THURSDAY, JULY 25, 2019

7:30-8:00 AM CONTINENTAL BREAKFAST

8:00-8:30 AM Introduction and meeting objectives
   • Dennis Turk, PhD

8:30-9:00 AM Neurobiology of central sensitization
   • Clifford Woolf, MD, PhD

9:00-9:15 AM Q & A

9:15-9:45 AM What is “centralized chronic pain” and how can it be assessed?
   • Daniel Clauw, MD

9:45-10:00 AM Q & A

10:00-10:30 AM BREAK

10:30-11:00 AM Somatosensory amplification and the development and maintenance of chronic pain (including assessment)
   • Robert Edwards, PhD

11:00-11:15 AM Q & A

11:15-11:45 AM A regulatory perspective on the introduction of new analgesic indications
   • Sharon Hertz, MD

11:45-12:00 PM Q & A

12:00-1:00 PM LUNCH

1:00-2:00 PM Panel and audience discussion
   • Moderator: John Markman, MD
   • Daniel Clauw, MD; Robert Edwards, PhD; Howard Fields, MD, PhD; Sharon Hertz, MD; Clifford Woolf, MD, PhD
2:00-2:30 PM  
**Co-morbidities in chronic pain: a systematic review**  
- Annie Kleykamp, PhD

2:30-3:00 PM  
**Central sensitization and chronic overlapping pain conditions**  
- Roger Fillingim, PhD

3:00-3:30 PM  
**BREAK**

3:30-4:00 PM  
**What has fMRI revealed about central sensitization and chronic pain?**  
- Vitaly Napadow, PhD

4:00-5:00 PM  
**Q & A and panel discussion**  
- Moderator: Ajay Wasan, MD  
- Roger Fillingim, PhD; Annie Kleykamp, PhD; Vitaly Napadow, PhD; Shannon Smith, PhD; Christin Veasley

7:00-9:00 PM  
**DINNER**

**FRIDAY, JULY 26, 2019**

7:30-8:00 AM  
**CONTINENTAL BREAKFAST**

8:00-8:45 AM  
**Implications of central sensitization and “centralized chronic pain” for the design of chronic pain clinical trials**  
- Srinivasa Raja, MD

8:45-9:30 AM  
**Implications of somatosensory amplification for the design of chronic pain clinical trials**  
- Claudia Campbell, PhD

9:30-10:00 AM  
**BREAK**

10:00-10:45 AM  
**Implications of multiple comorbidities for the design of chronic pain clinical trials**  
- Lesley Arnold, MD

10:45-11:45 AM  
**Q & A and panel discussion**  
- Moderator: Nathaniel Katz, MD  
- Lesley Arnold, MD; Claudia Campbell, PhD; Srinivasa Raja, MD; Friedhelm Sandbrink, MD, PhD

11:45-1:00 PM  
**LUNCH**
1:00-3:30 PM  
Consensus discussion: What specific recommendations can be made for chronic pain clinical trials addressing central sensitization/somatosensory amplification and multiple comorbidities?

- **Moderators:** Robert Dworkin, PhD, and Annie Kleykamp, PhD