

2022 Grants (selected)

- “Antagonists of CRMP2 phosphorylation for chemotherapy-induced peripheral neuropathy”
- “Anti-CV2 autoantibodies unmask a CRMP5/GluN2B pain signaling hub”
- “Artemin overexpression in oral cancer pain and carcinogenesis”
- “Defining the role of SERT in brain, behavior and gut abnormalities resulting from in utero SSRI exposure”
- “Developing inhibitors of TDP-43/Tau interaction for AD therapeutics”
- “Developing small molecule chaperones for CLN2”
- “Developing small molecules to target RNA in Batten Disease”
- “Disease Model Characterization and Development of Assays to Evaluate and Measure Pain in a Porcine Model for Sickle Cell Disease”
- “Elucidating the Pathophysiology of Angelman Syndrome in the GI Tract”
- “Endosomal Chemokine Receptor Signaling as Basis for Metastasis in Malignant Melanoma”
- “Genetic and Pharmacological Validation of CRMP2 Phosphorylation as a Novel therapeutic Target for Neuropathic Pain”
- “A GI-Focused SERT antagonist to treat anxiety and depression”
- “Green Light Therapy for Improving Dementia in Mice Models of Alzheimer’s Disease”
- “Gut-Neuronal Signaling Through Polymeric Mucin via Chemical Probes and Imaging”
- “Inhibition of CaV α - β interaction with orally available small organic molecules for chronic pain
- “CRMP2 phosphorylation: a novel target for Alzheimer’s disease”
- “Intratumor co-delivery of DNA and RNA to relieve cancer pain”
- “Linkage of s100a10 (p11) to enteric 5-HT4-mediated serotonergic signaling roles in GI motility, enteric nervous system development, and co-morbid dysfunction of gut and brain”
- “Mechanisms of Endosomal Signaling of Itch”
- “Microenvironment in Enteric Neuron Development”
- “Peripherally-restricted cannabinoids for cancer and chemotherapy-induced pain”
- “Pre-clinical tests of novel GABA transaminase inhibitors to treat obesity induced hyperglycemia, hyperinsulinemia, and insulin resistance.”
- “A Prospective Study Examining the Role of Gestational SSRI Exposure in the Development of Functional Gastrointestinal Disorders”
- “Protease/PAR₂/TRPV4 Axis and Oral Cancer Pain”
- “Receptors in Endosomes Mediate Chronic Pain Associated with Trauma and Stress: Non-Opioid Targets for Pain”
- “The Role of Algorithm-Based Microbiota Consortia in Murine Models of IBS”
- “Role of Endothelial eNAMPT Secretion and TLR4 Signaling in the ARDS Vascular Endotype”
- “Sentrin proteases, CRMP2 deSUMOylation, and Chronic Pain”
- “Spatiotemporal Regulation of GPCR Signaling by Different β -Arrestin Conformations”

- “TAF1, T-Type channel activators, and X-Linked Dystonia Parkinsonism”
- “Targeting Endosomal Receptors for Treatment of Chronic Pain”
- “Targeting the neuropilin-1 receptor (NRP-1)/VEGF-A axis for neuropathic pain”
- “Trafficking-Dependent Signaling of Pain by Protease-Activated Receptors”
- “TRPV1 nociceptors in oral carcinogenesis and pain”
- “Validation of Spinal Neurotensin Receptor 2 as an Analgesic Target”