

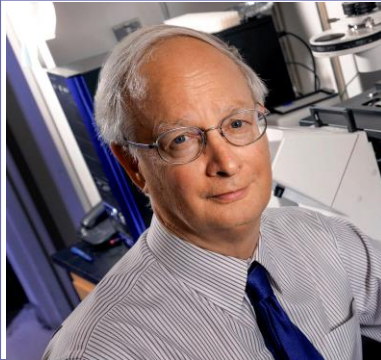


McGill

Department of  
Pharmacology and  
Therapeutics

8th Annual

**THEODORE L. SOURKES LECTURE IN NEUROPHARMACOLOGY**



**Ray Dingledine, PhD**

**Professor and former Chair,  
Dept. Pharmacology & Chemical Biology  
Emory University School of Medicine**

<http://www.pharm.emory.edu/people/primary/dingledine-r.html>

## *“Targeting inflammation in neurologic disease”*

**Neuroinflammation** has both beneficial and deleterious effects on chronic neurologic disorders including epilepsy and Parkinson's disease. We now recognize roles for infiltrating monocytes, several classes of resident microglia, reactive astrocytes, activated endothelial cells and oligodendrocytes. Over the past decade our research has become focused on the consequences of unabated inflammation in the brain, most particularly that mediated by COX-2 induction and consequent EP2 receptor activation in epilepsy models. We have applied a large variety of technical approaches to this issue including memory and EEG assays, medicinal chemistry to synthesize novel anti-inflammatory compounds, in vivo and in vitro studies of microglial activation and monocyte infiltration, single nucleus RNA sequencing and associated informatics. These studies demonstrate a profound role for EP2 receptor activation in COX-2 related neuroinflammation in epilepsy. Our most advanced EP2 receptor lead compound is moving towards IND with an eye to preventing cognitive deficits after seizures.

*All are Welcome!*

**Thursday October 19<sup>th</sup>, 2023**

**Starting at 3:30 PM**

In Room 521 (Meakins Amphitheater)  
McIntyre Building – McGill University