

# Curriculum Vitae

## Robert G. Kowalski, MD, PhD

Assistant Professor, Department of Neurosurgery  
Clinical Instructor, Department of Neurology  
University of Colorado School of Medicine  
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Deputy Managing Editor, *Annals of Neurology*  
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Medford, MA 02155

### EDUCATION

#### Medill School of Journalism Northwestern University

Evanston, IL  
Journalism major (BSJ, June 1983)  
Political science minor

#### Columbia University

Postbaccalaureate premedical program  
New York, NY  
(Completed premedical studies: May 2002)

#### Georgetown University

Graduate School  
Washington, D.C.  
Special Master's Program in Physiology and Biophysics  
(MS, Physiology, August 2005)

#### School of Medicine National University of Ireland

University College Cork  
Cork, Ireland  
(MD [MB, BCh, BAO], June 2009)

#### University of Colorado Anschutz Medical Campus

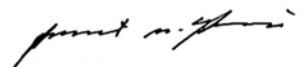
Clinical Science PhD Program  
(PhD, Clinical Investigation, August 2024)

### POST-GRADUATE MEDICAL EDUCATION AND TRAINING

#### Johns Hopkins University School of Medicine

Johns Hopkins Hospital  
Johns Hopkins Bayview Medical Center  
Baltimore, MD

- Elective Rotation: Neurological Intensive Care, July 28 - Aug. 22, 2008
- Clinical Rotation (sub-internship): Neurology, July 4 – July 31, 2011



October 2, 2024

Robert G. Kowalski, MD, MS

## POST-GRADUATE MEDICAL EDUCATION AND TRAINING (CONTINUED)

### Harbor Hospital

Baltimore, MD  
Internal Medicine Internship  
July 2012 to June 2013

### Yale University School of Medicine

New Haven, CT  
Neurology Residency  
July 2013 to June 2014

## PROFESSIONAL EXPERIENCE

**December 2021 to present:** Deputy Managing Editor, Annals of Neurology, Medford MA.

**April 2021 to present:** Research Instructor, University of Colorado School of Medicine, Department of Neurosurgery, Aurora, CO.

**April 2019 to present:** Clinical Instructor, University of Colorado School of Medicine, Department of Neurology, Aurora, CO.

**March 2020 to March 2021:** Clinical Protocol Development Specialist, Office of Vice Chancellor for Research; University of Colorado, Anschutz Medical Campus, Aurora CO.

**October 2018 to March 2020:** Director of Clinical Research, Assistant Scientist, Henry Ford Hospital, Department of Neurology, Detroit, MI.

**October 2017 to October 2018:** Research Instructor, University of Colorado School of Medicine, Department of Neurology, Aurora, CO.

**May 2016 to October 2017:** Assistant Clinical Professor, University of Colorado School of Medicine, Department of Neurology, Aurora, CO.

**February 2016 to October 2017:** Assistant Clinical Professor, University of Colorado School of Medicine, Department of Physical Medicine and Rehabilitation, Aurora, CO.

**January 2015 to October 2017:** Principal Research Investigator, Craig Hospital, Englewood, CO. Led and participated in multiple clinical studies and trials involving patients with traumatic brain injury and spinal cord injuries.

**July 2013 to June 2014:** Neurology Resident, Yale University School of Medicine, Yale-New Haven Hospital, New Haven, CT.

**July 2012 to June 2013:** Preliminary Internal Medicine Resident (Intern), Harbor Hospital, Baltimore, MD.

**January 2010 to June 2012:** Senior Research Program Coordinator, Neurosciences Critical Care Division, Johns Hopkins Hospital, Johns Hopkins University School of Medicine, Baltimore, MD. Led and participated in study design, IRB application, subject enrollment, data analysis and manuscript preparation on numerous clinical trials and studies involving patients treated for severe brain injuries in two neurointensive care units.

**October 2003 to May 2004, and October 2005 to April 2008:** Teaching assistant (demonstrator), National University of Ireland, University College Cork, Departments of Biochemistry, Physiology, and Epidemiology; Cork, Ireland. Lectured, graded and guided biochemistry, molecular biology and physiology experiments, and medical statistics, for medical, dental and science students.

**May 2001 to September 2003:** Staff research assistant/coordinator, Division of Critical Care Neurology, Columbia University Medical Center, New York, NY. Participated in various treatment and observational clinical trials in the hospital's Neurological Intensive Care Unit. Lead research staff member on a trial of a novel cooling device for acetaminophen-refractory febrile patients.

**November 2002 to September 2003:** Administrative Director, Neurocritical Care Society, New York, NY. Helped establish and run a new international society devoted to improving hospital critical care treatment of patients with severe brain injuries.

**September 2002 to June 2003:** Teaching assistant, Columbia University, Department of Biology, Contemporary Biology Laboratory. Lectured, graded reports, guided experiments for premedical students.

**January 2001 to June 2002:** Volunteer research associate, Department of Emergency Medicine, Lincoln Medical and Mental Health Center, Bronx, New York. Participated in clinical studies at the third-busiest emergency department in the U.S.

**September 1999 to April 2001:** Investigative reporter, TheStreet.com online financial news publication, New York, NY. Covered the Securities and Exchange Commission, the New York Stock Exchange and Nasdaq stock market.

**October 1997 to August 1999:** Correspondent, The Anchorage Daily News, state capital bureau, Juneau, Alaska. Covered the state capital and Southeast Alaska. Wrote on subjects including oil industry, salmon fishing and Alaska Native issues.

**November 1993 to October 1997:** Investigative reporter, The Denver Post. Covered wildfire catastrophe on Storm King Mountain, construction and financing of a new Denver airport, and a controversy involving hundreds of skull surgeries for "craniosynostosis" on babies at Denver's Children's Hospital.

**November 1992 to November 1993:** Leave of absence from The Denver Post, to work on writing project in Berkeley, Calif.

**August 1989 to November 1992:** Washington, D.C. correspondent, The Denver Post. Covered Colorado issues in Congress and at the White House. Also covered and completed investigations on a housing scandal at HUD, the savings and loan collapse and the demise of Silverado Banking Savings and Loan and President George H.W. Bush's son Neil. Covered the 1992 Democratic National Convention.

**March 1986 to August 1989:** City hall and aviation reporter, The Denver Post. Covered planning and construction of \$5 billion new airport. Covered crashes of Continental Airlines Flight 1713 in Denver and United Airlines Flight 232 in Iowa.

**June 1983 to March 1986:** Reporter, The Fort Lauderdale News/Sun-Sentinel. Covered Boca Raton city hall, Palm Beach County government, politics, and the Florida state legislature in its spring session.

**1982 to 1986:** Stringer (freelance writer), The New York Times. Wrote stories covering a variety of issues in Chicago, Florida and Colorado.

**Fall, 1981:** Intern reporter and copy editor, The Miami Herald.

## **PRIZES**

### **Journalism:**

Nominated by The Denver Post for the Pulitzer Prize in 1995, 1996 and 1997 for stories on the Storm King Mountain wildfire in Glenwood Springs, Colo., the “epidemic” of craniosynostosis skull surgeries in Denver, and dishonesty and fabrication in wildlife and nature filming and photography. Numerous state journalism awards.

### **Medical research:**

**Best of AHA Poster**, Ultra-early Activation of neuroinflammatory Cascade Following Acute Stroke: Plasma and Extracellular Vesicle Biomarkers from a Mobile Stroke Unit. Selected for presentation at AHA Scientific Sessions, Nov. 12, 2023, Philadelphia, PA.

**Top poster**, “Intraventricular Hemorrhage on Early CT Predicts Poorer Short- and Long-term Outcome in Moderate to Severe Traumatic Brain Injury”. University of Colorado Annual Research Forum. February 4, 2016.

**First Prize**, oral presentation. “Acute recovery of consciousness in comatose patients: Impact of reversal of lateral brain displacement and radiologic herniation.” American College of Physicians, Maryland Region Annual Associates Meeting. May 16, 2013, Baltimore, MD.

**Silver medal**, poster presentation. “Acute recovery of consciousness in comatose patients: Impact of reversal of lateral brain displacement and radiologic herniation.” Anesthesia Critical Care Medicine Research Day, Johns Hopkins University School of Medicine, Dec. 7, 2011, Baltimore, MD.

**First Prize**, Watts Poster competition. “Comparison of Cerebral Entropy Monitoring with Electroencephalography in Assessing Depth of Anaesthesia and Sleep Activity.” Awarded by Health Research Board of Ireland, Dec. 7, 2006, Dublin, Ireland.

**Finalist**, Watts Medal platform competition. “Comparison of Cerebral Entropy Monitoring with Electroencephalography in Assessing Depth of Anaesthesia and Sleep Activity.” Awarded by Health Research Board of Ireland, Dec. 7, 2006, Dublin, Ireland.

## **MEDICAL PUBLICATION AND INSTITUTIONAL ACTIVITY**

**Editorial Board Member**, *Frontiers in Neurology*, 2021 to present.

**Review Editor**, Neurocritical and Neurohospitalist Care, *Frontiers in Neurology*, 2021 to present.

**Section Editor**, “Blood-Based Biomarkers in Acute Ischemic Stroke and Hemorrhagic Stroke”, *Frontiers in Neurology*, 2020 to present.

**Editor in Chief**, *Mobile Stroke Unit News*, official news magazine of PRE-hospital Stroke Treatment Organization (PRESTO), 2018 to present.

**Editorial Board Member**, *Currents*, newsletter, Neurocritical Care Society, 2006 to 2016.

## Ad hoc Reviewer

*Journal of Neurology, Neurosurgery and Psychiatry*, 2018 to present  
*Canadian Journal of Neurological Sciences*, 2017 to present.  
*Neurocritical Care*, 2018 to present.  
*Journal of Neurological Surgery*, 2018 to present.  
*Journal of Head Trauma Rehabilitation*, 2019 to present.  
*Scientific Reports*, 2021 to present.  
*PLOS One*, 2023 to present.  
*Journal of the American Heart Association*, 2024 to present

**Member**, Colorado Multiple Institutional Review Board (University of Colorado IRB), 2017 to 2018, 2020 to present.

**Vice Chair**, Henry Ford Hospital Institutional Review Board, 2019-2020.

**Member**, Scientific Advisory & Review Committee (SARC), Colorado Clinical and Translational Sciences Institute, 2017 to 2018.

**Member**, Project Coordinating Committee, Epilepsy Bioinformatics Study for Antiepileptogenic Therapy (EpiBioS4Rx), 2016 to 2017.

**Founding Member**, PRE-hospital Stroke Treatment Organization (PRESTO), 2018 to present.

**Member**, International Brain Injury Association, 2016-2017.

**Member**, American Heart Association/American Stroke Association, 2017 to present.

**Member**, Clinical Trials Committee, Neurocritical Care Society, 2012 to 2014.

**Founding member**, Neurocritical Care Society, 2004 to present.

## RESEARCH GRANT SUPPORT

### Active Research

American Heart Association (24TPA1293938) Kowalski (PI) 7/01/2024-06/30/2027  
Transformational Project Award. The award supports work on a study entitled: "Evaluation of ultra-early interleukin-6 levels in acute stroke to estimate stroke onset timing." The study enrolls patient treated on a Mobile Stroke Unit at the University of Colorado and evaluates IL-6 in real time with a point-of-care device developed by an industry collaborator.  
Grant amount: \$300,000  
Role: Principal Investigator

NIH/NINDS (LRP, #2674-12) Kowalski (PI) 07/01/2024-06/30/2025  
NIH Loan Repayment Program (LRP) award, renewal, through the National Institute of Neurological Disorders and Stroke (NINDS). The award supports work on a study entitled: "Ultra-early cellular, molecular and neuroinflammatory biomarkers in acute ischemic stroke." The study enrolls patient treated on a Mobile Stroke Unit at the University of Colorado and evaluates blood-based biomarkers of acute stroke. The grant is renewable after one year.  
Grant amount: \$69,500  
Role: Principal Investigator

University of Colorado SOM Kowalski (PI) 7/01/2023-06/30/2026  
Chancellor's Discovery and Innovation Award, through the University of Colorado School of Medicine, Anschutz Medical Campus. The award supports work on a study entitled: "Evaluation of ultra-early interleukin-6 levels in acute stroke to estimate stroke onset timing." The study enrolls patient treated on a Mobile Stroke Unit at the University of Colorado and evaluates IL-6 in real time with a point-of-care device developed by an industry collaborator.  
Grant amount: \$150,000  
Role: Principal Investigator

Bluejay Diagnostics, Inc. Kowalski (PI) 7/01/2023-06/30/2026  
The award supports work on a study entitled: "Evaluation of ultra-early interleukin-6 levels in acute stroke to estimate stroke onset timing." The study enrolls patient treated on a Mobile Stroke Unit at the University of Colorado and evaluates IL-6 in real time with a point-of-care device developed by Bluejay Diagnostics, Acton MA.  
Grant amount: \$113,000  
Role: Principal Investigator

### **Completed Research**

NIH/NINDS (LRP, #2674-12) Kowalski (PI) 07/01/2021-06/30/2023  
NIH Loan Repayment Program (LRP) award, through the National Institute of Neurological Disorders and Stroke (NINDS). The award supports work on a study entitled: "Ultra-early cellular, molecular and neuroinflammatory biomarkers in acute ischemic stroke." The study enrolls patient treated on a Mobile Stroke Unit at the University of Colorado and evaluates blood-based biomarkers of acute stroke. The grant is renewable after two years.  
Grant amount: \$139,000  
Role: Principal Investigator

MaxQ Artificial Intelligence Kowalski (PI) 10/01/2018-04/01/2020  
Retrospective Collection of Non-Contrast Head CT images for Clinical Evaluation of MaxQ-AI Accipio Family Software study.  
The goal of this project is to utilize neuroimaging software that incorporates artificial intelligence to rapidly and accurately identify intracranial hemorrhage on non-contrast head CT. Potential applications include hyperacute settings where rapid CT evaluation is critical, and emergency medicine facilities that lack on-call neurological and/or neuroradiological staffing.  
Grant amount: \$96,200  
Role: Principal Investigator

Colorado Department of Human Services Kowalski (PI) 07/01/2017-06/30/2019  
Role and Neuroanatomic Basis of Concurrent Medical Conditions in Outcome Following Moderate to Severe Traumatic Brain Injury: Development of a TBI-specific Index.  
The goal of this project is to utilize neuroimaging and data on co-occurring medical conditions to assess the impact of these conditions on outcome in traumatic brain injury. The study was designed to incorporate a novel system for assessing the acuity of concurrent medical conditions to develop a TBI-specific index for use in brain injury research.  
Grant amount: \$348,000  
Role: Principal Investigator

Craig Hospital Kowalski (PI) 04/12/2017-present  
Identification of Central Nervous System Anatomic Predictors of Outcome in Traumatic Brain Injury and Spinal Cord Injury Utilizing Longitudinal Neuroimaging and Plasma Protein Biomarkers.  
The goal of this study is to evaluate plasma biomarkers, and brain and spinal cord imaging data at multiple time points, to assess associations between central nervous system (CNS) anatomic characteristics and outcome in patients with moderate to severe traumatic brain injury (TBI) and spinal cord injury (SCI).  
Grant amount: \$23,000  
Role: Principal Investigator

Craig Hospital Weintraub (PI) 01/2014 - present  
Post traumatic hydrocephalus: clinical characteristics and rehabilitation outcomes. The goal of this study is to evaluate outcome of patients with traumatic brain injury and post TBI hydrocephalus compared with matched TBI patients with no hydrocephalus.  
Grant amount: \$12,000  
Role: Co-Investigator

Craig Hospital Kowalski (PI) 03/08/2017-10/11/2017  
Evaluation of a High-Definition Wearable Display Device for Enhancement of Peripheral Vision in Patients with Visual Field Deficits: The Craig Hospital Visual Field Enhancement Device (VFED) study.  
The goal of this study is to evaluate a novel, proprietary device to augment peripheral vision in survivors of traumatic brain injury or stroke who have visual field deficits.  
Grant amount: \$20,000  
Role: Principal Investigator

Colorado Neurological Institute Kowalski (PI) 08/01/2015-07/31/2016  
Neuroanatomic Predictors of Longer-term Outcome in Traumatic Brain Injury: Craig Hospital Longitudinal Neuroimaging Study. The goal of this study is to evaluate neuroanatomic changes in brain imaging at several time points after traumatic brain injury for association or predictive effect on patient outcome.  
Grant amount: \$3,800  
Role: Principal Investigator

Johns Hopkins University School of Medicine Geocadin (PI) 01/2010 - 2015  
Prospective study of acute coma in patients treated in a designated Neuroscience Critical Care Unit. The goal of this study is to evaluate factors effecting outcome in patients with severe brain injuries who are comatose at the time of Neurologic ICU admission or become comatose during their ICU course.  
Grant amount: Salary support  
Role: Co-Investigator

Health Research Board of Ireland Kowalski (Investigator) 05/29/2006  
Comparison of Cerebral Entropy Monitoring with Electroencephalography in Assessing Depth of Anaesthesia and Sleep Activity.  
The study evaluated Entropy device monitoring and conventional electroencephalography (EEG) as measures of anaesthesia during surgery, and post procedure sleep.  
Grant amount: \$2,600  
Role: Investigator

## MEDICAL RESEARCH AND PUBLICATIONS

### RESEARCH:

**May 2017 to present:** Principal investigator, *University of Colorado Mobile Stroke Unit Study. Outcomes and first-year experience (COMIRB #17-0762); Evaluation of ultra-early biomarkers in acute ischemic stroke (COMIRB #20-1088)*. Proposed, designed, drafted IRB application, for study of first-year experience with the Mobile Stroke Unit at the University of Colorado Hospital (UCH). The study team includes Neurology, Neurointensive Care and Neuroradiology faculty, and research staff.

**February 2019 to March 2020:** Principal Investigator, *Outcomes after Acute Central Retinal Artery Occlusion*. Observational study of outcomes in CRAO over 9 years. Collaboration between Henry Ford Hospital, Vanderbilt University and Brown University.

**October 2018 to March 2020:** Principal investigator, *Retrospective Collection of Non-Contrast Head CT images for Clinical Evaluation of MaxQ-AI Accipio Family Software study*. Leading project at Henry Ford Hospital to utilize neuroimaging software that incorporates artificial intelligence to rapidly and accurately identify intracranial hemorrhage on non-contrast head CT.

**June 2015 to October 2018:** Principal investigator, *University of Colorado Status Epilepticus Outcomes Study*. Proposed, designed, drafted IRB application, for multi-year, multi-center study of treatment and outcome in all patients admitted with status epilepticus to the University of Colorado Hospital and two affiliated Denver hospitals. The study team includes Neurology, Epilepsy, Neurointensive Care and Emergency Medicine faculty, fellows and residents.

**July 2015 to 2018:** Lead investigator, *Role of concurrent medical conditions in outcome following traumatic brain injury*. Interagency Agreement, Centers for Disease Control, National Institute on Disability, Independent Living, and Rehabilitation Research, TBI Model Systems, Craig Hospital. Led research project to assess the role of sequelae, treatment complications and pre-existing medical conditions in outcome following TBI.

**August 2015 to 2017:** Principal investigator, *Neuroanatomic Predictors of Longer-term Outcome in Traumatic Brain Injury: Craig Hospital Longitudinal Neuroimaging Study*. The study utilized brain imaging (CT, MRI) data acquired at multiple time points to assess associations between neuroanatomic characteristics and longer-term outcome in patients with moderate to severe traumatic brain injury (TBI) at the Craig Hospital, Englewood, CO.

**January 2010 to June 2012:** Co-investigator – Multi-year prospective study of Coma in the Neurosciences Critical Care Unit, Johns Hopkins Hospital, Baltimore, MD. Led design, IRB application, startup, data gathering and preliminary data analysis for a prospective study of comatose patients in 22-bed neurointensive care unit on the hospital's main campus.

**January 2010 to June 2012:** Co-investigator – Retrospective study of status epilepticus management, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center. Study of therapeutic regimens, EEG monitoring, ventilation and outcome in status epilepticus patients.

**June 2010 to June 2012:** Co-investigator – Dysautonomia in Traumatic Brain Injury. Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center. An assessment of effectiveness of common therapies for dysautonomia (propranolol, clonidine, bromocriptine) at reducing the duration and frequency of dysautonomic events.

**July 2006 to June 2009:** Co-researcher – clinical trial of electroencephalography to validate Spectral Entropy and SE/RE indices as markers of postoperative cerebral function following arthroplasty, and depth of sedation during pre-operative propofol anesthesia induction. Applied and monitored EEG and Entropy™ recording devices, gathered and analyzed data, participated in preparation of journal articles and abstracts. Cork University Hospital, National University of Ireland, Cork, Ireland.



**July 2001 to September 2003:** Clinical research coordinator - pilot study and randomized clinical trial of a novel cooling device to induce and maintain normothermia in acetaminophen-refractory febrile patients in the Neurological Intensive Care Unit, Columbia University Medical Center, New York, NY. Enrolled patients, applied cooling equipment, trained nursing staff, gathered and analyzed data and wrote and co-wrote associated journal articles and abstracts.

**May 2001 to September 2003:** Staff research assistant - Subarachnoid Hemorrhage Outcomes Project, Neuro-ICU, Columbia University Medical Center, New York. An ongoing study, of patients admitted to the neuro-intensive care unit for treatment for SAH. Assisted in preparation of IRB, data collection and analysis of SAH research findings.

**May 2002 to September 2003:** Staff research assistant – multi-center clinical trial of the tissue factor activating drug NovoSeven (recombinant factor VIIa) to control early hematoma growth in patients with intracerebral hemorrhage, Neuro-ICU, Columbia University Medical Center, New York. Responsible for collection and processing of patient blood samples before, during and after administration of the drug. The double-blind, randomized, placebo-controlled study was a phase IIA safety and feasibility trial involving 20-25 centers in the United States, Europe and Australia.

**January 2002 to September 2003:** Staff research assistant – Intraventricular Hemorrhage Thrombolysis Trial, Neuro-ICU, Columbia University Medical Center, New York. A multi-center clinical trial of the use of recombinant tissue plasminogen activator (r-tPA) to dissolve clotted blood from ventricular catheters, and assist in evacuation of blood from patient ventricular spaces. Assisted in collection of cerebral spinal fluid and blood samples and processed the fluids before, during and after administration of r-tPA to patients.

**April 2001 to December 2001:** Volunteer research associate, Genetics of Asthma in Latino Americans (GALA) and Molecular Determinants of Asthma Severity (MODAS) studies at Lincoln Medical Center, Bronx, New York. Interviewed (in English and Spanish) and enrolled patients from the adult and pediatric asthma units at the Lincoln Hospital Emergency Department.

**October 2001 to February 2002:** Volunteer research associate, Children's Health Insurance Program (CHIP): Outreach through the Emergency Department, Lincoln Medical Center, Bronx, New York. Data was collected as part of a 20-center study coordinated Massachusetts General Hospital. Interviewed parents of pediatric patients at the Lincoln Hospital Emergency Department.

**January 2001:** Volunteer research associate - Asthma and chronic obstructive pulmonary disease (COPD) –a study of patients undergoing treatment for acute attack in the emergency department at Lincoln Medical Center, Bronx, New York. Helped interview all patients (in English and Spanish) treated during a one-week period at the hospital. Data was submitted as part of the Multicenter Airways Research Collaboration (MARC) centered at Massachusetts General Hospital.

## MEDICAL PUBLICATIONS:

### Papers

1. Snider SB, Temkin NR, Barber J, Edlow BL, Giacino JT, Hammond FM, Izzy S, **Kowalski RG**, Markowitz AJ, Rovito CA, Shih SL, Zafonte RD, Manley GT, Bodien YG; TRACK-TBI investigators. Predicting Functional Dependency in Patients with Disorders of Consciousness: A TBI-Model Systems and TRACK-TBI Study. *Ann Neurol*. 2023 Dec;94(6):1008-1023. doi: 10.1002/ana.26741. Epub 2023 Oct 5. PMID: 37470289.
2. **Kowalski RG**, Ledreux A, Violette JE, Neumann RT, Ornelas D, Yu X, Griffiths SG, Lewis S, Nash P, Monte AA, Coughlan CM, Deighan C, Grotta JC, Jones WJ, Graner MW. Rapid Activation of Neuroinflammation in Stroke: Plasma and Extracellular Vesicles Obtained on a Mobile Stroke Unit. *Stroke*. 2023 Mar;54(3):e52-e57. doi: 10.1161/STROKEAHA.122.041422. Epub 2023 Feb 2. PMID: 36727508.
3. Zhou W, Lovasz D, Zizzo Z, He Q, Coughlan C, **Kowalski RG**, Kennedy PGE, Graner AN, Lillehei KO, Ormond DR, Youssef AS, Graner MW, Yu X. Phenotype and Neuronal Cytotoxic Function of Glioblastoma Extracellular Vesicles. *Biomedicines*. 2022 Oct 27;10(11):2718. doi: 10.3390/biomedicines10112718. PMID: 36359238; PMCID: PMC9688005.
4. Snider SB, **Kowalski RG**, Hammond FM, Izzy S, Shih SL, Rovito C, Edlow BL, Zafonte RD, Giacino JT, Bodien YG. Comparison of Common Outcome Measures for Assessing Independence in Patients Diagnosed with Disorders of Consciousness: A Traumatic Brain Injury Model Systems Study. *J Neurotrauma*. 2022 Sep;39(17-18):1222-1230. doi: 10.1089/neu.2022.0076. Epub 2022 Jun 20. PMID: 35531895; PMCID: PMC9422782.
5. Uphaus T, Audebert HJ, Graner MW, Tiedt S, **Kowalski RG**. Editorial: Blood-Based Biomarkers in Acute Ischemic Stroke and Hemorrhagic Stroke. *Frontiers in Neurology*. 2022;13.
6. Fringuello A, Tatman PD, Wroblewski T, Thompson JA, Yu X, Lillehei KO, **Kowalski RG**, Graner MW. Cytokine-Laden Extracellular Vesicles Predict Patient Prognosis after Cerebrovascular Accident. *International Journal of Molecular Sciences*. 2021; 22(15):7847. <https://doi.org/10.3390/ijms22157847>
7. **Kowalski RG**, Hammond FM, Weintraub AH, Nakase-Richardson R, Zafonte RD, Whyte J, Giacino JT. Recovery of Consciousness and Functional Outcome in Moderate and Severe Traumatic Brain Injury. *JAMA Neurol*. 2021 May 1;78(5):548-557. doi: 10.1001/jamaneurol.2021.0084.
8. Viarasilpa T, Panyavachiraporn N, Osman G, **Kowalski RG**, Miller J, Barkley GL, Mayer SA. Differentiation of psychogenic nonepileptic attacks from status epilepticus among patients intubated for convulsive activity. *Epilepsy Behav*. 2021 Feb;115:107679. doi: 10.1016/j.yebeh.2020.107679. Epub 2020 Dec 23.
9. Thompson S, Hays K, Weintraub A, Ketchum JM, **Kowalski RG**. Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury: A Pilot Study *J Music Ther*. 2020 Oct 23;thaa016. doi: 10.1093/jmt/thaa016.

10. MacGrory B, Nackenoff A, Poli S, Spitzer MS, Nedelmann M, Guillon B, Preterre C, Chen CS, Lee AW, Yaghi S, Stretz C, Azher I, Paddock J, Bakaeva T, Greer DM, Shulman JG, **Kowalski RG**, Lavin P, Mistry E, Espaillat K, Furie K, Kirshner H, Schrag M. Intravenous Fibrinolysis for Central Retinal Artery Occlusion: A Cohort Study and Updated Patient-Level Meta-Analysis. *Stroke*. 2020 Jul;51(7):2018-2025.
11. Viarasilpa T, Panyavachiraporn N, Marashi SM, Van Harn M, **Kowalski RG**, Mayer SA. Prediction of Symptomatic Venous Thromboembolism in Critically Ill Patients: The ICU-Venous Thromboembolism Score. *Crit Care Med*. 2020 Jun;48(6):e470-e479.
12. Pretz C, **Kowalski RG**, Cuthbert JP, Whiteneck GG, Miller AC, Ketchum JM, Dams-O'Connor K. Return to Productivity Projections for Individuals With Moderate to Severe TBI Following Inpatient Rehabilitation: A NIDILRR TBIMS and CDC Interagency Collaboration. *J Head Trauma Rehabil*. 2020 Mar/Apr;35(2):140-151.
13. Schimpf B, Deanda K, Severenuk DA, Montgomery TM, Cooley GD, **Kowalski RG**, Vela-Duarte D, Jones WJ. Integration of Real-Time Electronic Health Records and Wireless Technology in a Mobile Stroke Unit. *J Stroke Cerebrovasc Dis*. 2019 Sep;28(9):2530-2536.
14. Viarasilpa T, Panyavachiraporn N, Jordan J, Marashi SM, van Harn M, Akioyamen NO, **Kowalski RG**, Mayer SA. Venous Thromboembolism in Neurocritical Care Patients. *J Intensive Care Med*. 2019 May 7.
15. Dams-O'Connor K, Ketchum JM, Cuthbert JP, Corrigan JD, Hammond FM, Haarbauer-Krupa J, **Kowalski RG**, Miller AC. Functional Outcome Trajectories Following Inpatient Rehabilitation for TBI in the United States: A NIDILRR TBIMS and CDC Interagency Collaboration. *J Head Trauma Rehabil*. 2019 Apr 25.
16. Brown AW, Pretz CR, Bell KR, Hammond FM, Arciniegas DB, Bodien YG, Dams-O'Connor K, Giacino JT, Hart T, Johnson-Greene D, **Kowalski RG**, Walker WC, Weintraub A, Zafonte R. Predictive utility of an adapted Marshall head CT classification scheme after traumatic brain injury. *Brain Inj*. 2019 Jan 19:1-8.
17. Nyberg EM, Cox JR, **Kowalski RG**, Duarte DV, Schimpf B, Jones WJ. Mobile Stroke Unit Reduces Time to Image Acquisition and Reporting. *AJNR Am J Neuroradiol*. 2018 Jul;39(7):1293-1295.
18. **Kowalski RG**, Weintraub AH, Rubin BA, Gerber DJ, Olsen AJ. Impact of timing of ventriculoperitoneal shunt placement on outcome in posttraumatic hydrocephalus. *J Neurosurg*. 2018 Feb 23:1-12.
19. **Kowalski RG**, Haarbauer-Krupa JK, Bell J, Corrigan JD, Hammond FM, Torbey MT, Hofmann MC, Dams-O'Connor K, Miller AC, Whiteneck GG. Acute Ischemic Stroke Following Moderate to Severe Traumatic Brain Injury: Incidence and Impact on Outcome. *Stroke*. 2017 Jul;48(7):1802-1809.
20. **Kowalski RG**, Buitrago MM, Duckworth J, Chonka ZD, Puttgen AH, Stevens RD, Geocadin RG. Neuroanatomical predictors of awakening in acutely comatose patients. *Ann Neurol*. 2015 Jan 27.
21. **Kowalski RG**, Ziai WC, Rees R, Kim G, Werner K, Goodwin H, Geocadin RG. Third-line antiepileptic therapy and outcome in status epilepticus: The impact of vasopressor use and prolonged mechanical ventilation. *Crit Care Med*. 2012 Sep;40(9):2677-84.

22. **Kowalski RG**, Claassen J, Kreiter KT, Bates JE, Ostapkovich ND, Connolly ES, Mayer SA. Initial misdiagnosis and outcome after subarachnoid hemorrhage. *JAMA*. 2004 Feb 18;291(7):866-9.
23. **Kowalski RG**, Chang T, Carhuapoma JR, Tamargo RJ, Naval NS. Withdrawal of Technological Life Support Following Subarachnoid Hemorrhage. *Neurocrit Care*. 2013 Oct 29.
24. Weintraub AH, Gerber DJ, **Kowalski RG**. Post-Traumatic Hydrocephalus as a Confounding Influence on Brain Injury Rehabilitation: Incidence, Clinical Characteristics and Outcomes. *Arch Phys Med Rehabil*. 2016 Sep 23. pii: S0003-9993(16)30984-4. doi: 10.1016/j.apmr.2016.08.478.
25. Charlifue S, Tate D, Biering-Sorensen F, Burns S, Chen Y-Y, Chun S, Jakeman LB, **Kowalski RG**, Noonan VK, Ullrich P. Advancing Knowledge on Spinal Cord Injury Research Through the Use of Comparable Databases. *Arch Phys Med Rehabil*. 2016 Oct;97(10):1805-18. doi: 10.1016/j.apmr.2016.03.030.
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## Symposia

Yelena G. Bodien, PhD; **Robert G. Kowalski, MD, MS**; Joseph T. Giacino, PhD; Samuel Snider, MD; Risa Nakase-Richardson, PhD. Disorders of Consciousness after Severe Brain Injury: Updates from the Traumatic Brain Injury Model Systems. Symposium, American Congress of Rehabilitation Medicine 2022 Conference, Nov. 9, 2022, Chicago IL.

**Robert G. Kowalski, MD, MS**; Zachary M Weill, PhD; Eric Schneider, PhD; Jennifer S. Albrecht, PhD; John D. Corrigan, PhD. TBI Increases Vulnerability to and Consequences of Ischemic Brain Damage. Symposium, 4th Federal Interagency Conference on Traumatic Brain Injury (FICTBI). June 11-13, 2018, Washington, D.C.

Risa Nakase-Richardson, PhD; **Robert G. Kowalski, MD, MS**; Flora Hammond, MD. Extending our Knowledge of Long-Term Outcome After Severe TBI: Three DOC TBI Model System Studies. Symposium, 4th Federal Interagency Conference on Traumatic Brain Injury (FICTBI). June 11-13, 2018, Washington, D.C.

## Grand Rounds Presentations

1. Assessing the Unknown in a Neurological Emergency: University of Colorado Status Epilepticus Outcomes Study. University of Colorado School of Medicine, Department of Neurosurgery, Nov. 8, 2016.
2. Evaluation of Exosome-Derived MicroRNA Sequences and Outcome in Status Epilepticus. University of Colorado School of Medicine, Department of Neurology, June 20, 2018.

## Abstracts: Platform Presentations

1. **Kowalski RG**, Ledreux A, Violette JE, Neumann RT, Grotta JC, Ornelas D, Thompson JA, Monte AA, Dylla L, Coughlan CM, Yu X, Graner MW, Jones WJ. Circulating Interleukin-6 Levels Early During Active Stroke Estimate Time of Stroke Onset: Potential New Clinical Biomarker Tool from a Mobile Stroke Unit. Oral presentation, International Stroke Conference 2024, February 2024, 2023, Phoenix, AZ.
2. **Kowalski RG**, Ledreux A, Violette JE, Neumann RT, Grotta JC, Ornelas D, Yu X, Griffiths SG, Lewis S, Nash P, Monte AA, Coughlan CM, Deighan C, Jones WJ, Graner MW. Ultra-early Activation of Neuroinflammatory Cascade Following Acute Stroke: Plasma and Extracellular Vesicle Biomarkers from a Mobile Stroke Unit. Oral presentation, International Stroke Conference 2023, Feb. 8, 2023, Dallas, TX.
3. **Kowalski RG**, Haarbauer-Krupa JK, Bell J, Corrigan JD, Hammond FM, Torbey MT, Hofmann MC, Dams-O'Connor K, Miller AC, Whiteneck GG. Acute Ischemic Stroke Following Moderate to Severe Traumatic Brain Injury: Incidence and Impact on Outcome. Platform presentation, International Brain Injury Association, World Congress on Brain Injury. March 30, 2017, New Orleans, LA.
4. **Kowalski RG**, Haarbauer-Krupa JK, Bell J, Corrigan JD, Hammond FM, Torbey MT, Hofmann MC, Dams-O'Connor K, Miller AC, Whiteneck GG. Incidence of associated medical conditions and treatment complications, and impact on outcome following moderate to severe traumatic brain injury. Platform presentation, International Brain Injury Association, World Congress on Brain Injury. March 31, 2017, New Orleans, LA.

5. **Kowalski RG**, Haarbauer-Krupa JK, Bell J, Corrigan JD, Hammond FM, Torbey MT, Hofmann MC, Dams-O'Connor K, Miller AC, Whiteneck GG. Acute Ischemic Stroke Following Moderate to Severe Traumatic Brain Injury: Incidence and Impact on Outcome. Platform presentation, American Congress of Rehabilitation Medicine, annual conference, Nov. 2, 2016, Chicago, IL.
6. **Kowalski RG**, Weintraub A, Gerber D, Mellick D. Hydrocephalus predicts outcome following traumatic brain injury. Platform presentation, International Brain Injury Association, World Congress on Brain Injury. March 3, 2016, The Hague, Netherlands.
7. **Kowalski RG**, Weintraub A, Mellick D, Nakamura T, Gerber D, Harrison-Felix C. Intraventricular Hemorrhage On Early CT Predicts Poorer Short- and Long-term Outcome in Moderate to Severe Traumatic Brain Injury. Platform presentation, American Congress of Rehabilitation Medicine, annual conference, Oct. 28, 2015, Dallas TX.
8. **Kowalski RG**, Naval NS, Chang T, Caserta F, Carhuapoma JR, Tamargo RJ. The SAH score: An Outcome Prediction Model. Platform presentation, the American Academy of Neurology 2013 Annual Meeting. March 19, 2013, San Diego, CA.
9. **Kowalski RG**, Duckworth J, Puttgen AH, Stevens RD, Geocadin RG. Acute recovery of consciousness in comatose patients: Impact of reversal of lateral brain displacement and radiologic herniation. Platform presentation, American College of Physicians, Maryland Region Annual Associates Meeting. May 16, 2013, Baltimore, MD.

### **Abstracts: Poster Presentations**

1. **Kowalski RG**, Ledreux A, Violette JE, Neumann RT, Grotta JC, Ornelas D, Yu X, Griffiths SG, Lewis S, Nash P, Monte AA, Coughlan CM, Deighan C, Jones WJ, Graner MW. Ultra-early Activation of Neuroinflammatory Cascade Following Acute Stroke: Plasma and Extracellular Vesicle Biomarkers from a Mobile Stroke Unit. Invited Poster presentation, "Best of AHA Posters", AHA Scientific Sessions 2023, Nov. 12, 2023, Philadelphia, PA.
2. **Kowalski RG**, Schimpf B, Ornelas D, Poisson SN, Nyberg E, Carrera E, Bernard TJ, Kluger BM, Taylor MR, Sillau SH, Jones WJ. Seizures as Stroke Mimics in Ultra-Early Treatment on a Mobile Stroke Unit: A Pilot Study. Poster presentation, International Stroke Conference, February 2022, New Orleans, LA.
3. Mohamed G, Aboul Nour H, Ismail M, Marin H, **Kowalski R**, Malik S. Moyamoya Disease in African Americans: A Single-Center Experience. Poster presentation, American Academy of Neurology, Virtual Annual Meeting, April 2021.
4. **Kowalski RG**, Pospishil J, Leech JD, Jones WJ. Characteristics And Predictors Of Mimics And Confirmed Strokes In A Stroke Alerts System At A Large Urban Medical Center. Poster presentation, International Stroke Conference, March 2021, Denver, CO.
5. **Kowalski RG**, Schimpf B, Wilson D, Poisson SN, Nyberg E, Carrera E, Bernard TJ, Vela-Duarte D, Simpson JR, Kluger BM, Taylor MR, Sillau SH, Jones WJ. Significant Reduction in Prehospital Evaluation and Door-to-Treatment Times with a Mobile Stroke Unit. Poster presentation, International Stroke Conference, February 2019, Honolulu, HI.

6. **Kowalski RG**, Vela-Duarte D, Schimpf B, Poisson SN, Simpson JR, Jones WJ. Improved Response, Neurologic Evaluation, and Treatment Timing with a Mobile Stroke Unit in a Large Urban Population. Poster presentation, International Stroke Conference, January 2018, Los Angeles, CA.
7. Schimpf B, Deanda K, Severenuk DA, Montgomery TM, Cooley GD, **Kowalski RG**, Vela-Duarte D, Jones WJ. Integration of Real-time Electronic Health Records and Wireless Technology in a Mobile Stroke Treatment Unit. Poster presentation, International Stroke Conference, January 2018, Los Angeles, CA.
8. Nyberg E, **Kowalski RG**, Vela-Duarte D, Schimpf B, Jones WJ. New Generation Mobile Stroke Unit Brings CT into the Field Reducing Time to Diagnosis. Submitted, American Society of Neuroradiology 56th Annual Meeting, June 2-7, 2018, Vancouver, Canada.
9. **Kowalski RG**, Tamargo RJ, Nyquist P. Role of temperature and humidity in aneurysmal subarachnoid hemorrhage onset: A comparative analysis with patient risk factors. Accepted for poster presentation at Society of Critical Care Medicine 2016 annual meeting, Feb. 20-24, 2016, Orlando, FL.
10. **Kowalski RG**, Duckworth J, Puttgen AH, Stevens RD, Geocadin RG. Acute recovery of consciousness in comatose patients: Impact of reversal of lateral brain displacement and radiologic herniation. Invited for presentation, American College of Physicians, Annual Meeting. April 10-12, 2014, Orlando, FL.
11. **Kowalski RG**, Schneider EB, Tamargo RJ, Nyquist P. Risk of aSAH increases with temperature drops and colder temperatures even in hot weather. Presented in poster format at Society of Critical Care Medicine 2014 annual meeting, Jan. 9-13, 2014, San Francisco.
12. **Kowalski RG**, Schneider EB, Tamargo RJ, Hanff T, Nyquist P. A method for detecting increased risk of aSAH as a function of falling temperatures. Presented in poster format at the Neurocritical Care Society 2012 meeting, Oct. 4-7, 2012, Denver, CO.
13. **Kowalski RG**, Duckworth J, Puttgen AH, Stevens RD, Geocadin RG. Acute recovery of consciousness in comatose patients: Impact of reversal of lateral brain displacement and radiologic herniation. Presented in poster format at the Neurocritical Care Society 2011 meeting, Sept. 22-24, 2011, Montreal, Canada.
14. **Kowalski RG**, Ziai WC, Rees R, Kim G, Werner K, Goodwin H, Geocadin RG. Third-line antiepileptic therapy and outcome in status epilepticus: The impact of vasopressor use and prolonged mechanical ventilation. Presented in poster format at the Neurocritical Care Society 2011 meeting, Sept. 22-24, 2011, Montreal, Canada.
15. **Kowalski RG**, LeRoux PD, Mayer SA, Claassen J, Gupta R, Wu O, Giacino JT, Diaz Arrastia R, Stevens RD. Neurologic prognosis in comatose traumatic brain injury patients – a multidisciplinary survey: The Neuroimaging to Predict Coma Emergence and Recovery (NICER) study. Presented in poster format at the European Society of Intensive Care Medicine, October 1-5, 2011, Berlin, Germany.
16. **Kowalski RG**, Ziai WC, Kim G, Geocadin RG. Outcome Predictors in Status Epilepticus: Role of Third-Line Therapy and Seizure History. Presented in poster format at the 8<sup>th</sup> Annual Meeting of the Neurocritical Care Society, Sept. 16, 2010, San Francisco.



17. **Kowalski RG**, Kim G, Geocadin RG, Ziai WC. Therapeutic Management of Status Epilepticus: Eight-Year Experience at a Two-ED Academic Medical Center. Presented in poster format at the 8<sup>th</sup> Annual Meeting of the Neurocritical Care Society, Sept. 16, 2010, San Francisco.
18. **Kowalski RG**, Mahon P, Boylan G, McNamara B, Shorten GD. Validity of the Modified Observer's Assessment of Alertness/Sedation Scale (MOAA/S) during low dose propofol sedation. [abstract] *European Journal of Anaesthesia 2007(24) Suppl.* 39. Presented in poster format at 3<sup>rd</sup> Annual Meeting of the European Society of Anesthesiology, June 10, 2007, Munich, Germany.
19. **Kowalski RG**, Mahon P, Boylan GB, McNamara B, Fitzgerald AP, Lynch EM, Shorten, GD. Comparison of Cerebral Entropy Monitoring with Electroencephalography in Assessing Depth of Anaesthesia and Sleep Activity. Presented in poster and oral format at Annual Meeting of the Health Research Board of Ireland, Dec. 7, 2006, Dublin, Ireland.
20. **Kowalski RG**, Schmidt MJ, Claassen J, Ostapkovich ND, Kreiter KT, Presciutti M, Mayer SA Parra A, Badjatia N. Risk factors and clinical implications of shivering during induced normothermia in brain-injured patients. [abstract] Presented in poster format at 58<sup>th</sup> American Academy of Neurology Annual Meeting, April 5, 2006, San Diego.
21. **Kowalski RG**, Fitzsimmons B-F, Claassen J, Kreiter KT, Peery S, Ostapkovich N, Connolly ES, Mayer, SA. Fatigue in subarachnoid hemorrhage survivors: Predictors and impact on long-term outcome. [abstract] *Ann Neurology 2003;54*. Presented in poster format at 128<sup>th</sup> Annual Meeting of the American Neurological Association, October 17, 2003, San Francisco.
22. **Kowalski RG**, Claassen J, Kreiter KT, Mayer SA. Predictors of early recovery among poor-grade patients with subarachnoid hemorrhage. [abstract] *Ann Neurology 2002;52:21*. Presented in poster format at 127<sup>th</sup> Annual Meeting of the American Neurological Association, October 15, 2002, New York.
23. Li X, Dungan D, Olsen AJ, **Kowalski RG**. Corpus Callosum Damage in Traumatic Brain Injury: Incidence and Role in Short-term Outcome. Platform presentation, International Brain Injury Association, World Congress on Brain Injury. March 30, 2017, New Orleans, LA.
24. Weintraub A, Gerber D, **Kowalski RG**. Incidence and characteristics of post-traumatic hydrocephalus during inpatient rehabilitation. Presented in poster format, International Brain Injury Association, 11th World Congress on Brain Injury. March 2-5, 2016, The Hague, Netherlands.
25. Makley M, Weintraub AH, Biggs-Arnold J, Newman J, Phillipus A, **Kowalski RG**, Gerber DJ. Sleep Efficiency after Traumatic Brain Injury and Agitation Scores on an Inpatient Brain Injury Rehabilitation Unit. Presented in poster format, International Brain Injury Association, 11th World Congress on Brain Injury. March 2-5, 2016, The Hague, Netherlands.
26. Makley M, Weintraub AH, Biggs-Arnold J, Newman J, Phillipus A, **Kowalski RG**, Gerber DJ. The Practical Aspects of Monitoring Sleep in Patients with Moderate to Severe Traumatic Brain Injury [TBI] on an Inpatient Rehabilitation Unit. Presented in poster format, International Brain Injury Association, 11th World Congress on Brain Injury. March 2-5, 2016, The Hague, Netherlands.

27. Weintraub AH, Makley MJ, Olsen AJ, **Kowalski RG**. Cerebral Fat Emboli Syndrome: Clinical and Neuroimaging Characteristics and Outcomes. Presented in poster format, International Brain Injury Association, 11th world Congress on Brain Injury, The Hague, Netherlands, March 2-5, 2016.
28. Ripley D, Wierman M, Gerber D, **Kowalski RG**, Pretz C, Weintraub A. Testosterone replacement in hypogonadal men following Traumatic Brain Injury: Results from a double-blind, placebo controlled pilot study. Platform presentation, American Academy of Physical Medicine and Rehabilitation Annual Meeting, Oct. 1-4, 2015, Boston, MA.
29. Wierman M, Ripley D, Gerber D, **Kowalski RG**, Rothman M. Natural History of Neuroendocrine Dysfunction following Traumatic Brain Injury during Inpatient Rehabilitation. Presented in poster format, American Academy of Physical Medicine and Rehabilitation Annual Meeting, Oct. 1-4, 2015, Boston, MA.
30. Chang T, **Kowalski RG**, Carhuapoma JR, Tamargo RJ, Naval NS. Impact of 24/7 in-hospital NCCU coverage on aneurysmal subarachnoid hemorrhage outcomes. Presented in poster format, Neurocritical Care Society 2013 meeting, Oct. 1-4, 2013, Philadelphia, PA.
31. Rivera Lara L, Nair V, Morency C, Bhatia S, **Kowalski RG**, Puttgen AH, Geocadin RG. Does the ICP monitor truly reflect brain injury during clinical brain herniation? Revisiting the concept of compartmentalized intracranial pressure. Presented in poster format, Neurocritical Care Society 2013 meeting, Oct. 1-4, 2013, Philadelphia, PA.
32. Naval NS, Chang T, Caserta F, **Kowalski RG**, Carhuapoma JR, Tamargo RJ. Withdrawal of technological support following Subarachnoid Hemorrhage. Presented in poster format, 42<sup>nd</sup> Critical Care Congress, the Society of Critical Care Medicine, Jan 19-23, 2013, San Juan, Puerto Rico.
33. Naval NS, **Kowalski RG**, Chang T, Caserta F, Carhuapoma JR, Tamargo RJ. The SAH score: A prediction model. Presented in poster format at the 2013 International Stroke Conference, Feb. 6-8, 2013, Honolulu, HI.
34. Naval NS, Chang T, Caserta F, **Kowalski RG**, Carhuapoma JR, Tamargo RJ. Impact of Acute Cocaine use on Aneurysmal Subarachnoid Hemorrhage. Platform presentation, 2013 International Stroke Conference, Feb. 6-8, 2013, Honolulu, HI.
35. Kalanuria A, Fellerman D, **Kowalski RG**, Geocadin RG, Ziai WC. The Inappropriate Diagnosis And Treatment Of Ventilator-Associated Pneumonia is Common in Comatose Patients in Neurocritical Care Units. Presented in poster format at the Neurocritical Care Society 2012 meeting, Oct. 4-7, 2012, Denver, CO.
36. Schneider E, Duckworth J, **Kowalski RG**, Hambridge H, Stevens RD, Efron D. Predictors of Disability-free Recovery Following Moderate to Severe Traumatic Brain Injury. Presented in oral format at the International Brain Injury Association's Ninth World Congress on Brain Injury, March 21-25, 2012, Edinburgh, Scotland.
37. Geocadin RG, **Kowalski RG**, Duckworth J, Stevens RD, Puttgen AH. Withdrawal of life-sustaining therapies in the acutely comatose patients in the neurocritical care unit. Presented in poster format at the Neurocritical Care Society 2011 meeting, Sept. 22-24, 2011, Montreal, Canada.

38. Rao AS, Earley CJ, Patil, SP, **Kowalski RG**, Solomon D. Intracerebral pressure waves and sleep disordered breathing. Presented in poster format at the World Association of Sleep Medicine & Canadian Sleep Society Congress, Sept. 13, 2011, Montreal, Canada.
39. Hinson H, Duckworth J, **Kowalski RG**, Puttgen H, Ziai WC. Lesion Localization in Paroxysmal Sympathetic Hyperactivity. Accepted for presentation in poster format at the Society of Critical Care Medicine, 40th Critical Care Congress, Jan. 15-19, 2011, San Diego.
40. Puttgen H, **Kowalski RG**, Efron D, Geocadin R. Neuroanatomic Basis for Posturing Reflexes in Acute Head Trauma: Re-evaluating the Evidence. [abstract] *Neurocrit Care* (2009) 11:S197. Presented in poster format at 7<sup>th</sup> Annual Meeting of the Neurocritical Care Society, November 13, 2009, New Orleans.
41. Neligan A, Mullins G, Daly S, **Kowalski RG**, McNamara B. A Retrospective Audit of an EEG Questionnaire to elicit possible indicators of Seizure and Seizure type. Presented in poster format at 42nd Annual Meeting of the Irish Neurological Association, May 12, 2006, Galway, Ireland.
42. Neligan A, **Kowalski RG**, Renganthan R, Spencer J, Sweeney BJ. Management of hypertension as acute treatment and secondary prevention in stroke patients. Presented in poster format at Association of British Neurologists, Spring Scientific Meeting, April 20, 2006, Brighton, England.
43. Neligan A, O'Sullivan SS, McCarthy A, Kinsella J, **Kowalski RG**, McNamara B. A retrospective audit of nerve conduction studies in cases of suspected compression neuropathies of the upper limb. Presented at The British Society For Clinical Neurophysiology, Scientific Meeting, March 24, 2006, Bristol, England.
44. Wartenberg KE, Schmidt JM, Temes RE, Frontera JA, **Kowalski RG**, Ostapkovich N, Sheth SJ, Parra A, Connolly ES, Mayer SA. Medical complications after subarachnoid hemorrhage: Frequency and impact on outcome. [abstract] *Stroke* 36 (2): 521-521 Feb. 2005.
45. Mayer SA, **Kowalski RG**, Presciutti M, Ostapkovich N, McGann E, Fitzsimmons BF, Yavagal DY, Du E, Naidech AM, Janjua NA, Claassen J, Kreiter KT, Commichau C, Parra A. Clinical trial of a novel surface cooling system for fever control in critically ill stroke patients. [abstract] *Stroke* 35 (1): 339-339 Jan. 2004.
46. Naidech A, **Kowalski R**, Kreiter KT, Ostapkovich N, Fitzsimmons BF, Parra A, Connolly ES, Mayer SA, Commichau C. Higher hemoglobin is associated with neurologic independence after subarachnoid hemorrhage. [abstract] *Stroke* 35 (1): 251-251 Jan. 2004.
47. Naidech A, **Kowalski R**, Kreiter KT, Ostapkovich N, Parra A, Fitzsimmons BF, Connolly ES, Mayer SA, Commichau C. High-dose pressors may exacerbate subarachnoid hemorrhage-related heart failure. [abstract] *Stroke* 35 (1): 338-338 Jan. 2004.
48. Mayer SA, Kreiter KT, Huddleston D, Peery S, Fitzsimmons BF, Yavagal D, Ostapkovich N, Connolly ES, **Kowalski RG**. Fever after subarachnoid hemorrhage: Predictors and impact on outcome. [abstract] *Crit Care Med.* 31 (2): A5-A5 16 Suppl. S, Feb. 2003.

49. Naidech A, Janjua N, **Kowalski R**, Kreiter K, Ostapkovich N, Peery S, Fitzsimmons BF, Parra A, Connolly ES, Mayer S. Rebleeding after subarachnoid hemorrhage: A persistent problem. [abstract] *Stroke* 34 (1): 242-242 Jan. 2003.
50. Janjua N, Naidech A, Kreiter K, Mayer S, Fitzsimmons BF, **Kowalski R**, Parra A, Ostapkovich N, Connolly ES. Hyponatremia after subarachnoid hemorrhage: Modern fluid management. [abstract] *Stroke* 34 (1): 275-275 Jan. 2003.
51. Kreiter KT, Commichau C, **Kowalski RG**, Ostapkovich N, Huddleston D, Fitzsimmons BF, Parra A, Connolly ES, Mayer SA. Fever burden and cognitive outcome after subarachnoid hemorrhage. [abstract] *Neurology* 2003;60: A230.
52. Mayer SA, **Kowalski RG**, Ostapkovich ND, Fitzsimmons B-F, Yavagal DY: Normalization of Body Temperature in Febrile Neuro-ICU Patients with the Arctic Sun Temperature Management System. [abstract] *Neurology*, 58, April 2002 (Suppl 3).
53. Fitzsimmons B-F, **Kowalski RG**, Claasen J, Mayer SA: Early Infarction following Acute Subarachnoid Hemorrhage. [abstract] *Neurology*, 58, April 2002 (Suppl 3).

## EBOOK

**Kowalski, R. G.**, Graner, M., Uphaus, T., Tiedt, S., eds. (2022). Blood-Based Biomarkers in Acute Ischemic Stroke and Hemorrhagic Stroke. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88974-544-9

## PODCAST

Episode 58: Recovery of Consciousness and Functional Outcome in Moderate and Severe Traumatic Brain Injury. Neurocritical Care Society. [https://www.pathlms.com/ncs-ondemand/courses/1549/audio\\_presentations/207473#](https://www.pathlms.com/ncs-ondemand/courses/1549/audio_presentations/207473#)

## MEDIA

1. “Groundbreaking Stroke Study Seeks Ways to Keep Brain Cells Alive.” **University of Colorado, Anschutz Medical Campus News.** <https://news.cuanschutz.edu/news-stories/groundbreaking-stroke-study-seeks-ways-to-keep-brain-cells-alive>
2. “Sicknick death ruled 'natural' but experts say stress can set off strokes.” *CNN.* <https://www.cnn.com/2021/04/20/health/sicknick-death-natural-strokes/index.html>
3. “This test could predict if coma patients will wake up.” *The Week.* <http://theweek.com/speedreads/540092/test-could-predict-coma-patients-wake>
4. Author Interview: Robert G. Kowalski, MD, MS. “**Acute Ischemic Stroke After Moderate to Severe Traumatic Brain Injury: Incidence and Impact on Outcome.**” August 9th, 2017. *Stroke Online.* <http://journals.heart.org/blogginstroke/2017/08/09/author-interview-robert-g-kowalski-md-ms/>
5. **Most TBI Patients with Persistent Consciousness Problems Recover After Rehab.**” *Physician’s Weekly.* <https://www.physiciansweekly.com/most-tbi-patients-with-persistent-consciousness-problems-recover-after-rehab/>

6. **“Time to Rethink Prognosis After Prolonged Unconsciousness?”** *Medscape News*. <https://www.medscape.com/viewarticle/946867>
7. **“Traumatic Brain Injury Patients Recovered Consciousness, Functional Independence After Rehabilitation.”** *Neurology Today*. <https://journals.lww.com/neurotodayonline/blog/breakingnews/pages/post.aspx?PostID=1091>
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