dinner

Social Program

Welcome Cocktail Social Evening Dinner Brunch

Thursday, January 21, 19:30 at the hotel Friday, January 22, 20:00 at a typical Viennese tavern Saturday, January 23, 19:30 Sunday, January 24



Social Evening, January 22:

In a traditional Viennese tavern called "Stadtwirt" we will celebrate a marvellous evening with typical Austrian wine and culinary specialties. You will enjoy this homely atmosphere having a relaxing time with your shock wave research friends! The tavern is located in a 5 min. walking distance to the hotel.

Brunch, January 24:

If you can't stop discussing shock wave research we will arrange a little brunch at a typical Viennese Café on Sunday morning before everyone has to take his flight back home. This event will be on your own costs



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