**Microglia and pannexin-1: a cellular Rubik’s cube**

Opioid analgesics are an essential class of drugs for treating pain. The increasing use of opioids is concerning and has contributed to a striking rise in opioid related deaths. Adverse opioid side effects are increasingly linked to activity of microglia, which are immune cells that reside in the central nervous system. This presentation will focus on the interplay between microglia and opioids, as well as the emerging sexual dimorphic role of microglia in chronic pain. We are beginning to unlocked pieces of the cellular puzzle that will allow us to better understand the inner workings of microglia.

Objectives:

1. Understand the importance of microglia in chronic pain.

2. Define how sex differences contribute to chronic pain.

3. Learn how opioids modulate microglia activity and its implications for use of opioid medications.