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## BIOGRAPHICAL SKETCH

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NAME: Robertson, George Sverre

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eRA COMMONS USER NAME (credential, e.g., agency login): GEORGEROBERTSON

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POSITION TITLE: Professor of Psychiatry & Pharmacology

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### EDUCATION/TRAINING

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INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Dalhousie University, Halifax, Canada	BSc	05/1985	Psychology
Dalhousie University, Halifax, Canada	PhD	09/1989	Pharmacology
University of British Columbia, Vancouver, Canada	PDF	03/1992	Neuropharmacology

### A. Personal Statement

Over my career as an academic and industrial scientist, I have developed a broad background in pharmacology and specific training in the use of a wide variety of techniques to model various features of neurodegenerative disorders in cultured cells and animals. The primary goal of my research is to develop treatments that will protect the central nervous system from damage observed in Alzheimer's disease, multiple sclerosis, hearing loss, stroke and Parkinson's disease. This work is based on the premise that mitochondrial dysfunction plays a central role in driving the numerous pathological processes implicated in these neurodegenerative disorders (1,2). To this end, my laboratory has developed small molecule (3) and gene therapy (4,5) approaches designed to protect neurons by preserving mitochondrial performance (6).

1. Jones QR, Warford J, Rupasinghe HP, **Robertson GS** (2012) Target-based selection of flavonoids for neurodegenerative disorders. *Trends in Pharmacological Sciences* 33: 602-610.
2. **Robertson GS**, Crocker SJ, Nicholson DW, Schulz JB (2000) Neuroprotection by the inhibition of apoptosis. *Brain Pathology* 10: 283-292.
3. Nichols, M., Zhang J., Polster B.M., Elustondo P.A., Thirumaran A., Pavlov EV, **Robertson GS** (2015) Synergistic neuroprotection by epicatechin and quercetin: Activation of convergent mitochondrial signaling pathways. *Neuroscience* 308: 75-94.
4. Xu DG, Crocker SJ, Doucet JP, St-Jean M, Tamai K, Hakim AM, Ikeda JE, Liston P, Thompson CS, Korneluk RG, Mackenzie A, **Robertson GS** (1997) Elevation of neuronal expression of NAIP reduces ischemic damage in the rat hippocampus. *Nature Medicine* 3: 997-1004.
5. Jie H, Tao S, Liu L, Xia L, Charko A, Yu Z, Bance M, Yin S, **Robertson GS**, Wang J (2015) Cochlear protection against cisplatin by viral transfection of X-linked inhibitor of apoptosis protein across round window membrane. *Gene Therapy* 22(7): 546-552.
6. Nichols M, Pavlov EV, **Robertson GS** (2018) Tamoxifen-induced knockdown of the mitochondrial calcium uniporter in Thy1-expressing neurons protects mice from hypoxic/ischemic brain injury. *Cell Death and Disease* 9 (606): 1-13.

## B. Positions and Honors

### Positions and Employment

Years	Position, Place
1992-1996	Assistant Professor, Cellular & Molecular Medicine, University of Ottawa, Ottawa, ON
1996-1998	Associate Professor, Cellular & Molecular Medicine, University of Ottawa, Ottawa, ON
1998-2002	Director, Pharmacology, Merck-Frosst Centre for Therapeutic Research, Kirkland, PQ
2002-	Professor, Departments of Psychiatry & Pharmacology, Dalhousie University, Halifax, NS

### Other Experience and Professional Memberships

Member	Society for Neuroscience
Member	Canadian College of Neuropsychopharmacology
2010-present	Member, Scientific Advisory Board, Nova Scotia Heart and Stroke Foundation
2010-present	Chair, SPRINT Training Program Awards, MS Society of Canada
2008-present	Grant Reviewer, MS Society of Canada
1992-2008	Grant Reviewer, British Columbia Health Foundation
1992-present	Grant Reviewer, Canadian Institutes of Health Research
1992-present	Grant Reviewer, Heart & Stroke Foundation of Canada
1992-present	Grant Reviewer, Canadian Psychiatric Foundation
1992-present	Grant Reviewer, Parkinson Foundation of Canada

### Honors

2016	Canadian College of Neuropsychopharmacology (CCNP) Innovations Award for seminal contributions to the field of neuropsychopharmacology
2002-2007	CIHR-Rx&D Research Chair
1996	Canadian College of Neuropsychopharmacology (CCNP) Young Investigator Award for outstanding contributions in the field of neuropsychopharmacology
1989-1992	Medical Research Council of Canada Fellowship
1987-1989	Medical Research Council of Canada Studentship
1988	Co-recipient of a Sandoz Research Prize (\$10,000) for the publication Combined L-Dopa and bromocriptine therapy for Parkinson's disease: A proposed mechanism of action. <i>Clinical Neuropharmacology</i> 10: 84-87.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1vAaFNGYherkK/bibliography/51836532/public/?sort=date&direction=ascending>

## C. Research Support

### Ongoing Research Support

G. S. Robertson (PI)	07/2018-06/2021	Total Award - \$263,000
Gait preservation by conditional neuron-specific mitochondrial calcium uniporter deficiency in mouse models of hemorrhagic and ischemic stroke <i>Heart and Stroke Foundation of Canada and Brain Canada</i>		
G. S. Robertson and T. Akay (co-PIs)	04/2017-03/2020	Total Award - \$312,000
Gait parameters as predictors of functional recovery in a mouse model of MS <i>MS Society of Canada</i>		
G. S. Robertson and M. Alda (co-PIs)	01/2018-01/2019	Total Award - \$20,000
Reversal of mitochondrial and autophagy deficits in neurons derived from the pluripotent stem cells of patients with bipolar disorder. <i>Department of Psychiatry Research Fund (Dalhousie University)</i>		