MSNBIO2622 – Mechanisms and Clinical Presentation of Pain

Syllabus for Fall 2023

The class meets Mondays from 3-5 in 1495 BST. This is a two unit class that will be based on class participation (~40%), and a review paper on a topic of your choosing (that is approved by the course director, Michael Gold). Topic should be submitted for approval by November 6. The paper is due Monday December 11.

Reading material and lectures will be accessible through the PCPR slack channel #mechanisms-and-clinical-presentation-of-pain.

Unless anything changes, the class will be offered in person only.

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| **Date** | **Topic**  | **Faculty** |
| 28-Aug | Pain Taxonomy - History/Nociceptors | Koerber/Koerber-Ross |
| 11-Sept | Dorsal horn/Ascending circuits | Koerber/Ross |
| 18-Sept | Supraspinal circuits /Descending pathways | Ross/Taylor |
| 25-Sept | Injury-induced changes in Nociceptors/Dorsal horn | Albers/Seal |
| 2-Oct | Low Back Pain  | Sowa/Vo  |
| 9-Oct | Neuropathic pain | Wasan/Gold |
| 16-Oct | Itch and Pain | Kaplan/Ross |
| 23-Oct | Cancer pain | Nilsen/Scheff |
| 30-Oct | Visceral pain | Levinthal/Davis |
| 6-Nov | Perioperative pain | Ibinson/Gold |
| 13-Nov | SFN Meeting  | NO CLASS |
| 20-Nov | Pain and substance use disorder | Merlin/Taylor |
| 27-Nov | Psychosocial factors and pain | Jarquin/Ross |
| 4-Dec | Orofacial pain-Headache | Kaniecki/Gold |
| 13-Dec | Final paper due |  |

Faculty:

Kathryn Albers, PhD, Professor of Neurobiology

Brian Davis, PhD, Professor of Neurobiology

Michael S Gold, PhD, Professor of Neurobiology

James Ibinson, MD, PhD Assistant Professor of Anesthesiology and Perioperative Medicine

Susan Jarquin, PhD, Assistant Professor of Anesthesiology and Perioperative Medicine, UPMC Pain Medicine Program

Robert Kaniecki, MD Assistant Professor of Neurology and Director of the Headache Center

Daniel Kaplan, MD, PhD Professor of Immunology and Dermatology

H Richard Koerber, PhD Professor of Neurobiology

David Levinthal, MD, PhD, Assistant Professor of Medicine

Jessica Merlin, MD, PhD, MBA, Associate Professor of Medicine

Marci Nislen, RN, PhD, Assistant Professor of Nursing

Sarah Ross, PhD Professor of Neurobiology

Nicole Scheff, PhD Assistant Professor of Neurobiology and Hillman Cancer Center

Rebecca Seal, PhD Professor of Neurobiology

Gwendolyn Sowa, MD, PhD Professor and Chair of Physical Medicine and Rehabilitation

Bradley Taylor, PhD Professor of Anesthesiology and Perioperative Medicine

Nam Vo, PhD Associate Professor of Orthopaedic Surgery

Ajay Wasan, MD, MSc Professor of Anesthesiology and Perioperative Medicine and Psychiatry