

BDR SEMINAR via Zoom

Wei Li

Retinal Neurophysiology Section

National Eye Institute (NEI)

National Institutes of Health (NIH), Bethesda, MD, USA

Tuesday, March 16, 2021

10:00-11:00

Meeting URL will be announced on March 15 by e-mail.

✂This seminar is open only to BDR members.

Living in the cold - what we can learn from a hibernator

This seminar is a part of the QMIN project seminar series.

Summary

Hibernation is a fascinating biological phenomenon. Mammalian hibernators have evolved sophisticated survival mechanisms designed to cope with extremely stressful conditions that would be life-threatening to non-hibernators. However, the mechanisms of such promising protective mechanisms remain elusive, hindering potential clinical applications. We use thirteen-lined ground squirrel as an animal model to study adaptive strategies during hibernation focusing on the central nervous system. In this seminar, I will report adaptations that we observed in synapse, cytoskeleton, and local immune response from hibernating ground squirrels. Exploiting the knowledge of such adaptations in hibernation can facilitate the development of new therapeutic strategies for neuroprotection against neural injury and neurodegeneration.



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