



Guest Editors

Gut Microbiome, Neuroimmune Regulation, and Epigenetic Mechanisms in Orofacial Pain



Prof., MD, Feng Tao, Ph.D.

Email: ftao81@tamu.edu

Interest: orofacial pain;
temporomandibular joint
pain; migraine

Website: <https://dentistry.tamu.edu/departments/bms/faculty-staff-students/faculty/feng-tao.html>



Ran Tao, BDS, MS, Ph.D.

Email: rantao@tamu.edu

Interest: temporomandibular
disorder; migraine

Website: <https://www.researchgate.net/profile/Ran-Tao-39>

Dear Colleagues,

Deadline: 31 May 2027

Orofacial pain is difficult to treat and often involves interactions among peripheral tissues, the trigeminal system, immune signaling, and central sensitization. Recent studies suggest that the gut microbiome may also play an important role in pain modulation through the gut-brain axis, systemic inflammation, microbial metabolite production, and immune regulation.

This Special Issue will focus on how the gut microbiome and microbiota-derived metabolites contribute to orofacial pain mechanisms, especially in temporomandibular disorders, trigeminal neuralgia, burning mouth syndrome, dental pain, and neuropathic craniofacial pain. Topics of interest include gut microbiota composition, short-chain fatty acids, neuroinflammation, glial and immune cell interactions, trigeminal pathway plasticity, epigenetic regulation, single-cell and spatial multi-omics, biomarkers, and non-opioid therapeutic strategies. We welcome original research and review articles.

The goal of this Special Issue is to bring together basic, translational, and clinical studies that improve our understanding of gut microbiome-related mechanisms in orofacial pain and support the development of new diagnostic and therapeutic approaches.

Keywords: Gut microbiome; Orofacial pain; Microbiota-derived metabolites; Neuroimmune regulation; Epigenetic mechanisms

Regards,
Feng Tao, Ran Tao

Submission link: <https://submit.jofph.com/ch/author/login.aspx>

Journal of Oral & Facial Pain and Headache

Current Impact Factor: 2.4 (2024)

Scopus CiteScore: 3.1

JCR Category Rank: Q2 in DENTISTRY, ORAL

SURGERY & MEDICINE- SCI

Official website: <https://www.jofph.com/>

Indexed in...



Clarivate
Web of Science™



Scopus Preview

EBSCO