

Group 1: Cerebral Blood Flow/Physiology

Abstract Number	Abstract Author	Abstract Title
1	Monica S. Vavilala, M.D.	Risk Factors for Intraoperative Hypotension During Emergent Decompressive Pediatric Craniotomy
2	Monica S. Vavilala, M.D.	Relationship Between Cerebral Autoregulation and Outcome in Children with Severe Traumatic Brain Injury
3	Monica S. Vavilala, M.D.	Return of Cerebral Autoregulation During the First Week Following Severe Pediatric Traumatic Brain Injury
4	Tomoki Hashimoto, M.D.	Hemodynamically-Induced Intracranial Aneurysms in Rats
5	William L. Young, M.D.	Matrix Metalloproteinase-9 Expression is Associated with Myeloperoxidase Level in Brain AVM
6	M. Sean Kincaid, M.D.	Autoregulation and CO ₂ Reactivity of Cerebral Blood Flow is Preserved Under Mild Hypothermia During General Anesthesia
7	Michael J. Souter, M.B., Ch.B., F.R.C.A.	The Radiographic Validity of Transcranial Doppler Cerebral Blood Flow Velocity Measurement
8	Ribal Darwish, M.D.	Evaluation of Indices Derived from Transcranial Doppler for Assessment of Cerebral Blood Flow in Patients With Cerebral Vasospasm
9	Withdrawn	Withdrawn
10	Achal S. Achrol, B.S.	TNF α -238G>A Promoter Polymorphism is Associated with Increased Risk of New Hemorrhage in the Natural Course of Patients With Brain Arteriovenous Malformations

Group 2: Cerebral Blood Flow/Pharmacology

Abstract Number	Abstract Author	Abstract Title
11	William M. Armstead, M.D., Ph.D.	Plasminogen Activators Contribute To Impairment Of Hypercapnic and Hypotensive Cerebrovasodilation After Cerebral Hypoxia/Ischemia
12	Patrick Meybohm, M.D.	Arginine Vasopressin is Superior to Norepinephrine in Resuscitation of Cerebral Blood Flow and Cerebral Oxygenation in a Model of Uncontrolled Hemorrhage Shock
13	Oak Za Chi, M.D.	Effects of VEGF and Nitric Oxide Synthase Inhibition on Blood-Brain Barrier Disruption in the Ischemic and Non-Ischemic Cerebral Cortex
14	Hailong Dong, M.D., Ph.D.	Cortical Acetylcholine Release and Electroencephalogram Activation Evoked by Orexins Through OX ₁ Receptor in the Basel Forebrain Under Isoflurane Anesthetized Rat
15	Michael J. Souter, M.B., Ch.B., F.R.C.A.	Nitric Oxide Activity and Cerebral Blood Flow Effects of Sodium Nitroprusside and Sodium Nitrite
16	Maolin Qiu, M.D., Ph.D.	Disturbed Coupling of rCBF, BOLD and CMRO ₂ in the Presence of Stimuli during Anesthesia as Revealed by Simultaneous BOLD and CBF Functional Magnetic Resonance Imaging
17	Frederick W. Lombard, M.B., Ch.B., F.A.N.Z.C.A.	Inhibition of Platelet Derived Growth Factor Receptor Tyrosine Kinase by Intracisternal Imatinib Does Not Prevent Subarachnoid Hemorrhage Associated Vascular Proliferation or Cerebral Vasospasm
18	W. Andrew Kofke, M.D.	Remifentanyl-Induced Brain Activation in Normal Volunteers. Genotype Effects
19	Mei Wang, M.D.	Comparison of Intraarterial Nicardipine and Verapamil in Reversing Experimental Vasospasm

Group 3: Cerebral Ischemia/Molecular Biology

Abstract Number	Abstract Author	Abstract Title
20	Raymond S. Roginski, M.D., Ph.D.	New GRINL1A Protein Interacts with NMDA Receptor and May Modulate Activity
21	U. Stegemann, D.V.M.	Halothane and S(+)-ketamine influence the Neuroregenerative Potency of the Brain after Forebrain Ischemia in Rats
22	Kristin Engelhard, M.D.	Influence of Different Concentrations of Sevoflurane on Neuroregeneration after Cerebral Ischemia in
23	Piyush Patel, M.D., F.R.C.P.C.	Microarray Analysis of the Effect of an NMDA Receptor Antagonist on Preconditioning Induced Gene Transcription
24	M. Albertsmeier, M.D.	Evaluation Of a Tape Removal Test To Assess The Neurological Deficit After Cardiac Arrest In Rats
25	Eugene S. Fu, M.D.	Attenuation of Astroglial-NF-kB Activation Reduces Formalin Pain Behavior
26	Greg Stratmann, M.D., Ph.D.	Isoflurane Increases Neurogenesis in the Hippocampus of Young Adult Rats
27	Lijun Xu, M.D.	Focal Ischemia in the Rat Provokes Elevation of Plasma Nitrate/Nitrite Which is Reduced by the Protective Strategy of Expressing a Chaperonin
28	Heidi M. Koenig, M.D.	Timing of Blood Brain Barrier Breakdown and IgG Extravasation after Cerebral Ischemia and Reperfusion
29	M. Lucia Gordan, M.D.	Evaluation of Neurocognitive Outcome Following Cerebral Ischemia in Rats: a Comparison Between the Modified Hole Board Test and the Morris Water Maze

Group 4: Cerebral Protection/Pharmacology

Abstract Number	Abstract Author	Abstract Title
30	A. Zlotnik, M.D.	Pretreatment with Premarin Does Not Affect Neurological Outcome after Closed Head Injury in Rats
31	Alex Bekker, M.D., Ph.D.	Effect of Isoflurane on Working Memory in Adult Mice Following Moderate Hypoxia
32	Oak Za Chi, M.D.	Estrogen Aggravates Blood-Brain Barrier Disruption during Focal Ischemia in Old Rats
33	Erik Popp, M.D.	Effects of the Intracerebroventricular Application of Insulin-like Growth Factor 1 (IGF-1) and its N-Terminal Tripeptide (GPE) on Cerebral Recovery After Cardiac Arrests in Rats
34	Bernd Weber, M.D., Ph.D.	Alpha2-Adrenergic Receptors May Mediate Their Neuroprotective Effects Via APLP1
35	Enrico M. Camporesi, M.D.	Asialoerythropoietin (aEPO) is Neuroprotective in MCAO Injury
36	Susanna S. Popp, M.S.	Effects of Low-dose Lidocaine Administration on Recovery after Transient Global Cerebral Ischemia in Rats
37	Jun Wang , M.D.	Blockade of the PKC Activation Abolishes the Protective Effects of Sevoflurane Preconditioning Against Hypoxic Neuronal Damage in Rat Hippocampal Slices
38	Ines P. Koerner, M.D.	14, 15-Epoxyeicosatrienoic Acid Decreases Neuronal Cell Death and Brain Damage After Ischemia

Group 5: Cerebral Protection/Techniques

Abstract Number	Abstract Author	Abstract Title
39	Maurice S. Albin, M.D., M.Sc.	Historical Firsts: The Total Isolation, Transplantation and Hypothermic Preservation of the Mammalian Brain
40	Noriyuki Sasaoka, M.D.	Short- and Long-Term Assessments of Acute Preconditioning Efficacy with Isoflurane in Neonatal Rats Subjected to Hypoxic-Ischemic Injury
41	Eva Eberspaecher, D.V.M.	Influence of EEG-targeted High and Low Dose Propofol Infusion on Acute Histopathological Damage After Controlled Cortical Impact in the Rat Brain
42	Gary Fiskum, M.D., Ph.D.	Improvement in Neurologic and Neuropathologic Outcome after Canine Cardiac Arrest by Oximetry-Based Reduction in Post Resuscitation Ventilatory Oxygen
43	Fellery de Lange, M.D.	Neurocognitive Dysfunction in Rats Undergoing Hypothermic Cardiopulmonary Bypass: the Impact of Limited Rewarming and Postoperative Hypothermia
44	Philip Bickler, M.D., Ph.D.	Hypoxic Preconditioning in Hippocampal Slice Cultures Decreases with Aging: Correlation with Protein Kinase B(Akt) Levels
45	Diana G. McGregor, M.D.	Effect of Nitrous Oxide on Neurologic Function Following Intracranial Aneurysm Surgery
46	Kristine Kellermann, D.V.M.	Long-Term Evaluation of Cerebral Inflammatory Reaction and Neurologic Outcome Following Cardiopulmonary Bypass with Deep Hypothermic Circulatory Arrest in Rats
47	Bettina Jungwirth, M.D.	Xenon Impairs Neurocognitive and Histologic Outcome Following Cardiopulmonary Bypass Combined with Cerebral Air Embolism in the Rat
48	Hetal H. Hosalkar M.D.	Perioperative Neuronal injury after Deep Hypothermic Circulatory arrest and Cardiac Surgery

Group 6: Clinical Neurological Science/Pharmacology

Abstract Number	Abstract Author	Abstract Title
49	B. Gurevich, M.D.	Influence of hyperthermia on MAC
50	Nabil M Elkassabany, M.D.	Anesthetic Management of Blood Brain Barrier Disruption (BBBD). A Retrospective Review
51	Pedro L. Gambus, M.D.	Pharmacokinetics (PK) and Pharmacodynamics (PD) of Rocuronium Bromide in Patients Undergoing Brain Surgery: An Influence of Chronic Phenytoine Therapy
52	Irene Rozet, M.D.	Iso-osmolar Solutions of Mannitol vs. Hypertonic Saline for Intraoperative Brain Relaxation
53	Suwimon Tangwiwat M.D.	The Assessment of Post-Procedure Pain in Patients Following Treatment for Cerebrovascular Lesions
54	Ramachandran Ramani, M.D.	Sevoflurane 0.25 MAC Affects Association Cortex More Than Primary Cortex fMRI Study in Volunteers
55	Anthony G. Hudetz, M.D., Ph.D.	Neural Correlates of Unawareness
56	Shailendra Joshi, M.D.	Cerebral Hypoperfusion Enhances Effectiveness of Intracarotid Mannitol

Group 7: Drugs and Techniques

Abstract Number	Abstract Author	Abstract Title
57	Alex Bekker, M.D., Ph.D.	The Safety of Dexmedetomidine as a Primary Sedative for Awake Carotid Endarterectomy
58	John H. Wills, M.D., F.A.N.Z.C.A.	Is the Incidence of Venous Air Embolism Under-Estimated During Spine Surgery in the Prone Position?
59	Naoko Kurita, M.D.	Long Term Assessment of White Matter Injury After Spinal Cord Ischemia in Rabbits
60	Jun Lin, M.D., Ph.D.	A Method to Improve Oxygen Delivery during Fiberoptic Tracheal Intubation via Intubating LMA (Fastrack) in Patients With Cervical Neuropathy
61	Marek Mirski, M.D., Ph.D.	Deep Brain Stimulation For Intractable Epilepsy: Chemical And Network EEG Evidence Supporting Anterior Thalamus as Critical Target Site
62	Michael J. Souter, M.B., Ch.B., F.R.C.A.	Dexmedetomidine Sedation For Awake Craniotomy and Electrocoercography
63	Mak PHK, M.B., Ch.B., F.R.C.A.	Effects of Propofol Induction on Heart Rate Variability in Elderly Patients
64	Arzu Gerçek, M.D.	The Effect of Parenteral Fish Oil Emulsion (Omegaven®) On Wound Healing in Rats Under the Dexamethasone Treatment
65	Frank J. Podojil, D.O.	Anesthetic Advantages for Minimally Invasive Versus Traditional Techniques for Major Spinal Surgeries
66	Joshua Etu, B.A.	Bolus Delivery is More Effective Than Infusion of Intracarotid Drugs

Group 8: Monitoring, General

Abstract Number	Abstract Author	Abstract Title
67	Catarina S. Nunes, M.D., Ph.D.	Propofol and Remifentanyl Pharmacokinetics/Pharmacodynamics during Induction may Predict Recovery of Anesthesia
68	Catarina S. Nunes, M.D., Ph.D.	Propofol Predicted Effect-Site Concentrations at Loss of Consciousness are Strongly Correlated with Baseline Patient Heart Rate
69	Kenji Yoshitani, M.D.	A Comparison of Tissue Oxygen Index with Jugular Venous Bulb Oxygen Saturation during Hypercapnic Challenge
70	Kimiko Fukui, M.D.	Intraocular Pressure during Prone Position Surgery: Effects of Time and Head Elevation
71	Hailong Dong, M.D., Ph.D.	Excitatory and Inhibitory Actions of Isoflurane in Cholinergic Ascending Arousal System of the Rat
72	Lorri A. Lee, M.D.	An Analysis of 71 Spine Cases With Ischemic Optic Neuropathy From The ASA Postoperative Visual Loss Registry
73	Neus Fabregas M.D., Ph.D.	Venous Jugular Bulb Desaturation Episodes During Functional Hemispherotomies
74	Erol Cavus, M.D.	Comparison of TCD and NIRS in Determination of Cerebral Hemodynamics in a Porcine Model of Hemorrhagic Shock
75	Curtis V. Choice, M.D.	Feasibility and Accuracy of Tonopen XL and Medtronic Pneumatonometer for Measuring Intraocular Pressure in the Prone Position Using a Modified Prone View Helmet System

Group 9: Monitoring/Electrophysiology

Abstract Number	Abstract Author	Abstract Title
76	W. Scott Jellish, M.D., Ph.D.	Facial Nerve Emg Vs Bis To Predict Movement During Different Anesthetics
77	Catarina S. Nunes, M.D., Ph.D.	Bis May Alert For Cerebral Ischemia
78	Catarina S. Nunes, M.D., Ph.D.	Predicted Propofol Concentrations And Bis In Patients With Brain Tumors
79	Catarina S. Nunes, M.D., Ph.D.	Hemodynamic Depression Of Remifentanil May Affect BIS
80	Petra Bischoff, M.D.	No Evidence of Nociceptive Components during SSEP Recordings from Remifentanil and Propofol Anesthesia in Healthy Subjects
81	Masahiko Kawaguchi, M.D.	Effects of Xenon on Myogenic Motor Evoked Potentials in Rabbits : A Comparison with Propofol and Iso
82	Matthew Chan, M.D., F.A.N.Z.C.A.	Quality of Recovery After AEP-Guided Anesthesia. Results of A Randomized Trial
83	Matthew Chan, M.D., F.A.N.Z.C.A.	Performance of the Bispectral index During Electrocautery
84	Berthold Bein, M.D.	Bispectral Index (BIS) May be Suitable for Estimation of Cerebral Hemodynamics
85	Marc J. Bloom M.D., Ph.D.	BIS Variability Reflects Analgesia

Group 10: Clinical Neurological Science/Critical Care

Abstract Number	Abstract Author	Abstract Title
86	Olaf L. Cremer, M.D.	Prognosis Following Severe Head Injury: Development and Validation of a Model for Prediction of Death, Disability, and Functional Recovery
87	Norikazu Miura, M.D.	Evaluation of Predictors of Postoperative Stroke after Off-Pump CABG
88	R. Badenes, M.D.	Correlation between Mid-Latency Auditory Evoked Potentials Monitor and Richmond Agitation-Sedation Scale in Neurosurgical Critical Care Patients
89	Stacey Quintero Wolfe, M.D.	Thromboembolic and Hemorrhagic Complications After Neuroendovascular Procedures: Parameters for Activated Clotting Time
90	Jeffrey J. Pasternak, M.D.	Relationship Between Blood Glucose Concentration and Both Postoperative Infections and Neurologic Function in Patients Undergoing Cerebral Aneurysm Clipping
91	Chanannait Paisansathan, M.D.	CSFS100 Related to Vasospasm in Patients Undergoing Intracerebral Aneurysm Clipping Surgery
92	Marek Mirski M.D., Ph.D.	Acute Neuroscience Intensive Care Sedation Trial - "ANIST" Trial
93	Giuseppina Magni, M.D., Ph.D.	Fast-track Anesthesia after Intracranial Surgery for Supratentorial Lesions
94	Carmela Imperiale, M.D.	Intraoperative Airways Management during Percutaneous Tracheostomy: One Year Experience in Neurosurgical Intensive Care Unit
95	Francisco Lobo, M.D.	Intracranial Pressure Monitoring in Severe Traumatic Brain Injured Patients and Outcome at Discharge