JOHN GORDON BOYD
CURRICULUM VITAE

john.gordon.boyd@queensu.ca

Assistant Professor, Department of Medicine (Neurology and Critical Care)
Southeastern Ontario Medical Association Clinician-Scientist
Davies 2, Kingston Health Sciences Centre
76 Stuart St.
Kingston, ON K7L 2V7

ACADEMIC APPOINTMENTS:

2013-present	Assistant Professor, Department of Medicine (Neurology) and Critical Care Southeastern Ontario Medical Association Clinician-Scientist Queen's University Kingston, ON

HOSPITAL APPOINTMENTS:

2013-present	Full time regular attending staff, Department of Medicine (Neurology) and Critical Care Kingston General Hospital/Hotel Dieu Hospital (now Kingston Health Sciences Centre, c. 2017) Kingston, ON
2011-2013	Term attending staff, Department of Medicine (Neurology) Kingston General Hospital Kingston, ON
2011-2013	Locum Physician, Department of Critical Care Medicine Quinte Healthcare Corporation, Belleville Site Belleville, ON

TRAINING/EDUCATION

2016:	Emergency Neurological Life Support (ENLS), Instructor Certification by Neurocritical Care Society (USA)
2016:	Emergency Neurological Life Support (ENLS), Certification by Neurocritical Care Society (USA)
2011-2013	Critical Care Medicine Subspecialty Certification Department of Critical Care Medicine, Queen's University, Kingston, ON
2006-2011	Fellow of the Royal College of Physicians Canada, Neurology Queen's University, Kingston, ON.
2002-2006	Doctor of Medicine Faculty of Health Sciences, Queen's University, ON
2001-2004:	Post-doctoral fellowship, Dept. of Anatomy and Cell Biology, Queen's University, ON
1997-2001:	PhD Neuroscience (with Distinction) University Centre of Neuroscience, University of Alberta, Edmonton, AB
1993-1997:	BSc. (Hons) Psychology Lakehead University, Thunder Bay, ON

RESEARCH PROGRAMS AND AWARDS (awarded)

2017-2018	***Co-Investigator***: CONCEPT-HIBI (Heart and Stroke Foundation of Canada-PI Dr. Donald Griesdale, $196 661)
2017-2019	***Co-Investigator:*** Aneurysmal subarachnoid hemorrhage-red blood cell transfusion and outcome: a randomized controlled trial (CIHR Project Grant-PI: Dr. Shane English, $296 661)
2016-present	***Principal Investigator:*** Serum proteomics for identification of novel serum prognostic biomarkers for comatose survivors of cardiac arrest (SEAMO Innovation Fund, $98 500).
2016-present	***Co-Investigator***: Death Prediction and Physiology after Removal of Therapy (DePPaRT) study. Canadian Blood Services (PI: Dr. Sonny Dhannani, Dr. via University of Alberta; $20 130.00)
2016-present	***Co-Investigator***: Observational Study on Clinical Practice in Organ Donation (DONATE). Canadian Blood Services (PIs: Drs. Maureen Meade and Frederick D'Arargon, $10 000.00)
2016-present	***Co-Investigator***: A randomized, double-blind, placebo controlled study to evaluate the efficacy and safety of SAGE-347 injection in the treatment of subjects with super-refractory status epilepticus (STATUS). SAGE Pharmaceuticals $40 000.00.
2016-present	***Principal Investigator***: Cerebral Oxygenation and Neurological Outcomes Following CriticAL illness (the CONFOCAL Study). Physician Services Incorporated 232 000 (3 years).
2015-present:	***Principal Investigator:*** Cerebral hypoperfusion during hemodialysis contributes to long term neurological dysfunction in patients with end stage kidney disease. Queen's Dept. of Medicine Innovation Fund ($30 000.00 for 2 years).
2014-present:	***Co-Principal Investigator***: Cerebral oxygenation and neurological outcome after coronary artery bypass surgery-a feasibility study. SEAMO Innovation Fund ($50 000.00/yr X 2 years).
2014-present:	***Principal Investigator***: Cerebral oxygenation and neurological outcome after coronary artery bypass surgery-a feasibility study. Botterell Foundation of Queen's University ($10 000.00).
2014:	***Principal Investigator***: Cerebral oxygenation and neurologic recovery after cardiac arrest. Queen's Principal's Development Fund and Senate Advisory Research Committee ($ 9800.00).
2014-present:	***Principal Investigator:*** Serum proteomics to identify novel biomarkers that predict neurologic recovery after cardiac arrest AHSC AFP INNOVATION FUND (96 000.00).
2014-present:	***Co-investigator:*** A non-human primate model of chronic epilepsy-deep brain stimulation and cognitive performance in epilepsy Queen's University DDIF ($25 000.00).
2014-present:	***Co-investigator:*** GSK. A two-part study to investigate the safety, tolerability, pharmacokinetics, and pharmacodynamics of GSK 2586881 in patients with acute lung injury (52421.00).
2014-present:	***Co-investigator***: Nutritional adequacy therapeutic enhancement in the critically ill: a randomized double-blind, placebo controlled trial of the motilin receptor agonist GSK962040. The NUTRIATE study (143 000.00).
2014-present:	***Co-investigator:*** OPTIMAL Selection for and timeing to start renal replacement in critically ill older patients with acute kidney injury (OPTIMAL-AKI) (17 000.00).
2013-present:	***Principal Investigator:*** Southeastern Ontario Medical Association Clinician-Scientist Award. A five-year award to establish a translational and clinical research program with a focus on predictive biomarkers and neurological function and recovery from critical illness.
2013-present:	***Sub-Principal Investigator***: EXPAND Trial: Phase 2 study of sponimod in patients with secondary progressive multiple sclerosis. Involved in monitoring first dose of medication.

2013-present: ***Sub-Principal Investigator***: OVATION STUDY: A phase 1 study examining the optimal titration of vasopressors for patients with shock.

2010-present: ***Co-Investigator:*** The PREDICT Study: Funded by the Botterell Foundation of Queen's University. Serum proteomics to predict neurological recovery after cardiac arrest

2002-2004: ***Fellowship:*** The Ontario Neurotrauma Foundation Post Doctoral Fellowship: The role of olfactory ensheathing cells to promote axon regeneration and remyelination after spinal cord injury

2001-2002: ***Fellowship*** Queen's Principals's Development Fund Post-Doctoral Fellowship: Using olfactory ensheathing cells to promote axon regeneration and functional recovery after spinal cord injury.

1999-2001: ***Studentship:*** Rick Hansen Foundation/Alberta Paraplegic Foundation for Spinal Cord Injury. Neurotrophic Factors and Their Receptors in Motor Axonal Regeneration.

RESEARCH PROGRAMS AND AWARDS (Currently Submitted:)

2016: ***Co-Principal Investigator:*** Precision health for ICU survivors: Using large, multimodal data sets to identify determinants and predictors of neurocognitive and functional outcomes following critical illness. (with Drs. David Maslove and Joon Lee; CIHR Catalyst Grant)

RESEARCH PROGRAMS AND AWARD (Unsuccessful:)

2015: ***Co-Investigator:*** Cerebral oximetry to assess cerebral autoregulation in hypoxic-ischemic brain injury (COnCEpT-HIBI). Heart and Stroke Foundation of Canada ($225 000.00).

2015: ***Principal Investigator:*** Cerebral hypoperfusion contributes to accelerated cognitive decline in patients with end-stage kidney disease. The Kidney Foundation of Canada ($95 000.00)

2014: ***Principal Investigator:*** Biomarkers and Neurological Recovery After Cardiac Arrest. Heart and Stroke Foundation of Canada ($218 000.00).

2014: ***Principal Investigator***: Thinking beyond survival: defining neurological recovery after critical illness. CIHR Program Grant ($750 000.00).

2012: ***Principal Investigator:*** Biomarkers and Neurological Recovery After Cardiac Arrest. Heart and Stroke Foundation of Canada ($215 000.00).

PROFESSIONAL MEMBERSHIPS:

2015-present:	Canadian Critical Care Trials Group
2015-present:	Neurocritical Care Society
2013-present:	Society of Critical Care Medicine
2013-present:	American Heart Association
2012-present:	European Society of Intensive Care Medicine
2011-present:	Canadian Critical Care Translational Biology Group
2011-present:	Fellow of the Royal College of Physicians and Surgeons Canada
2006-2011:	American Academy of Neurology

ADMINISTRATIVE APPOINTMENTS/COMMITTEES:

2017-present:	CIHR College of Reviewers
2017-present:	Queen's University Research Advisory Committee
2016-present:	Queen's University Dept. of Critical Care Medicine CBME Committee
2016-present:	ICU fellow research coordinator: Queen's Critical Care Medicine Program.
2013-present:	Physician lead: Organ Donation and Tissue Transplantation Committee Kingston General Hospital
2012-present:	Search Committee for New Full-Time Critical Care Physician Kingston General Hospital
2012-present:	CaRMS Committee for New Critical Care Fellows Kingston General Hospital
2011-2015:	LAUNCH (Royal College Exam Preparation for Residents) Written Exam Committee
2011-2012:	Critical Care Program Council
2011-2012:	Chief Resident, Critical Care Medicine
2009-2011:	Chief Resident, Division of Neurology, Department of Medicine
2007-present:	CaRMS Committee for Queen's Neurology Resident Training Program
2004-2005:	Queen's University Class of 2006 Undergraduate Medicine Education Committee Representative
2003:	Queen's University Search Committee (Associate Dean of Undergraduate Medicine)
1999-2001:	Vice president Neuroscience Graduate Students Association/Chair-Clinical Neurosurgery Liaisons

TEACHING POSITIONS/EXPERIENCE

2015:	Neurosciences graduate program (NSCI 844): Controversies in Neuroscience "Communicating with the patient in the persistent vegetative state"
2009-present:	Critical Care Medicine Queen's University "Approach to the comatose patient', core curriculum ICU Junior Residents
2009-present:	Critical Care Medicine Queen's University "Neurologic emergencies in the ICU", core curriculum ICU Junior Residents
2006-present:	Queen's University Undergraduate Medical Program Neuroanatomy, Clinical Correlates of Neuroanatomy, Neurological Emergencies, Organ Donation, Approach to the patient with decreased level of consciousness, Headache and CNS infections.
2010-2012:	Internal Medicine, Queen's University "The five minute neurological exam", senior resident half day.
2001:	Part time sessional lecturer Department of Community Research and Disability Studies University of Calgary
1998-2001:	University of Alberta Undergraduate and graduate courses on central and peripheral neurodegenerative diseases as well as mechanisms of neurotrophin signaling
1996-1997:	Teaching assistant for Lakehead University's Department of Psychology/Distance Education-Behavioural Neuropharmacology
1996-1997:	Teaching assistant for Lakehead University's Department of Biology- Human Anatomy Lab

TEACHING AWARDS AND SCHOLARSHIPS

2017:	W.F. Connell Award for Excellence in Lectureship (Queen's University)
2015:	Queen's Aesculapian Society Faculty Lectureship Award
2014:	Critical Care Program Faculty Lectureship Award
2010:	Queen's Aesculapian Society Faculty Lectureship Award
2009:	American Academy of Neurology Resident Travel Scholarship to Annual Meeting
2009:	Denis N. White Memorial Scholarship, Queen's School of Medicine
2006:	Neil Currie Polson Memorial Prize, Queen's School of Medicine
2004:	Awarded Institute of Neurosciences, Mental Health, and Addition "Brainstar" Award
2002:	Selected for Young Investigator Award by International and National Neurotrauma Society at 6th annual meeting in Tampa, FL.
2001:	Nominated by University Centre for Neuroscience for NSERC silver medal for doctoral studies
1999:	Awarded Marie Louise Imrie Studentship from Faculty of Graduate Studies and Research

RESEARCH PUBLICATIONS

Papers:

1. Ajzenberg, H., Newman P., Harris, G-A, Cranston, M, and **Boyd, JG** (2017). A "Neurological Emergency Trolley" reduces turnaround time for high-risk medications in a general medical-surgical ICU. Accepted pending minor revisions to *Int. Crit. Care Nurs*.
2. D'Aragon F., Dhanani S., Akhtar A., Arsenault E., Baker A., Ball I., **Boyd JG**., Burns K., Chasse M., Cook DJ., Frenette AF., Guyatt GH., Hand LE., Healey A., Keenan S., Kramer A., Kusogianni DJ., Lamontagne F., Lize J-F., Masse MH., Ribic C., Rochbert B., and Meade MO. (2017). The Canada-DONATE Study Protocol: A Prospective National Observational Study of the Medical Management of Deceased Organ Donors. *BMJ Open-in press.*
3. Muscedere J, Waters B, Varambally A, Bagshaw SM, **Boyd JG**, Maslove D, Sibley S, Rockwood K (2017). The impact of frailty on intensive care unit outcomes: a systematic review and meta-analysis. *Intensive Care Med.* 2017 Aug;43(8):1105-1122. doi: 10.1007/s00134-017-4867-0. Epub 2017.
4. Low brain tissue oxygenation contributes to the development of delirium in critically ill patients: A prospective observational study. Cerebral Oxygenation and Neurological Outcomes Following Critical Illness (CONFOCAL) Research Group; Canadian Critical Care Trials Group, Wood MD, Maslove DM, Muscedere JG, Day AG, **Boyd, JG** *J Crit Care.* 2017 Jun 15;41:289-295. doi: 10.1016/j.jcrc.2017.06.009. [Epub ahead of print]
5. Park A, Chapman M, McCredie CA, Debicki D, Gofton, T, Norton, L., **Boyd, JG** (2016). EEG utilization in Canadian intensive care units: A multicentre prospective observational study. *Seizure* 43, 42-47.
6. Muscedere J., Maslove D, **Boyd JG,** O'Callaghan N, Lamontagne F., Reynolds S., Albert M, Hall R, McGolrick D, Jian X, Day A (2016). Prevention of nosocomial infections in critically ill patients with lactoferrin (PREVAIL Study). *Trials* 17, 474.
7. Kroll, RR., **Boyd, JG.**, and Maslove DM (2016). Accuracy of a wrist-worn wearable device for monitoring heart rates in hospital inpatients: A prospective observational study. *JMIR* 18, e253.
8. Wood, MD., Maslove D., Muscedere J., Scott SH., Day A, **Boyd, JG** (2016). Assessing the relationship between brain tissue oxygenation and neurological dysfunction in critically ill patients: study protocol. Int. J. Clin. Trials, 3(3) 98-105.
9. **Boyd, JG**., Smithson LJ, Howes D, Muscedere, J., Kawaja MD (2016). Serum proteomics as a strategy to identify novel biomarkers of neurologic recovery after cardiac arrest: a feasibility study. *Intensive Care Medicine-Experimental* (epub May 2016).
10. O'Loughlin, S., Guy, B., Rossiter J. P., and **Boyd J.G.** (2016). A 39 year old male with multiple cranial neuropathies. *Neurology* **86** (7) p66-70.
11. Park, A, and **Boyd, JG** (2016). EEG Utilization in the medical/surgical ICU: a single centre prospective observational study. *Int. Care. Med* **41** (10) 1869-70.
12. Howes, D., Muscedere J., Gray S.H., Brooks, S., **Boyd, J.G.,** Djogovic, D., Golan E., Green R.S., Jacka M.J., and Sinuff, T (2016). Canadian Guidelines for the Use of Targeted Termperature Management (Therapeutic Hypothermia) After Cardiac Arrest. *Resuscitation* **98**, 48-63.
13. Wood, M., Song, A., Maslove D., Ferri C., Howes, D., Muscedere J., **Boyd, J.G.** (2015). Brain tissue oxygenation in patients with septic shock: a feasibility study *Can. J. Neuro. Sci.* **43** 65-73.
14. Galvin I.M., Levy R., **Boyd, J.G**., Day A.G., and Wallace, M.C. (2015). Cooling for cerebral protection during brain surgery. *Cochrane Database Syst. Rev.* epub, PMID 25626888.
15. **Boyd, J. G.,** Debicki, D., and Young, G.B. (2012). Temporal lobe epilepsy after refractory status epilepticus: an illustrative case and review of the literature. *Epilepsy Research and Treatment,* doi 10.1155/2012/209701.
16. **Boyd J.G.,** Taylor S., Rossiter J, Islam, O, Spiller A, and Brunet DG. (2009). New onset refractory status epilepticus associated with restricted diffusion and neuronophagia in the pulvinar. *Neurology* **74**, 1003-5.
17. Smithson, L., **Boyd J.G**., and Kawaja, M. D. (2009). Technical strategies to isolate olfactory ensheathing cells for intraspinal implantation. *J. Neurotrauma* **26**, 155-77.
18. Jahed A., Rowland, JW., McDonald, TG., **Boyd J.G**., Doucette, R., and Kawaja, M.D. (2007). Olfactory ensheathing cells express smooth muscle alpha-actin in vitro and in vivo. *J. Comp. Neurol.* **502**, 209-223.
19. **Boyd, J.G.**, Jahed, A., McDonald, T. G., Doucette, R., Van Eyk, J. E., Kawaja, M. D. (2006) Proteomic evaluation reveals that olfactory ensheathing cells, not Schwann cells, express Calponin. *Glia* **53**, 434-4
20. **Boyd, J. G**., Doucette, R., and Kawaja, M.D. (2004). Defining the role of olfactory ensheathing cells in facilitating axon remyelination following damaged to the spinal cord (*FASEB J.* **19***,* 694-703)
21. **Boyd, J.G.**, Lee, J., Skihar, V., Doucette, R., Kawaja, M.D. (2004). LacZ-expressing olfactory ensheathing cells do not associate with myelinated axons after implantation into the compressed spinal cord. *PNAS* **101**, 2162-6.
22. Gordon, T., Sulaiman, O., **Boyd, J. G.** (2003). Experimental strategies to promote functional recovery after peripheral nerve injuries. *J. Peripher. Nerv. Syst*. **8,** 236-50.
23. **Boyd, J. G.,** Skihar, V. Kawaja, M. D., and Doucette, R. (2003). Olfactory ensheathing glia: Historical perspective and therapeutic potential. *Anat. Rec. Part B: New Anat.* **271**B, 49-60.

24. **Boyd, J. G.,** and Gordon, T. (2003). Exogenous glial cell line-derived neurotrophic factor sustains axonal regeneration of chronically axotomized motoneurons, *Exp. Neurol* **183**, 610-19.
25. **Boyd, J.G.** and Gordon, T. (2003). Functional roles for neurotrophic factors and their receptors in peripheral nerve regeneration. *Mol. Neurobiol.* **27**, 277-324.
26. Sulaiman, O. A. R., **Boyd, J. G.**, and Gordon, T. (2002). Regeneration in the peripheral nervous system of mammals. In *Neuroglia* 2nd Ed., Kettenmann and Ransom, Eds.
27. **Boyd, J. G.**, and Gordon, T. (2002). A dose-dependent facilitation and inhibition of peripheral nerve regeneration by brain-derived neurotrophic factor. *Eur J Neurosci*. 15, 613-26.
28. **Boyd, J.G.**, and Gordon, T (2001). The neurotrophin receptors, trkB and p75, differentially regulate motor axonal regeneration. (*J Neurobiol.* 49, 314-325.).
29. **Boyd, J. G.** (July 2001). Functional roles of neurotrophic factors in the motoneuronal response to axonal injury. PhD Thesis.

Conference Abstracts

1. Lee, KFH., Wood MD., Maslove DM., Griesdale DE., Muscedere JM., and **Boyd JG** (2017). Early disturbances in cerebrovascular autoregulation are associated with subsequent development of delirium in critically ill patients. *Submitted* to *Canadian Critical Care Forum*, Toronto, ON, Oct. 2017.
2. Wood, MD., Maslove DM., Muscedere JM., and **Boyd, JG** (2017). Heart rate and central venous oxygen content are key determinants of brain tissue oxygenation in critically ill patients. ESICM-Lives, accepted for presentation in Vienna, September 2017.
3. Vanderlinden JA., Holden R., Scott SH., and **Boyd, JG.** (2017). Robotic technology quantifies sensorimotor and visuospatial impairments in chronic kidney disease patients: a pilot study. Canadian Society of Nephrology Annual Meeting, June 2017, Montreal, QC.
4. Vanderlinden JA., Chan L., Ross-White A., Holden R., Shamseddin MK., **Boyd JG**. (2017). Cognitive assessments across the spectrum of chronic kidney disease: a meta-analysis. Canadian Society of Nephrology Annual Meeting, June 2017, Montreal, QC.
5. Semrau J., Scott SH., Saha T., Hamilton A., Petsikas D., Payne D., and **Boyd, JG** (2017). Cerebral oxygenation and quantified neurological outcomes after cardiac surgery. Society of Cardiac Anaesthesiology Annual Meeting. Accepted for presentation April 2017, Orlando, FL.
6. Wood, MD., Maslove D., Muscedere JM, Day A, and **Boyd, JG** (2017). Low cerebral oxygenation during the first 24 hours of critical illness may contribute to the development of intensive care unit associated delirium. American Delirium Society, June 2017, Nashville TN.
7. Ajzenberg H., Newman, P., Harris G-H., Cranston, M., and **Boyd, JG** (2016). The impact of a neurological emergency "crash cart" on high-risk medication delivery in a general medical-surgical intensive care unit. *Canadian Critical Care Forum,* Toronto, Ontario, October 2016.
8. Kroll, R, Howes D, **Boyd, JG**, and Maslove D. (2016). Accuracy of a wrist-worn wearable device for monitoring heart rates in hospital inpatients: A prospective observational study. *Canadian Critical Care Forum*, Toronto, Ontario, October 2016.
9. Wood, M., Maslove D, Muscedere JM., Scott SH., Saha T., Hamilton A., Petsikas D, Payne D., and **Boyd, J.G.** (2016). Using robotic technology to precisely define the neurocognitive phenotype of ICU survivors. *ESICM LIVES*, Milan, Italy. October 2016.
10. Wood, M., Maslove D, Muscedere, J., and **Boyd, JG.** (2016). Coma and delirium are associated with low levels of brain tissue oxygen in critically ill patients. Canadian Federation for Neurological Sciences, Quebec City, June 2016.
11. Vanderlinden J., Scott, SH., Holden R, and **Boyd, JG** (2016). Does brain tissue oxygenation (BtO2) predict cognitive decline in patients undergoing hemodialysis? A feasibility study. Canadian Federation for Neurological Sciences, Quebec City, June 2016.
12. Venters, A., Saha T, Hamilton A., Payne D., Petsikas, D., Scott SH., and **Boyd, JG**. (2016). Does brain tissue oxygenation during coronary artery bypass surgery correlate with quantitative assessment of neurological function? A feasibility study. Canadian Federation for Neurological Sciences, Quebec City, June 2016.
13. **Boyd, JG**., Maslove D, Wood M, and Muscedere J. (2016). Non invasive measurements of brain tissue oxygenation correlate with acute neurological dysfunction in critically ill patients. Canadian Critical Care Trials Group Spring Meeting, Halifax, June 2016.
14. **Boyd, J.G.,** Muscedere J, and Kawaja, MD (2016). Serum proteomics identifies muskelin as a novel putative biomarkers for poor neurological outcome after cardiac arrest. Canadian Critical Care Translational Biology Group Meeting. Halifax, June 2016.
15. **Boyd, J.G**., and Scott SH (2016). Robotic technology finds subtle neurocognitive deficits in high functioning cardiac arrest survivors. SCCM Orlando.
16. Wood, M., Maslove D, Muscedere J, Scott SH., and **Boyd, JG.** (2015). Using robotic technology to quantify neurological deficits among survivors of critical illness: do they relate to brain tissue oxygen levels? A pilot study. ESICM Berlin. Oct 2, 2015.
17. Wood, M., Song, A., Maslove D, Ferri CM., Howes D., Muscedere J., **Boyd, JG.** (2015). Poor cerebral oxygenation during critical illness is associated with acute neurological dysfunction. ATS Denver, May 2015.
18. **Boyd, J.G.** and Scott SH. (2014). Using robotic technology to quantify neurological recovery in apparent high functioning survivors of cardiac arrest. Canadian Critical Care Forum (October 2014), Toronto, ON.
19. Song, A., Wood, MD., Ferri C., Howes, D., Maslove D., Muscedere J., and **Boyd, J.G.** (2014). Brain tissue oxygenation as a surrogate marker for acute neurological dysfunction in patients with severe sepsis/septic shock: a pilot study. Canadian Critical Care Forum (October 2014), Toronto, ON.
20. **Boyd, J.G**. (2014). The utilization of electroencephalography in the intensive care unit: are we following the guidelines? ESICM LIVES September 2014, Barcelona, Spain.
21. Boisse-Lomax, L., Jalini S., Spiller A., Brunet D.G., and **Boyd, J.G**. (2014). Continuous EEG contributes to clinical decision making in the medical surgical intensive care unit. Annual Meeting of the American Epilepsy

Society, Dec 2014, Seattle, WA.

22. Muscedere J. M., Kawaja M.D., Scott, S.H., and **Boyd, J. G.** (2013). Predicting and precisely defining neurological recovery after critical illness. CIHR New Investigators Meeting, QC, Canada.
23. Jalini, S., Spiller, A, Brunet, D.G., and **Boyd, J.G.** (2013). The impact of continuous EEG on management decisions in a tertiary medical/surgical intensive care unit. Neurocritical Care Society 11th Annual Meeting, Philadelphia PA.
24. **Boyd, J.G.,** Smithson, L, Muscedere, J., and Kawaja, M. D. (2012). Serum proteomics is a feasible strategy to identify novel biomarkers that predict neurologic recovery after cardiac arrest. ESICM, Lisbon, Portugal.
25. **Boyd, J.G.,** Smithson, L, Petrie, C, Muscedere J, and Kawaja, MD (2012). Serum proteomics to predict neurological recovery after cardiac arrest: a pilot/feasibility study. Canadian Critical Care Conference, Whistler, BC
26. Boisse, L., **Boyd J.G**., and Brunet, D.G. (2011). The EEG of posterior reversible encephalopathy syndrome (PRES). American Academy of Neurology Annual Meeting, Hawaii, USA.
27. **Boyd J.G.,** Jin, A. (2010). "Alien voice" auditory hallucinations as the presenting symptom of acute left middle cerebral artery infarction. *Canadian Stroke Congress, Canadian Federation of Neurological Sciences.* Quebec City, June 2010.
28. **Boyd, J.G.,** Jichi, D., and Bolton, C. (2010). Isolated phrenic nerve palsy secondary to airbag deployment in a motor vehicle collision. *Canadian Federation of Neurological Sciences* Annual Congress, Quebec City, June 2010
29. **Boyd, J. G.** Rowland J. W., Jahed A., and Kawaja, M. D. (2007). Purified cultures of glial cells from the olfactory lamina propria promote axon growth and remyelination following spinal cord injury. *Society for Neuroscience*, San Diego, CA.
30. Smithson, L., **Boyd, J.G**., and Kawaja, M. D. (2007). A comparative ultrastructural study of olfactory tissues from adult mice, rats, and cats. *Society for Neuroscience*, San Diego, CA.
31. **Boyd, J. G**., Rowland J. W., Jahed A., and Kawaja, M. D. (2007). Purified cultures of glial cells from the olfactory lamina propria promote remyelination following experimental spinal cord injury in rats. *American Academy of Neurology Annual Meeting.* Boston, MA.
32. Jahed, A., **Boyd, J.G**., Rowlands, J. and Kawaja, M. D. (2006). Olfactory ensheathing cells express smooth muscle alpha actin. *National Neurotrauma Society Meeting*, San Diego, CA.
33. **Boyd, J. G.,** Jahed, A., McDonald, T. G., Van Eyk, J. E., and Kawaja, M. D. (2004). Characterization of the olfactory ensheathing cell (OEC) proteome and its utility in distinguishing OECs from Schwann cells in vitro and in vivo. *National Neurotrauma Society Meeting, San Diego, CA. Oct. 2004.*
34. **Boyd, J. G.** Skihar, V., Doucette, R., and Kawaja, M. D. (2003). Ultrastructural characterization of retrovirally infected olfactory ensheathing cells (OECs) following compressive spinal cord injury. *Soc. Neurosci. Abs.*
35. Lee, J. Krol, K. M., **Boyd, J. G.,** and Kawaja, M. D. (2003). Alterations in densities of pre-and postganglionic sympathetic axons following high thoracic spinal cord injury in adult rats. ISAN Calgary: Autonomic dysfunction after SCI. Banff, AB.
36. Jahed, A., McDonald, T. G., **Boyd, J. G.**, Skihar, V., Doucette, R., Van Eyk, J. E., and Kawaja, M. D. (2003). Proteomic analysis of fetal rat olfactory ensheathing cells and adult rat Schwann cells. *Soc. Neurosci. Abs.*
37. Lee, J., **Boyd, J. G.**, and Kawaja, M. D. (2003). Electron microscopic and immunohistochemical characterization of the corticospinal tract after clip compression in the adult rat. *Inaugural meeting of the Ontario Neurotrauma Foundation: Building Bridges.* January 2003.
38. **Boyd, J. G.** , Skihar V., Lee, J., Doucette, R., and Kawaja, M. (2002). Olfactory ensheathing cells promote robust axon growth following clip compression injury. *The 20th Annual National Neurotrauma Society Symposium & The Sixth International Neurotrauma Symposium*, Tampa Bay, FL, USA.
39. Gordon, T. and **Boyd, J. G.** (2002)**.** The combined effects of GDNF and BDNF on the axonal regeneration of chronically axotomized motoneurons. *Sunderland society meeting,* August, 2002.
40. **Boyd, J. G.,** Skihar, V., Doucette, R., and Kawaja, M. (2002). Intraspinal grafting of olfactory ensheathing cells promotes robust axon regeneration following compressive spinal cord injury. *Canadian Federation of Biological Sciences*. Montreal, QC, Canada
41. **Boyd J. G.,** Lee, J. Skihar, V., Doucette, R., and Kawaja, M. (2002). Intraspinal grafting of olfactory ensheathing cells promotes robust axon regeneration following compressive spinal cord injury in adult rats. *The 20th Annual National Neurotrauma Society Symposium & The Sixth International Neurotrauma Symposium*, Tampa Bay, FL, USA.
42. **Boyd, J. G.**, and Gordon, T. (2001). The neurotrophin receptors, trkB and p75, differentially regulate motor axonal regeneration. *Soc. Neurosci. Abs. 802.11.*
43. **Boyd, J. G.**, and Gordon, T. (2001). Dose dependent bimodal effects of BDNF on motor axonal regeneration: role of p75 in the BDNF-mediated inhibition. *Sunderland Society Meeting*, San Diego, CA
44. **Boyd, J. G.**, and Gordon, T. (2000). The combined effects of brain derived neurotrophic factor (BDNF) and glial derived neurotrophic factor (GDNF) on motor axonal regeneration after chronic axotomy. *Exp. Neurol.* 163, 291
45. **Boyd, J. G.**, Posse de Chaves, EIP, and Gordon, T. (2000). *In vivo* evidence that high dose brain derived neurotrophic factor (BDNF) binding to p75 receptors inhibits motor axonal regeneration: a ceramide-dependent

mechanism. *Soc. Neurosci Abs 317.10*.

46. **Boyd, J. G.**, and Gordon, T. (2000). The bimodal effects of brain derived neurotrophic factor (BDNF) on chronically axotomized motoneurons may be explained by the presence of high and low affinity receptors. *Physiol. Canada* 30, 153.
47. **Boyd, J.G.**. and Gordon, T. (1999) Dose-dependent effects of brain-derived neurotrophic factor (BDNF) on motor axon regeneration. *Can. J. Physiol. Pharmacol.*
48. **Boyd, J.G.**, Bennett, D. and Gordon, T. (1998) The effects of brain derived neurotrophic factor (BDNF) on axonal regeneration after prolonged motoneuron axotomy. *Soc. Neurosci*. 24, 23.4.

Invited Presentations:

1. **Boyd, JG** (2016). Acute ischemic stroke. Emergency Neurological Life Support Course, Canadian Critical Care Forum, Toronto, ON.
2. **Boyd, JG** (2016). Thinking beyond survival: the neurological consequences of critical illness. Citywide Critical Care Grand Rounds, London Health Sciences Centre, London, ON.
3. **Boyd, JG** (2016). Neuroprognostication in the intensive care unit. Canadian Federation for Neurological Sciences, Quebec City, June 2016.
4. **Boyd, JG** (2016). Survivorship in the ICU: the good, the bad, and the ugly. Critical Care Grand Rounds, Kingston, ON.
5. **Boyd , J. G**. (2015). Delirium in the critical care unit. Canadian Neurological Sciences Federation Neurocritical Care Special Interest Group. June 2015
6. **Boyd, J. G.** (2015). The use of EEG in the ICU. Canadian Neurological Sciences Federation Neurocritical Care Symposium.
7. **Boyd, J. G.** (2014). Monitoring cerebral function in critically ill patients. Division of Neurology Grand Rounds-Queen's University.
8. **Boyd, J. G.** (2014). Thinking beyond survival: the neurological consequences of critical illness. Department of Medicine Grand Rounds, Queen's University.
9. **Boyd, J. G.** (2014). Use of serum proteomics to identify novel biomarkers that correlated with neurological recovery after cardiac arrest. Canadian Critical Care Translational Biology Group, Montreal, QC.
10. **Boyd, J. G**. (2013). Critical care aspects of acute stroke. Quinte Health Annual Critical Care Conference, Belleville, ON.
11. **Boyd, J. G. (2013**). The five-minute neurological exam. Southeastern Ontario Regional Stroke Strategy Annual Conference, Kingston, ON.
12. **Boyd, J. G. (2012)**. Can serum proteomics be used to identify novel biomarkers to predict neurologic recovery after cardiac arrest? Resuscitation in Motion Scientific Meeting, Toronto, ON.
13. **Boyd, J. G. (2012).** A spoonful of sugar or salt, which will help make the ICP go down? Kingston Annual Critical Care Conference, Kingston, ON.
14. **Boyd, J. G. (2013**). Serum proteomics is a feasible strategy to identify new biomarkers to aid in prognosis after cardiac arrest. Canadian Critical Care Translational Biology Group Meeting, Quebec City, QC.
15. **Boyd, J. G. (2012).** Serum proteomics to identify new biomarkers to aid in prognosis after cardiac arrest. Canadian Critical Care Translational Biology Group Meeting, St Alesis des Monts, QC.
16. **Boyd, J. G. (2010).** Neurological recovery after pediatric cardiac arrest in the therapeutic hypothermia era. Critical Care and Neurology Grand Rounds. Hospital for Sick Children, Toronto, ON.
17. **Boyd, J. G.** (2010). Predictors of neurological recovery following cardiac arrest for patients treated with therapeutic hypothermia. Clinical Neurosciences Grand Rounds, London, ON.
18. **Boyd, J. G.** (2009). New onset refractory status epilepticus: case report and review of the literature. Neurology and Critical Care Grand Rounds. Montreal Neurological Institute, Montreal QC.
19. **Boyd, J. G.** (2009). Akinetic rigid syndromes: clinical and pathological correlations. Queen's Clinical Neurosciences Grand Rounds, Kingston, ON.
20. **Boyd, J. G.** (2009). Neurology-Nuggets: Epilepsy. Queen's Family Medicine Residency Program Academic Session. Kingston, ON.
21. **Boyd, J. G.** (2009). Interventional strategies to treat acute stroke. Regional stroke education day. Kingston, ON.
22. **Boyd, J. G.** (2009). New onset refractory status epilepticus: case report and review of the literature. Intensive Care Grand Rounds, Queen's University, Kingston, ON.
23. **Boyd, J. G.** (2008). The manifestations of varicella zoster infection in the nervous system. Neurosciences Grand Rounds, Queen's University, Kingston, ON
24. **Boyd, J.G.** (2007). Olfactory ensheathing cells in human spinal cord injury: from rats, to humans, and back again. Neurosciences Grand Rounds, Queen's University, Kingston, ON.
25. **Boyd, J. G.** (2005). Are olfactory ensheathing cells a viable therapy for repair following spinal cord injury? *Combined Neurology and Neurosurgery Rounds*, Vancouver General Hospital, Vancouver, BC.
26. **Boyd, J. G.** (2005). The role of olfactory ensheathing cells and Schwann cells in the remyelination of axons following spinal cord injury. *International Collaboration on Repair Discoveries*. University of British Columbia, Vancouver, BC.
27. **Boyd, J. G.** (2005). Defining the role of olfactory ensheathing cells in promoting axon regeneration and remyelination after spinal cord injury. *University of Alberta Centre for Neuroscience Seminar Series*, Edmonton, AB.
28. **Boyd, J. G.** (2005). Olfactory ensheathing cells: What are they, and what do they do in the damaged spinal cord? *Clinical Neurosciences Rounds*, University of Western Ontario, London, ON.
29. **Boyd, J. G.** (2004). Are growth factors a viable therapy for axon regeneration following peripheral nerve injury?

Neuroscience Rounds, Dept. of Neurology, Queen's University.

30. **Boyd J. G.**, Lee, J. Skihar, V., Doucette, R., and Kawaja, M. (2002). Intraspinal grafting of olfactory ensheathing cells promotes robust axon regeneration following compressive spinal cord injury in adult rats. *The 20th Annual National Neurotrauma Society Symposium & The Sixth International Neurotrauma Symposium*, Tampa Bay, FL, USA.
31. **Boyd, J. G.** (Oct., 2001). Peripheral nerve injury: Can we use neurotrophic factors to promote axonal regeneration and functional recovery? *Queen's University Centre for Neuroscience Studies Seminar Series.*
32. **Boyd, J. G.** (Oct., 2001). The role of neurotrophic factors in motor axonal regeneration. Queen's University Department of Anatomy and Cell Biology Seminar Series, Queen's University, Kingston, ON.
33. **Boyd, J. G.** (June, 2001). The role of neurotrophic factors and their receptors in motor axonal regeneration. *University Centre for Neuroscience Seminar Series*, University of Alberta, Edmonton, AB.
34. **Boyd, J.G.**, Posse de Chaves, E.I.P., and Gordon, T. (2000). *In vivo* evidence that high dose brain derived neurotrophic factor (BDNF) binding to p75 receptors inhibits motor axonal regeneration: a ceramide-dependent mechanism. *NGF 2000: Nerve growth factor and related molecules*. Montreal, QC. May, 2000.