

## **2<sup>nd</sup> IASP/IHS joint symposium April 2014, Siena, Italy**

### **Background for the symposium**

Headache and other pain entities share some important common pathophysiological mechanisms concerning pain generation and chronicity. On the other hand some distinct pathophysiological processes have been described that are unique for the development of headache. Thus, the research agendas of both societies, the International Association for the Study of Pain (IASP) and the International Headache Society (IHS) have a considerable amount of overlap that has only rarely been addressed and discussed in the past.

### **Objectives of symposium**

- to present the two scientific societies and their background
- to stimulate a discourse /discussion between the members of the two scientific societies.
- to improve knowledge of pain mechanisms, diagnosis, and management of headache and other chronic pain states
- to identify similarities and differences of headache and other chronic pain states
- to actively involve and educate young scientists
- to establish potential co-operations and synergies of both societies

### **Meeting details**

The meeting took place in April 23 – 26, 2014 in Siena, Italy and 94 invited young scientists from 21 countries participated. The participants came from science but also clinical background and were either involved in the IASP and the IHS. Each topic was represented by speakers from both societies and included, amongst others, genetics, epidemiology, NO, CGRP and vascular biology, neurogenic inflammation, neurophysiology, functional imaging, and neurostimulation. The excellent atmosphere and lively discussions, but also the personal comments and remarks after and between sessions (see below) confirmed the outcome of the evaluation form that all participants filled out. Such meetings with mostly younger scientists with a lot of interaction are highly welcomed and indeed more than 90 % quoted that a joint meeting of the IHS and IASP offer important and unique opportunities for new co-operations. This is even more important as most participants indicated that they have had little opportunity in the past to learn about of the initiatives of the respective other society. Particularly younger scientists suggested new topics for future meetings, asked for publication of contact information/email-addresses of all participants, indicated that they will use this meeting for better and new co-operations and asked for more time and opportunity for personal interaction in the future. It is now on all of us to fill these ideas and co-operations with life and make them reality.

### **Faculty details**

The faculty included specialists from both societies. Following the structure of the topics (which were chosen based on the overlapping research interest of both fields) one speaker of each society and a moderator was invited to present each topic (see programme).

## Participants details

It was decided that the symposium should have capacity for up to 100 invited registrants including faculty. Since one of the objective of the symposium was to support and actively involve younger scientists each of the moderators were asked to select one speaker for his topic. Furthermore, the societies were asked to nominate up to 50 additional trainees. For all participants travel and accommodation was provided.

	2012		2014	
<b>Participants total</b>		97		<b>94</b>
<b>IHS total</b>		49		<b>47</b>
Chair/Moderators/Speakers	12		14	
Junior Nomination by HIS	37		33	
<b>IASP total</b>		44		<b>46</b>
Chair/Moderators/Speakers	13		15	
	31		31	
Organisation		4		<b>1</b>

The participants represented 21 different countries:

1	Australia
2	Austria
3	Canada
4	Chile
5	Denmark
6	Finland
7	France
8	Germany
9	Hungary
10	Israel
11	Italy

12	Netherlands
13	Norway
14	Portugal
15	Singapore
16	Spain
17	Sweden
18	Switzerland
19	Turkey
20	UK
21	USA

## Venue

The symposium lasted for 2.5 days and was held at the “Scuola Superiore Santa Chiara and Refugio” in Siena, Italy. The conference center room was located in the old town of Siena. The historical buildings of Siena were spectacular and very stimulating and inspiring for all participants.



## Program

The program started in the morning and continued until late afternoon, interrupted by coffee breaks and lunch. An excellent social program was included to further facilitate the interaction between the symposium participants.



**2<sup>nd</sup> Joint Symposium IHS / IASP**  
**April 23 – 26, 2014, Siena, Italy**  
 Scuola Superiore "Santa Chiara" Via Valdimontone, 1 - 53100 Siena  
 and "Refugio" Via del Refugio, 4 - 53100 Siena

### Program

**Wednesday, April 23, 2014** "Santa Chiara"

17.00h **Welcome and Introduction**  
 New organizing principles and treatment approaches in pain and headache  
 A. May (IHS Germany)  
 R. Baron (IASP Germany)

20.00h **Dinner** "Refugio"

**Thursday, April 24, 2014** "Santa Chiara"

09.00h **The WHY and HOW of headache research**  
 The WHY and HOW of my scientific career in research: a personal view  
 A. Rapoport (IHS USA)  
 R.-D. Treede (IASP Germany)

10.45h **Coffee Break**

11.15h **Clinical studies**  
 Moderator: P. Goadsby (IHS USA), T. Jensen (IASP Denmark)  
 - Clinical studies, or: what we talk about when we talk about headaches  
 J. Hansen (IHS Denmark)  
 - Measuring pain for scientific purposes – can we be more specific than on a 0-10 scale?  
 A. Truini (IASP Italy)

13.00h **Lunch** "Refugio"

14.30h **Genetics**  
 Moderator: A. v.d. Maagdenberg (IHS Netherlands), I. Belfer (IASP USA)  
 - P2X and P2Y receptors in pain and more specifically migraine  
 A. Nistri (IHS, Italy)  
 - Genetics of pain - pathway to personalized pain management  
 E. Young (IASP USA)

17.00h **Guided tour to historical Siena** Fountain "Fonte Gaia" at Piazza del Campo  
 19:30h **Aperitif** Piazza del Campo  
 Free time for participants / Dinner for the faculty

**Friday, April 25, 2014** "Santa Chiara"

09.00h **Neuro-Imaging**  
 Moderator: A. May (IHS Germany), G. Iannetti (IASP UK)  
 - Challenges in the investigation of structural abnormalities in headache disorders  
 N. Maleki (IHS USA)  
 - Who and how? Using neuroimaging to understand cognitive modulation of pain  
 T. Salomons (IASP Canada)

10.45h **Coffee Break**

11.15h **Neurogenic inflammation**  
 Moderator: S. Eftekhar (IHS Sweden), F. Birklein (IASP Germany)  
 - Neurogenic inflammation in headache: the saga continues  
 D. Levy (IHS USA)  
 - Peripheral nociceptor activation and neurogenic inflammation  
 H. Kraemer (IASP Germany)

13.00h **Lunch** "Refugio"

14.30h **Gases (nitric oxide and carbon monoxide) as Neurotransmitters**  
 Moderator: M. Ashina (IHS Denmark), R. Baron (IASP Germany)  
 - NO & CO: neurovascular headaches  
 H. Schytz (IHS Denmark)  
 - NO & CO: nociception and sensory transduction  
 K. Messlinger (IASP Germany)

20.00h **Dinner** "Refugio"

**Saturday, April 26, 2014** "Santa Chiara"

08.30h **Neurostimulation**  
 Moderator: R. Jensen (IHS Denmark), S. Raja (IASP USA)  
 - Is it relevant with neurostimulation in headache?  
 T. Jürgens (IHS Germany)  
 - Neurostimulation for chronic pain: potential targets, parameters and mechanisms  
 Y. Guan (IASP USA)

10.15h **Coffee break**

10.45h **Neural Mechanisms**  
 Moderator: S. Akerman (IHS USA), A. Dickenson (IASP UK)  
 - Central neural mechanisms in migraine  
 P. Holland (IHS UK)  
 - How brain monoamines modulate spinal processing of somatic pains  
 W. Rahmann (IASP UK)

13.00h **Lunch and Departure** "Refugio"

### Evaluation

Following the symposium there was an evaluation of the impact on the participants and the co-operation between the two societies.

Evaluation form (1 = not, 6 = absolutely)

What I liked about this meeting:

	2012	2014
• Location	5,37	5,10
• Organisation	5,36	5,23
• Selection of topics	5,01	4,94
• Interdisciplinarity	5,12	4,88
• Social program	5,34	5,12
• Chance to interact	5,32	5,48

A better co-operation between IASP and IHS is warranted 5,42 5,50

In the pain field, scientific and clinical partners usually work closely together	4,12	4,09
In the headache field, scientific and clinical partners usually work closely together	4,05	4,28
As a pain/headache expert, I am well aware what the respective other society does	3,59	3,55
At my home institution I work closely with the respective other society	3,21	2,80
Meetings like this one offer important opportunities for new co-operations	5,26	5,54
This meeting gave me concrete ideas for such a co-operation	4,76	4,86
This meeting should be repeated	5,61	5,83
I would like to be part of such a meeting	5,69	5,90
I would opt for a proper joint congress of both world societies	<u>4,90</u>	<u>5,54</u>
overall	4,88	4,87*

**\*Please note that 1 question was rated very low: knowledge about the respective other field!**

### **Overall conclusion**

The second IHS/IASP joint symposium continues the work of analysing options for future collaborations of both societies in various fields. The symposium turned out to be a very successful event, both in terms of content, structure, and output. The participants realized that both societies are active in various very similar research fields; this overlap of interests has not been identified before. The symposium has demonstrated a clear potential for further collaboration of the IHS and IASP in research projects as well as in educational and congress initiatives. Several concrete plans were already formulated during the symposium.

With respect to repetition we do suggest that this symposium should be repeated, e.g. in two years' time.

Respectfully submitted  
Arne May  
June, 2014

## **Collaborations:**

Prof. Dr. K. Meßlinger Institut für Physiologie & Pathophysiologie, Erlangen, Germany

Joint research ideas and planned collaborations resulting from the 2nd Joint Symposium between IASP and IHS in Siena, April 23-26

Existing collaborations, specified during meeting:

- 1) Arne May, Laura Schulte (Hamburg): EU project EUROHEADPAIN, neurobiological mechanism of migraine pain, specifically role of nasal nociception and cyclic mechanisms
- 2) Arn van den Maagdenberg (Leiden): EU project EUROHEADPAIN, migraine models, specifically trigeminal primary afferent activity in FHM transgenic mouse models
- 3) Messoud Ashina, Henryk Schytz (Copenhagen): EU project EUROHEADPAIN, migraine models, specifically comparison of nitroglycerin model in humans and animals
- 4) Andrea Nistri (Trieste): EU project EUROHEADPAIN, migraine models, specifically immunohistochemistry of meningeal markers – laboratory stay of collaborator planned
- 5) Peter Goadsby (London): EU project EUROHEADPAIN – exchange of co-workers
- 6) Rigmor Jensen (Copenhagen): Medication overuse headache
- 7) Jan Hoffmann (Berlin): Data exchange, headache mechanisms

New collaborations planned:

- 1) Vladimir Bogdanov (Marseille): Impact of cortical spreading depression (CSD) in mouse on second order neuronal activity – laboratory visit planned
- 2) Kayi Chan (Rotterdam): Migraine models – collaboration planned
- 3) Sajadeh Eftekhari (Lund): Meningeal nociception – laboratory visit planned
- 4) Dan Levy (Boston): CSD and migraine – collaboration planned

Prof. Peter Drummond, School of Psychology and Exercise Science, Murdoch University  
Perth, Western Australia

Thanks again for including me at late notice in the symposium. It was personally very productive, with collaborations established with Anna Andreou to study the electrophysiology of pain inhibition and excitation through the locus coeruleus, Oliver Summ to study clinical correlates of post-stroke thalamic pain, and Heidi Kramer to study expression of alpha-1 adrenoceptors in the amputated hand of a patient with CRPS. I will also visit Drs Nosedá (Harvard) and Raja (Johns Hopkins) next month to discuss their work in more detail and to explore potential collaborations.

## Individual comments

- It has been a very fulfilling meeting in a very historical atmosphere; thank you for your efforts. Didem Akcali, Turkey
- Thank you for all the work you have done to organize the congress in Siena. It was truly fantastic. Gijs van Velzen, Netherlands
- Thank you for organizing this wonderful meeting in sienna! Really enjoyed it! Vladimir Bogdanov, France
- Thanks for an interesting and exciting symposium in such lovely surroundings! Line Melaa Jacobsen, Norway
- Thank you for the organization of the meeting in Siena. It was great! Rodrigo Nosedá, USA
- I would like to express my gratitude for having been part of the Symposium. It was very useful for me and well organized. Dimitris Xanthos, Austria
- Thanks for a wonderful meeting in Siena. I really enjoyed participating and discussing ideas and projects with colleagues. Jacob M Hansen, USA
- Many thanks for organizing such an amazing meeting. I learnt lots and had a great time in Siena. Margarita Calvo, Chile
- I had a great time at the meeting and enjoyed the beautiful view of Siena! Thank you very much for putting so much effort into it and to have me presenting at this important meeting! Yun Guan, USA
- Thanks again for all your work in making this great conference happen! Tim Salomons, UK
- Thank you very much for this fantastic meeting. It was really useful for many aspects. Anett Csáti, Hungary
- First of all thanks very much for arranging a fabulous get together which I am sure all of us thoroughly enjoyed being a part of! Farooq Maniyar, UK
- It was very good to see you in Siena. Thanks again for putting together such a wonderful symposium. Giandomenico Ianetti, UK
- Once again thanks for a lovely, interesting and inspiring symposium in Siena. Dyveke Demant, Denmark
- It was very nice meeting you in Siena. It was such a great meeting and a great experience for all of us. Many thanks to you and your colleagues to make it happen. Nasim Maleki, USA
- Thank you for working so hard to make this conference a wonderful experience for us all. Erin Young, USA
- Thank you for taking such good care of us and organizing another successful and pleasurable meeting! Marta Ceko, USA



