

QPRN presents:

NAPS North American
Pain School

An Educational Initiative of IASP and ACTION

**Where Does it Hurt and Why: Peripheral
and Central Contributions to Pain
Throughout the Body**

Program

June 25 – June 29, 2017

*Chateau Montebello
Montebello, QC, Canada*

www.northamericanpainschool.com



#NAPainSchool

Executive Committee



**Prof. Jeffrey S. Mogil, Ph.D.
(Director)**

E.P. Taylor Professor of Pain Studies / Canada Research Chair in the Genetics of Pain (Tier 1) / Dept. of Psychology / Director, Alan Edwards Centre for Research on Pain, McGill University



Prof. Christine T. Chambers, Ph.D. (Assistant Director)

Canada Research Chair in Children's Pain (Tier 1) / Prof., Depts. of Pediatrics and Psychology & Neuroscience Dalhousie University and IWK Health Centre



Prof. Roger B. Fillingim, Ph.D.

Distinguished Professor, University of Florida College of Dentistry / Director, UF Pain Research and Intervention Center of Excellence



Prof. Nicolas Beaudet, Ph.D.

Assistant Director, Quebec Pain Research Network / Adjunct Professor, Dept. of Anesthesiology, Faculty of Medicine and Health Sciences, Université de Sherbrooke



Prof. Anne-Louise Oaklander, M.D., Ph.D.

Associate Professor of Neurology Director, Nerve Unit Harvard Medical School and Massachusetts General Hospital



Prof. Petra Schweinhardt, M.D., Ph.D.

Adjunct Professor, Faculty of Dentistry and Alan Edwards Centre for Research on Pain, McGill University / Senior Scientist, Interdisciplinary Spinal Research, Department of Chiropractic Medicine, University of Zurich



Prof. Michael S. Gold, Ph.D.

Professor, Dept. of Anesthesiology University of Pittsburgh School of Medicine

Coordination



Dr. Alexandre J. Parent, Ph.D.

Head coordinator, Quebec Pain Research Network / Coordinator, North American Pain School

Vision of NAPS

The North American Pain School (NAPS) will bring together leading experts in the fields of pain research and management to provide a unique educational and networking experience for the next generation of basic science and clinical pain researchers. We offer opportunities for scientific education, professional development, and connections with peers in a setting far removed from the lab and steeped in the character and culture of Quebec.

Led by an Executive Committee of permanent faculty, NAPS will take place in the first weeks of summer to take full advantage of all that Quebec has to offer—from the Festival International de Jazz de Montreal (June 28-July 8, 2017) to nearby wilderness activities. The venue for NAPS will facilitate lectures (by both faculty and students) as well as intimate breakout conversations and offer an array of recreational opportunities.

Each year's program will have a different theme, and will bring together approximately 30 trainees with six dynamic, internationally recognized pain investigators from around the world and NAPS permanent faculty for an intensive four-day workshop.

Director's Message: Overview of the 2017 North American Pain School

Dear Colleagues,

Welcome to NAPS! For our second installment, we have chosen the theme “Where Does it Hurt and Why: Peripheral and Central Contributions to Pain Throughout the Body”. Every NAPS is designed to be multidisciplinary, and to focus on career development as well as science, but we try to pick a theme that is topical and relevant to guide us in our faculty invitations. This year’s theme can be interpreted in a few ways. Does the perception or biological processing of pain depend on where in the body it’s located? Is all pain qualitatively similar, or is there something fundamentally different about pain above the neck, or deep below the skin? What are the role of psychosocial factors acting at the highest levels of the neuraxis? Although everyone now agrees that chronic pain sufferers have aberrant sensory processing both in the periphery and the central nervous system, the debate continues to rage as to where the fundamental pathology lies and/or where treatments (both pharmacological and non pharmacological) ought to be focused. These topics and others will be covered by our accomplished and exciting visiting faculty, who will be giving talks and participating in our workshops. New additions to NAPS this year include the incorporation of patients with pain into the program, and new workshops on preclinical pain measurement, job negotiation skills and clinical interviewing/diagnosis. Back from last year are student talks, workshops on presentation skills, mentoring, psychophysical testing and knowledge translation, and the student debates. And of course the times when the true learning occurs, over meals, bonfires, the sugar shack, and rafting. I and the rest of the Executive Committee are beyond excited to meet and learn with a new cohort of pain’s best-and-brightest. See you in June!



Jeffrey S. Mogil, Ph.D.
Director, North American Pain School

Visiting Faculty



Prof. Rami Burstein, Ph.D.

- Professor, Dept. of Anesthesia, Beth Israel Deaconess Medical Center / Harvard University
- John Hedley-Whyte Professor of Anaesthesia / Harvard Medical School



Prof. Jennifer A. Haythornthwaite, Ph.D.

- Professor, Dept. of Psychiatry & Behavioral Sciences, Medical School / Johns Hopkins University
- Director of the Center for Mind-Body Research / Johns Hopkins University



Prof. Daniel Clauw, M.D.

- Professor, Dept. of Anesthesiology, Medical School / University of Michigan
- Director of the Chronic Pain and Fatigue Research Center / University of Michigan



Prof. Anne-Marie Malfait, M.D., Ph.D.

- Professor, Dept. of Medicine (Rheumatology), Rush University Medical Center
- Director of the Laboratory for Translational Research in Osteoarthritis / Rush University Medical Center



John T. Farrar, M.D., Ph.D.

- Professor, Depts. of Epidemiology, Neurology, and Anesthesia / University of Pennsylvania
- Senior Scholar, Center for Clinical Epidemiology and Biostatistics / University of Pennsylvania



Prof. Martin Schmelz, M.D.

- Professor, Dept. of Anesthesiology, University of Heidelberg
- Group leader of the Interdisciplinary Center for Neurosciences / University of Heidelberg

Patient Representatives



Ms. Stéphanie Perreault

Published Author and former Policy Advisor for the Government of Canada



Mr. Mario Di Carlo

Co-Chair, Patient Partnership / Chronic Pain Network



NAPSters



Mark Bicket*

@markbicket

Johns Hopkins University, USA
Supervisor: Dr. Christopher Wu
"Who Knew Patients On Opioids Before Surgery Use More Opioids After Surgery?"



Shana Burrowes*

@ShanaABB

University of Maryland, Baltimore, USA
Supervisor: Dr. David Seminowicz
"I Watched Dr. Strange And Realized Marvel May Have Scooped Me On My Thesis Project...At Least I Have Solid Reference Material."



Dara Bree

@DaraBree1

Harvard University, USA
Supervisor: Dr. Dan Levy
"Getting Hit In The Head Repeatedly Is Probably Not The Best Thing."



Chen Xiao Chen

@HelenChenChen

Indiana University, USA
Supervisor: Dr. Janet Carpenter
"Why Some Women Have Worse Menstrual Pain Than Others?"



Rebecca Brouillette

@reb_brouillette

Université de Sherbrooke, Canada
Supervisor: Dr. Philippe Sarret
"When Targeting GPCR Receptors In Order To Relieve Pain, As In Life, You Can Gain Valuable Information By Focusing On The Inside, Instead Of Just What's On The Outer Surface."



Patrick Grenier

@PatrickGGrenier

Queen's University, Canada
Supervisor: Dr. Mary C. Olmstead
"Paradoxical Pharmacology Of Ultralow Dose Receptor Antagonists In Chronic Pain And Opioid Tolerance."

*PRF-NAPS correspondents



Jane Hartung

@janehartung
University of Pittsburgh, USA
Supervisor: Dr. Michael Gold
“Post-Traumatic Headache--Is It
Stressing Out The Field Mice AND
Bopping Them On The Head?”



Andrew (Junseok) Kim

@JunseokAKim
Krembil Research Institute, Canada
Supervisor: Dr. Karen Davis
“Pain Makes Your Brain Less Groovy.”



Peter (Shih Ping) Hung

@ShihPingHung
Krembil Research Institute, Canada
Supervisor: Dr. Mojgan Hodaie
“To Cut Or Not To Cut: Can
Computers Teach Us Which Facial
Pain Patients Do Well Surgically?”



Michael J. Lacagnina*

@MJLacagnina
University of Texas, USA
Supervisor: Dr. Peter M. Grace
“How Immune Cells In Your Brain May Be
Involved In Pain: The Story Of Gently Poking
Rats With Sticks.”



Harriet I. Kemp*

@DrHarrietKemp
Imperial College London, United
Kingdom
Supervisor: Dr. Andrew Rice
“HIV: A Whole World Of Pain For
A Whole Host Of Reasons.”



Sarah R. Martin

@sarahraemartin
University of California, Los Angeles, USA
Supervisor: Dr. Lonnie Zeltzer
“Helping Teens With SCD Turn Down The
Pain Signals In Their Brain Because The
Music Sure As Hell Isn't Getting Any Softer.”



Stacy McAllister

@StacyMcAllist13
Stanford University, USA
Supervisor: Dr. Eric Gross
“Working To End The 1 In 10 Women With Endometriosis-Associated Pain.”



Somayyeh Mohammadi

@smhmohammadi
IWK Health Centre, Canada
Supervisor: Dr. Christine Chambers
“Two Signs That You Are In Trouble: 1. Being A Kid & 2. Having A Parent With Chronic Pain.”



Élora Midavaine

@EloraMidavaine
Université de Sherbrooke, Canada
Supervisor: Dr. Philippe Sarret
“Nanoparticles As Trojan Horses Against Cancer Pain.”



Beatriz Monteiro

Université de Montréal, Canada
Supervisor: Dr. Éric Troncy
“Animals And Humans Hurt Quite Similarly. How Does It Feel?”



Megan Marie Miller

@megmarie_miller
Indiana University - Purdue University in Indianapolis, USA
Supervisor: Dr. Adam T. Hirsh
“Life Isn’t Fair, It’s Just Fairer Than Death, That’s All.”



Sarah Najjar

@snajjarian
University of Pittsburgh, USA
Supervisor: Dr. Kathryn Albers
“Listen To Your Gut, But Neurons Might Not Be Giving You The Whole Story.”



Ashley M. Reynolds

@AshleyMCowie
Medical College of Wisconsin, USA
Supervisor: Dr. Cheryl Stucky
“Who Says CGARS Are Bad? They Help Alleviate Neuropathic Pain.”



Sarah Rosen

McGill University, Canada
Supervisor: Dr. Jeffrey Mogil
“If You Are A Female Who Suffers From Chronic Pain, Get Pregnant. If You Are A Male, Take Morphine. Don't Try It The Other Way Around.”



Sonia Sharma

@soniasha18
University at Buffalo, USA
Supervisor: Dr. Richard Ohrbach
“Back To The Future: When Paradoxical Elements Of Time Obscure Simple Causal Effects.”



Brittany Rosenbloom

@BNRosenblm
York University, Canada
Supervisor: Dr. Joel Katz
“Why Some Children Develop Chronic Pain After Surgery And Others Don't: Does In-Hospital Physical Activity Matter?”



Ester Solé Pijuan

@estersop
Universitat Rovira i Virgili, Spain
Supervisor: Dr. Jordi Miró
“The Management Of Pediatric Pain In Spain: How Do Health Care Professionals Deal With It?”



Jessica Ross*

@JRossNeuro
University of Cincinnati, USA
Supervisor: Dr. Michael P. Jankowski
“Boy And Girl Mice Both Hurt, But Become Sensitive In Different Ways.”



Delfien Syx

@DelfienSyx
Ghent University, Belgium
Supervisor: Dr. Anne-Marie Malfait
“What Causes Chronic Pain In The Connective Tissue Disorder Ehlers-Danlos Syndrome?”



Ellen Terry

@Ellen_Terry

University of Florida, USA

Supervisor: Dr. Roger Fillingim

“Neural Mechanisms Underlying Psychosocial Contributions To Ethnic Differences In Pain”



Lincoln Tracy*

@lincolntracy

Monash University, Australia

Supervisor: Dr. Melita Giummarra

“Warning People About Pain Makes Them Anxious, Giving Them Oxytocin Selectively Enhances Arousal And Sensitivity To Pain.”



Calia Torres

@CaliaTorres

The University of Alabama, USA

Supervisor: Dr. Beverly E. Thorn

“Train Your Brain to Close the Pain Gate”



Robert Ungard

@rungard

McMaster University, Canada

Supervisor: Dr. Gurmit Singh

“You’ve Got It All Wrong, We’re Not Trying To Cure The Cancer.”



Stacie Totsch

@stacie_totsch

The University of Alabama at Birmingham, USA

Supervisor: Dr. Robert Sorge

“Who Knew Eating Like An American Could Be So Painful?”



DAY BY DAY

SUNDAY, JUNE 25TH

MONDAY, JUNE 26TH

TUESDAY, JUNE 27TH

WEDNESDAY, JUNE 28TH

THURSDAY, JUNE 29TH

FRIDAY, JUNE 30TH

**Sunday,
June 25th**

2:00-5:00 p.m.

Lobby

Registration and Check-in

4:00-5:00 p.m.

Foyer Outaouais

Welcoming Cocktail

4:45-5:00 p.m.

Outaouais I

Special Meeting for PRF-NAPS

Correspondents

Christine Chambers and Neil Andrews

5:00-5:30 p.m.

Outaouais I

Opening Remarks

-Director's Welcome

-Supporters' Welcome

-Introduction of Executive Committee

-Debate Instructions and Teams

5:30-6:00 p.m.

Outaouais I

**Patient Intros: Stéphanie Perreault
and Mario Di Carlo**

*Behind the Mask of Pain: A Personal
Journey*

6:00-7:00 p.m.

Outaouais I

Keynote Lecture: John T. Farrar

*Developing Better Analgesics: It's Difficult
to Make Predictions, Especially About the
Future*

7:00-8:30 p.m.

Aux Chantignoles

Dinner

After 8:30 p.m.

Free Night

**Monday,
June 26th**

7:00-7:45 a.m.
Foyer Outaouais

Yoga with Ondine

8:00-9:00 a.m.
Aux Chantignoles

Breakfast

9:00-9:30 a.m.
Outaouais 1

Meet the Exec: Jeffrey Mogil
*Pain in Mice and Man: Ironic
Adventures in Translation*

9:30-10:00 a.m.
Outaouais 1

Meet the Exec: Christine Chambers
*From Evidence to Influence: Making a
Difference for Children in Pain*

10:00-10:30 a.m.
Outaouais 1

Student Presentations (#1-3)

10:30-11:00 a.m.
Foyer Outaouais

Coffee Break

11:00-11:50 a.m.
Outaouais 1

Daniel Clauw
*CNS Contributions to Chronic Pain-
Maybe Sometimes It Is All in Their
Head*

11:50-12:20 p.m.
Outaouais 1

Student Presentations (#5-7)

12:30-2:30 p.m.
Aux Chantignoles

Lunch and Break

**Monday,
June 26th**

2:30-3:20 p.m.

Outaouais 1

Rami Burstein

I'm Stressed. I Can't Sleep. I'm too Busy to Eat. Oh, and I Can't Get Rid of my Migraines. By the Way, Can I Make my Finger Hurt Just by Trying?

3:20-3:40 p.m.

Foyer Outaouais

Coffee Break

3:40-4:30 p.m.

Outaouais 1

Student Presentations (#8-12)

4:30-5:00 p.m.

Outaouais 1

Meet the Exec: Roger Fillingim

Forget About Where it Hurts, Let's Figure Out Why it Hurts

5:00-5:40 p.m.

Outaouais 1

Student Presentations (#13-16)

6:00-7:30 p.m.

Aux Chantignoles

BBQ Dinner

7:30-9:10 p.m.

Outaouais 1

**Workshop: Interviewing and
Diagnosing Pain Patients**

Anne Louise Oaklander

9:15-11:00 p.m.

Meet in the lobby

Bonfire

**Tuesday,
June 27th**

7:00-7:45 a.m.
Foyer Outaouais

Yoga with Ondine

8:00-9:00 a.m.
Aux Chantignoles

Breakfast

9:00-9:50 a.m.
Outaouais 1

Jennifer Haythornthwaite
*Thinking Inside and Outside the
Box About Psychosocial Factors*

9:50-10:30 a.m.
Outaouais 1

Student Presentations (#17-20)

10:30-10:50 a.m.
Foyer Outaouais

Coffee Break

10:50-11:50 am
Outaouais 1

Student Presentations (#21-26)

12:00-2:00 p.m.
Aux Chantignoles

Lunch and Break

2:00-3:40 p.m.
Outside

**Workshop: What Your Mentor
Doesn't Know Might Hurt You**
Roger Fillingim

3:40-4:00 p.m.
Foyer Outaouais

Coffee Break

**Tuesday,
June 27th**

4:00-4:30 p.m.

Outaouais 1

Meet the Exec: Michael Gold

*Peripheral Mechanisms of Pain-The
Impact of What, Where and How*

4:30-5:10 p.m.

Outaouais 1

Student Presentations (#27-30)

5:10-5:40 p.m.

Outaouais 1

Meet the Exec: Anne Louise Oaklander

Small Fibers-Big Pain Problem

6:00-7:30 p.m.

Aux Chantignoles

Dinner

7:30-9:10 p.m.

Outaouais 1

**Workshop: How Do I Know if My
Mouse is in Pain?**

Michael Gold

9:10-11:00 p.m.

Debate Preparation

**Wednesday,
June 28th**

7:00-7:45 a.m.
Foyer Outaouais

Yoga with Ondine

8:00-9:00 a.m.
Aux Chantignoles

Breakfast

9:00-9:50 a.m.
Outaouais 1

Anne-Marie Malfait

Arthritis Pain: Does the Joint Have Anything to Do With It?

9:50-10:20 a.m.
Outaouais 1

Meet the Exec: Petra Schweinhardt

The Brain as a Pain Modulator - and Generator ?!

10:20-10:50 a.m.
Foyer Outaouais

Coffee Break

10:50-12:30 a.m.
Outside

Workshop: How to Get a Job

Nicolas Beaudet

12:30-2:30 p.m.
Aux Chantignoles

Lunch and Break

2:30-4:30 p.m.
Quebec/Ontario

Workshop: Pain and Sensory Testing in Humans

Petra Schweinhardt

4:30-6:00 p.m.
*Foyer Quebec/
Ontario*

Coffee Break and Debate Preparation

6:00-7:30 p.m.
Heritage Terrace

Sugar Shack Dinner

7:30-9:10 p.m.
Heritage

Workshop: Style Over Substance: Giving Better Talks

Jeffrey Mogil

**Thursday,
June 29th**

7:00-7:45 a.m.
Foyer Outaouais

Yoga with Ondine

8:00-9:00 a.m.
Aux Chantignoles

Breakfast

9:00-9:50 a.m.
Outaouais 1

Martin Schmelz

*Which Peripheral Input Provokes Pain
and Central Sensitization?*

9:50-11:40 a.m.
Outaouais 1

**Workshop: Making Sure Your
Research Makes a Difference: Knowledge
Translation for Pain Scientists**

Christine Chambers

12:00-5:00 p.m.
Lobby

Recreational Outing

6:00-10:00 p.m.
Foyer Outaouais

Cocktail & Banquet (including Student Debate)

10:00 p.m.
Foyer Outaouais

Live band - J2

**Friday,
June 30th**

Early birds

Lobby

Breakfast lunch box

8:00-10:00 a.m.

Aux Chantignoles

Breakfast

Before 12:00 noon

Lobby

Check-out

Shuttle departures :

(see shuttle schedule for specific details)

6:30 a.m.

10:00 a.m.

1:30 p.m.

PRF-NAPS Correspondents Program

The Executive Committee of NAPS is dedicated to engaging participants and other pain researchers using all of today's available tools. To this end, the Pain Research Forum (PRF) has committed to sponsor five NAPS participants as special "PRF Correspondents." The correspondents will reach others in the pain field through first-hand reporting online and through social media through content for the PRF website – including scientific session recaps, interviews with faculty, blog posts – and through live reporting on social media like Twitter. This initiative will benefit those outside of NAPS and help these five participants hone their science communications and writing skills.



Mr. Neil Andrews

PRF Executive Editor / Science Journalist and Writer



Sponsors

NAPS appreciates funding by:

**ACTION (Analgesic, Anesthetic, and Addiction Clinical
Trial Translations, Innovation, Opportunities, and Networks)**

www.action.org

**Chronic Pain Network – Strategy for Patient-
Oriented Research**

www.chronicpainnetwork.ca

Grunenthal GmbH

www.grunenthal.com

The International Association for the Study of Pain

www.iasp-pain.org

Eli Lilly Canada

www.lilly.ca

The Pain Research Forum

www.painresearchforum.org

The Quebec Pain Research Network

www.qprn.ca



Supporters

NAPS appreciates support by:

The American Pain Society

www.americanpainsociety.org

The Canadian Pain Society

www.canadianpainsociety.ca

The Mayday Fund

www.maydayfund.org





North American Pain School

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www.northamericanpainschool.com #NAPainSchool

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