



NEUREX WORKSHOP

OCTOBER 24th 2022 STRASBOURG

In neuroscience, sex-based differences impact all organ systems and subsequently affect a majority of health conditions, resulting in differences between men and women in disease risk factors, prevalence, clinical picture, and response to treatment.

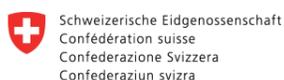
The nociception-pain field particularly illustrates those sex-based differences. Chronic pain is common worldwide and the lack of effective treatments confers a tremendous burden on individuals and on the overall healthcare systems and society. Although opiates, such as morphine and its derivatives, remain the most potent painkillers available at the hospital, their use and efficiency are limited by mild (i.e., nausea, constipation) to severe side effects, including analgesic tolerance, opioid use disorders and ultimately respiratory depression, which can lead to death.

Over the past thirty years, clinical studies have shown that women report more severe pain at more locations than do men but also indicated a higher prevalence of pain treatment failures in women. These results correlates with data from pre-clinical studies indicating sex differences in the analgesic effect of morphine with a higher efficacy in males. Since then, the involvement of sex hormones, mu opioid receptor signalling, glial cells and metabolism as potential actors of these sex differences have been enlighten.

During this symposium, results obtained on sex-difference studies in the nociception-pain field at the pre-clinical and clinical levels will be presented. The meeting will be the occasion to foster the inclusion of females/women in (pre-)clinical studies in substantial numbers, a paramount prerequisite to reducing the clinical and socioeconomic impact of chronic pain.

VENUE
INCI CNRS, 8 ALLÉE ROUVILLOIS, STRASBOURG

ORGANISERS
VOLODYA HOVHANNISYAN, ALEXANDRE CHARLET
with the support of **Euridol, ITI-Neurostra, HaPPy & USIAS**
(University Medical Center Freiburg, Department Of Psychiatry And Psychotherapy)
DOMITILLE BOUDARD (Neurex)



— PROJECT INTERNEURON —

Program Interreg V Upper Rhine «Transcending borders with every project», Neurex, Institut du médicament de Strasbourg, BioValley France, CNRS, Université de Strasbourg, Région Grand Est, Collectivité européenne d'Alsace, Eurométropole Strasbourg, Hôpitaux Universitaires de Strasbourg, Bernstein Center Freiburg, Klinik für Psychiatrie und Psychotherapie Freiburg, Neurozentrum Freiburg, Universität Freiburg, Universität Basel, Universitäre Psychiatrische Kliniken Basel, Kanton Aargau, Kanton Basel-Landschaft, Confédération suisse.

SEX DIFFERENCES IN PAIN EXPERIENCE AND MANAGEMENT

MONDAY, OCTOBER 24TH, 2022

- 09.00—10.00 **Jeffrey MOGIL** — (McGill University, Canada)
"Pain, sex and death"
- 10.00—11.00 **Serge MARCHAND** — (Université de Sherbrook, Canada)
"Endogenous pain modulation in healthy subjects and patients"
- 11.00—11.30 **COFFEE BREAK**
- 11.30—12.00 **PhD AND POST-DOC PRESENTATIONS**
- 11.30—11.45 **Anne-Sophie AUBRY** — (University of Strasbourg, France)
"Effect of sucrose bingeing on well-being and nociception in female and male mice"
- 11.45—12.00 **Etienne CLAUSS-CREUSOT** — (University of Strasbourg, France)
"GRABing the oxytocin until the pain goes away"
- 12.00—13.00 **Anne MURPHY** — (Georgia State University, USA)
"Impact of biological sex and age on opioid signalling in the rat periaqueductal gray"
- 13.00—14.30 **LUNCH BREAK**
- 14.30—15.30 **Michael SALTER** — (University of Toronto, Canada)
"Sex and pain: it's not always about the differences"
- 15.30—16.00 **PhD AND POST-DOC PRESENTATIONS**
- 15.30—15.45 **Juliette KAEFFERT** — (University of Strasbourg, France)
"Development of analgesic tolerance to DOR agonist: involvement of GRASPI in the mechanism and sex differences?"
- 15.45—16.00 **Lucien RUELLE-LE GLAUNEC** — (University of Strasbourg, France)
"Sex Differences in Nociception and Pain in context with Autism Spectrum Disorders"
- 16.00—16.30 **COFFEE BREAK**
- 16.30—17.30 **Yannick GOUMON** — (University of Strasbourg, France)
"Sex differences in morphine anti-nociceptive effects"

Program and registration at www.neurex.org

