

**CURRICULUM VITAE  
CURTIS E. DOBERSTEIN, M.D.**

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**Education**

Undergraduate Haverford College, Haverford, PA, Biology, BS, 1984

Medical School McGill University Faculty of Medicine, Montreal, Quebec.  
M.D.C.M., 1988.

**Postgraduate Training**

Internship Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, California, Internship in General Surgery, 7/1/88-6/30/89

Fellowship UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, California, Postdoctoral Research Fellowship in Neurosurgery, 7/1/89-6/30/90

Residency UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, California, Resident in Neurosurgery, 7/1/90-6/30/95

**Professional Licenses and Board Certification**

5/18/2000 Board Certified American Board of Neurological Surgeons  
7/1/1995 Rhode Island Medical License  
6/1/2000 Connecticut Medical License  
6/14/2000 Massachusetts Medical License

**Academic Appointments**

1995 - 2003 Assistant Professor, Department of Clinical Neuroscience,  
Warren Alpert School of Medicine – Brown University,  
Providence, RI 02905

2003 – 06/2015 Associate Professor (Clinical), Department of  
Neurosurgery, Warren Alpert School of Medicine – Brown  
University, Providence, RI 02905

06/2015 – Present Professor (Clinical), Department of Neurosurgery, Warren  
Alpert School of Medicine – Brown University,  
Providence, RI 02905

- 12/2007 - 06/2010 Interim Chairman, Department of Neurosurgery, Warren Alpert School of Medicine at Brown University, Providence, RI 02906
- 06/2010 – 01/2014 Vice Chairman, Department of Neurosurgery, Warren Alpert School of Medicine at Brown University, Providence, RI 02906
- 01/2014 - 06/2015 Interim Chairman, Department of Neurosurgery, Warren Alpert School of Medicine at Brown University, Providence, RI 02906
- 07/2015 – Present Vice Chairman for Clinical Affairs, Department of Neurosurgery, Warren Alpert School of Medicine at Brown University, Providence, RI 02906

### **Hospital Appointments**

- 1995 - Present Director, Section of Vascular Neurosurgery, Rhode Island Hospital.
- 1995 - Present Surgical Director, Rhode Island Hospital/Brown Medical School Stroke Program
- Attending Neurosurgeon, Rhode Island Hospital, Providence, Rhode Island
- Attending Neurosurgeon, The Miriam Hospital, Providence, Rhode Island
- Attending Neurosurgeon, Memorial Hospital, Pawtucket, Rhode Island
- Attending Neurosurgeon, South County Hospital, Wakefield, Rhode Island
- Consulting Neurosurgeon, Kent County Hospital, Warwick, RI
- 12/07 – Present Neurosurgery Residency Program Director, Rhode Island Hospital – Brown Medical School
- 12/07 – 06/10 Interim Chairman, Department of Neurosurgery, Rhode Island Hospital.
- 06/10 – 01/14 Vice-Chairman, Department of Neurosurgery, Rhode Island Hospital.

01/14 – 06/2015 Interim Chairman, Department of Neurosurgery, Rhode Island Hospital

07 – Present Vice Chairman for Clinical Affairs, Department of Neurosurgery, Rhode Island Hospital

### **Hospital Committees**

01/01 - 12/03 Operating room committee, Rhode Island Hospital  
06/02 - 12/03 Operating room committee, Miriam Hospital  
01/05 - Present Lifespan Risk Management Committee  
10/06 - 06/14 Rhode Island Hospital Credentials Committee  
01/08 - 01/09 Rhode Island Hospital Medical Executive Committee  
01/08 - Present Rhode Island Hospital GME Committee  
01/16 – Present Rhode Island Hospital Medical Executive Committee

### **University Committees**

01/01 - 01/02 Critical Care Search Committee  
06/03 - 06/04 Pediatric Neurosurgery Search Committee  
06/03 - 06/04 Spine Neurosurgery Search Committee  
01/08 - Present Neuroscience Critical Care Search Committee  
10/08 - Present Chair, Pediatric Neurosurgery Search Committee  
01/09 - Present Stroke Neurology Search Committee  
01/16 – Present Anesthesia Chair Search Committee

### **National Committees**

Executive Committee, American Association of Neurological Surgeons – Congress of Neurosurgeons Cerebrovascular Surgery Section (2007)  
Participant – North American Symptomatic Carotid Endarterectomy Trial (NASCET)  
Participant – Asymptomatic Carotid Atherosclerosis Study (ACAS)  
Participant - CREST trial

### **Memberships in Academic Societies**

Member Congress of Neurosurgeons  
Member American Association of Neurological Surgeons  
Member American College of Surgeons  
Member Society for Neuroscience

## **Publications**

Doberstein C, MacEwen GD, Lee MS: Group B Beta-Hemolytic Osteomyelitis of the Heel: A Case Report. *Clin Orthop* 1988 213:225-228.

Martin NA, Doberstein C, Bentson J, Vinuela F, Dion J, Becker DP: Intraoperative Angiography in Cerebrovascular Surgery. *Clin Neurosurg* 1990 37:312-331.

Doberstein C, Kirchner R, Gordon L, Morgenstern L, Shapiro S: Cystic Neoplasms of the Pancreas. *Mt. Sinai J. Med* 1990 57:102-106.

Martin NA, Doberstein C, Caron M, Zane C, Thomas K, Becker DP: Post-traumatic Cerebral Arterial Spasm: Transcranial Doppler Ultrasound, Cerebral Blood Flow, and Angiographic Findings. *J. Neurosurg*, 1992 77:575-583.

Doberstein C, Hovda DA, Becker DB: Clinical Considerations in the Reduction of Secondary Brain Injury. *Ann Emerg Med*, 1993 22:993-997.

Doberstein C, Fineman I, Hovda DA, Martin NA, Keenly L, Becker DP: Metabolic Alterations Accompany Ionic Disturbances and Cellular Swelling During a Hypoxic Insult to the Retina: An In Vitro Study. *Acta Neurochir (Suppl)* 1994 60:41-44.

Martin NA, Doberstein C: Cerebral Blood Flow Measurement in Neurosurgical Intensive Care. *Neurosurg Clin N. Amer*, 1994 5(4):607-618.

Martin NA, Doberstein C, Alexander MJ, Khanna R, Benzalcasar H, Alsina G, Zane C, McBride D, Kelly D, Houda D, Becker DB, McArthur D, Zavcha K: Post-traumatic Cerebral Arterial Spasm. *J Neurotrauma*, 1995 12(5): 897-901.

Guglielmo MA, Doberstein C: Temporally Associated Rupture of Intracranial and Mesenteric Artery Aneurysms: A Case Report. *J. Neurovascular Disease* 1998 3 (1):27-30.

Guglielmo MA, Chan PT, Cortez S, Stopa E, McMillan P, Johanson CE, Epstein M, Doberstein CE: The temporal Profile and Morphologic Features of Neuronal Death in Human Stroke Resemble Those Observed in Experimental Forebrain Ischemia: The Potential Role of Apoptosis. *Neurol Res* 1998 20:289-296.

Martin N, Khanna R, Doberstein C, Benston J. Therapeutic Embolization Arteriovenous Malformations: The Case for and Against. *Clinical Neurosurgery*, 1998 46:295-318.

Rogg JM, Smeaton S, Doberstein C, Goldstein JH, Tung GA, Haas RA: Assessment of the Value of MR Imaging for Examining Patients with Angiographically Negative Subarachnoid Hemorrhage. *AJR Am J Roentgenol* 1999 172:201-206.

Jayaraman MV, Mayo-Smith WW, Doberstein CE: Intracranial Aneurysm of the Anterior Inferior Cerebellar Artery Revealed by Multi-Detector CT Angiography. *AJR Am J Neuroradiol* 2003 24(7): 1338-40.

Jayaraman MV, Mayo-Smith WW, Tung GA, Haas RA, Rogg JM, Mehta NR, Doberstein CE. Detection of intracranial aneurysms: multi-detector row CT angiography compared with DSA. *Radiology*. 2004 230(2):510-8.

Vance AZ, Jayaraman MV, Dubel GJ, Doberstein CE, Haas RA. Safety of intravenous heparin administration after endovascular treatment of ruptured intracranial aneurysms. *J NeuroIntervent Surg* 2009;1:136-141.

Vance AZ, Jayaraman MV, Haas RA, Doberstein CE. Intracranial aneurysms: perspectives on the disease and endovascular therapy. *Med Health R I*. 2009 92(12):388-93.

Jayaraman MV, McTaggart RA, Sachs GM, Doberstein CE. Cerebellar pial AVM presenting with medullary venous hypertension: imaging and endovascular treatment. *JNIS Journal of Neurointerventional Surgery*. 2010 2:38-40

Boxerman JL, Rogg JM, Donahue JE, Machan JT, Goldman MA, Doberstein CE: Preoperative MRI Evaluation of Pituitary Macroadenoma: Imaging Features Suggestive of Successful Transsphenoidal Surgery. *AJR Am J Roentgenol* 210 195(3): 720-8.

Spader HS, Doberstein CE, Rao AJ, Jayaraman MV: Central Fever as an Early Predictor of Vasospasm in a Child with Isolated Intraventricular Hemorrhage. *Clin Neurol Neurosurg* 2011 113(2): 146-9.

Doberstein CE, Grossberg J, Spader HS, Goldman MA: Safety and Feasibility of Outpatient Carotid Endarterectomy. *Clin Neurol Neurosurg*. 2012 Feb;114(2):108-11.

Williams JR, Aghion DM, Doberstein CE, Cosgrove GR, Asaad WF: Penetrating brain injury after suicide attempt with speargun: case study and review of literature. *Front Neurol*. 2014 Jul 7;5:113.

Walker A, Torabi R, Punsoni M, Stopa E, Doberstein C. De Novo Adamantinomatous Craniopharyngioma Presenting Anew in an Elderly Patient With Previous Normal CT and MRI Studies. A Case Report and

Implications on Pathogenesis. *Interdisciplinary Neurosurgery: Advanced Techniques and Case Management* Volume 2, Issue 3, September 2015, Pages 149–151

Ripp K, Orellana V, Dugdale C, Punsoni M, Doberstein CE, Beckwith CG. The Masquerading Cyst: Extraparenchymal Neurocysticercosis Presenting as Acute Meningitis. *Am J Med.* 2016 Mar;129(3)

Abdul-Kareem Ahmed, John F Morrison, Nelli S Lakis, Edward Stopa, and Curtis Doberstein: Atypical Meningioma Mimicking High-Grade Glioma Accepted *Neurology* Nov. 2016

Yan S, Lakis N, Stopa E, Doberstein C. Collision Metastasis of Chronic Lymphocytic Leukemia and Glioblastoma: A Case Report. *J Clin Exp Pathol* Feb. 2017, 7:1.

Doberstein C, Noor A, Choi D, Smith J, Groh D, Mermel L, Doberstein C. Cerebral Epidural Abscess Secondary to Blastomyces Masquerading as an Epidermoid Tumor. *Open Forum Infect Dis.* 2017 May 29;4(3):ofx112.

Doberstein CA, Torabi R, Yan SC, McTaggart R, Doberstein C, Jayaraman M. Current Strategies in the Surgical Management of Ischemic Stroke. *R I Med J* (2013). 2017 Jun 1;100(6):25-29.

Doberstein CA, Torabi R, Klinge PM. Current Concepts in the Pathogenesis, Diagnosis, and Management of Type I Chiari Malformations. *R I Med J* (2013). 2017 Jun 1;100(6):47-49. Review.

Carnevale JA, Segar DJ, Powers AY, Shah M, Doberstein C, Drapcho B, Morrison JF, Williams JR, Collins S, Monteiro K, Asaad WF. Blossoming contusions: identifying factors contributing to the expansion of traumatic intracerebral hemorrhage. *J Neurosurg.* 2018 Jan 5:1-12.

Powers AY, Pinto MB, Aldridge AM, Tang OY, Chen JS, Berube RL, Doberstein C, Fox JM, Carnevale JA, Asaad WF. Factors associated with the progression of conservatively managed acute traumatic subdural hemorrhage. *J Crit Care.* 2018 Sep 14;48:243-250.

### **Other Publications**

Doberstein C, Rodts G, McBride DQ: Neurosurgical Critical Care. In Bongard F, Sude D (eds): *Current Therapy in Surgical Intensive Care*. Lange Publications, pp. 539-554, 1993.

Becker DP, Doberstein C, Hovda DA: Craniocerebral Trauma: Clinical and Cellular Consequences. In ***Clinical Concepts***. Upjohn Publications, Kalamazoo. 1996.

Kelly DK, Doberstein C, Becker DP: General Principles of Management of Head Injury. In Narayan RK, Wilberger JE, Povlishock JT (eds): ***Neurotrauma***. McGraw-Hill, Chapter 6, 1996.

Doberstein C, Martin NA: Transcranial Doppler in Head Injury. In Narayan RK, Wilberger JE, Povlishock JT (eds): ***Neurotrauma***. McGraw-Hill, Chapter 37, 1996.

Doberstein C, Martin NA: Cerebral Blood Flow in Clinical Neurosurgery. In Youmans JR,(ed): ***Neurological Surgery***. W.B. Saunders, Chapter 21, pp. 519-569, 1996.

Doberstein C, Guglielmo MA, Chan P: Cerebrovascular Malformations. In Gilchrist Fm (ed): ***Prognosis in Neurology***. Butterworth-Heinmann, Chapter 19, pp. 97-106, 1998.

Johanson CE, Palm D, Chan P, Doberstein. Functional interactions between the choroid plexus-cerebrospinal fluid system and the hippocampus in transient forebrain ischemia. In Blood-Spinal Cord and Brain Barriers in Health and Disease, H.S. Sharma and J. Westman, eds., Academic Press, San Diego, CA, 2002.

Anderson G, Doberstein C: Coma. Bland K (ed): ***The Practice of General Surgery***. Kirby Bland, M.D. (ed) W.B. Saunders, Chapter 19, pp.150-157, 2002.

Aizenburg M, Doberstein C: Status Epilepticus. Bland K (ed): In ***The Practice of General Surgery***, W.B. Saunders, Chapter 25, pp.181-185, 2002.

Johanson CE, Palm, DE, McMillan PN, Stopa EG, and Doberstein CE: Volume Transmission-Mediated Protective Impact of Choroid Plexus-Cerebrospinal Fluid Growth Factors on Forebrain Ischemic Injury. Sharma HS, Westman K (eds): Blood-Spinal Cord and Brain Barriers in Health and Disease. Elsevier Science (USA), pp. 361-385, 2003.

### **Published Abstracts**

Doberstein C, Martin NA, Thomas K, More S, Goldwater D, Becker DP: Assessment of Cerebral Blood Flow Using Transcranial Doppler Ultrasonography and the Intravenous Xenon-133 Technique. *J.Cardiovasc Tech* 9:60, 1989.

Thomas K, Doberstein C, Martin NA, Zane C, Becker DP: Physiological Correlation of Transcranial Doppler Waveform Patterns in Brain Dead Patients. *J.Cardiovasc Tech* 9:296-297, 1990.

Doberstein C, Martin NA, Zane C, Thomas K, Becker DP: Prediction of Intracranial Pressure from Doppler Ultrasonography. *J. Cardiovasc Tech* 9:294-295, 1990.

Doberstein C, Martin NA, Zane CJ, Thomas K, Becker DP: Transcranial Doppler Ultrasonography in the Diagnosis and Management of Aneurysmal Induced Vasospasm. *J. Cardiovasc Tech* 9:285-286, 1990.

Doberstein C, Martin NA, Hawkins R, Vinuela F, Thomas K, Zane C, Becker DP: Assessment of Autoregulation in Patients with Arteriovenous Malformations. *Journal of Cerebral Blood Flow and Metabolism* 11:2, 1991.

Doberstein C, Zane CJ, Martin NA, Caron MJ, Thomas K, Becker DP: Increased Recognition of Vasospasm Following Craniocerebral Trauma Using Transcranial Doppler Ultrasonography. *Journal of Cerebral Blood Flow and Metabolism* 11:2, 1991.

Zane CJ, Doberstein C, Martin NA, Thomas K, Becker DP: Prediction of Cerebral Blood Flow Using Doppler Velocity Measurements. *Journal of Cerebral Blood Flow and Metabolism* 11:2, 1991.

Doberstein C, Velade F, Badie H, Hovda DA, Becker DP: Changes in Local Cerebral Blood Flow Following Concussive Brain Injury. *Soc Neurosci Abst* 18:175, 1992.

Fineman I, Doberstein C, Badie B, Hovda DA, Martin N, Becker DP: Metabolic Alterations Accompany Ionic Disturbances During a Hypoxic Insult to the Retina: An In Vitro Study. *Soc Neurosci Abst* 18:175, 1992.

Doberstein C, Martin NM, Peacock W, Thomas K, Rinsky B: Transcranial Doppler Ultrasonographic Evaluation of Malfunctioning Shunts in Children. *Stroke* 23:478, 1992.

Khanna R, Zane CJ, Martin NM, Doberstein C, Caron MJ, McBride DQ, Thomas K, Becker DP: Prediction of Outcome by Transcranial Doppler and Cerebral Blood Flow in Head Injury. *Stroke* 23:475, 1992.

Zane CJ, Khanna R, Martin NM, Doberstein C, Caron MJ, Becker DP: Patterns of Cerebral Blood Flow and Transcranial Doppler Velocities Following Head Injury. *J. Neurosurg* 76:399, 1992.

Knuckey N, Primiano M, Palm D, Guglielmo M, Epstein M, Johanson C: The Distribution of bcl-2 Protein in the Rat Hippocampus Following Transient Forebrain Ischemia, *Soc Neurosci*, San Diego, CA, 1995.

Guglielmo M, Chan P, Doberstein C, Demers D, Primiano M, Palm D, Knuckey N, Johanson C, Epstein M: Delayed Neuronal Death Following Transient Forebrain Ischemia in Rat Hippocampus: A Comprehensive Temporal Analysis, *Soc Neurosci Abst*, Washington, DC, 1996.



Guglielmo M, Chan P, Doberstein C, Johanson C, Epstein M: A Comparison of the TUNEL and ISEL Techniques in Experimental Transient Forebrain Ischemia and A Decopartation Model of Necrosis, Soc. Neuroci, Abst, 23:217, 1997.

Guglielmo M, Chan P, Doberstein C, Johanson C, Epstein M: Neuroprotective Effects of Itravenous ATP-Mgcl2 Infusion Following Forebrain Ischemia in the Rat., Soc Neurosci Abst. 24:216, 1998.

Hayamizu TF, Chan PT, Doberstein CE, Sunwoo LW, Guglielmo MA, Johanson CE. The role of FGF-2 in the response to cerebral ischemia: FGF-2 expression in hippocampus and choroid plexus, and the neuroprotective effects of intraventricular FGF-2 infusion in a rat model of transient forebrain ischemia. Soc. for Neuroscience Abs. 25:1851, 1999.

Carnevale J, Segar DJ, Drapcho B, Doberstein C, Morrison JF, Asaad W.: Cerebral Contusions: Catalysts and Counteractants. Neurosurgery. 2016 Aug;63 Suppl 1:195.

### **Invited Presentations**

- 1984 Effects of Making Site-Specific Mutations in 16s rRNA. Presented, (oral), at the Thomas Jefferson University Research Society, Philadelphia, Pennsylvania. March, 1984.
- 1989 Cystic Neoplasms of the Pancreas. Presented, (oral), at the Annual Meeting of the Southern California Chapter of the American College of Surgeons, Palm Springs, California. January, 1989.
- 1990 Routine Measurement of Cerebral Blood Flow in the Operating Room and Intensive Care Unit. Presented, (oral), at the Annual Meeting of the Southern California Chapter of the American College of Surgeons, Santa Barbara, California. January, 1990.
- 1990 Assessment of Cerebral Blood Flow Using Transcranial Doppler Ultrasonography and the Intravenous Xenon-133 Technique. Presented, (oral), at 4th International Symposium on Intracranial Hemodynamics, Orlando, Florida. February, 1990.
- 1990 Blood Flow Alterations in Craniocerebral Trauma with Emphasis on Intensive Care Unit Monitoring. Presented, (oral), at the UCLA Symposium on Current Intensive Care Unit Monitoring Techniques. March, 1990.
- 1990 Cerebral Vasospasm Detection Using Transcranial Ultrasonography and Intravenous Xenon-133 Measurements. Presented, (oral), at the American Heart Association Young Investigators Forum, Los Angeles, California. May, 1990.
- 1990 Transcranial Doppler Ultrasonography and Xenon-133 rCBF Monitoring in the Diganosis and Management of Traumatic and Aneurysmal Induced

- Cerebral Vasospasm. Presented, (oral), at the Tenth International Symposium on Microsurgery for Cerebrovascular Disease. San Francisco, California. July, 1990.
- 1990 Cerebral Blood Flow Monitoring in the Detection and Management of Cerebral Vasospasm Secondary to Trauma and Aneurysmal Subarachnoid Hemorrhage. Presented, (oral), at the Fifth Toronto Stroke Workshop, Toronto, Ontario. September, 1990.
- 1990 Interrupted Time Series Analysis of Serial EEG Using Robust Data Screening Methods: Potential Use for Continuous Monitoring in a Neuro-Intensive Care Unit. Presented, (poster), at the Congress of Neurological Surgeons Annual Meeting, Los Angeles, California. October, 1990.
- 1990 Comparison of CBF Determined by Thermal Diffusion Probes and Intravenous Xenon-133 rCBF Measurements in Postoperative Neurosurgical Patients. Presented, (poster), at the Congress of Neurological Surgeons Annual Meeting, Los Angeles, California. October, 1990.
- 1991 Prediction of Intracranial Pressure From Doppler Ultrasonography. Presented, (oral), at the 5th International Symposium on Intracranial Hemodynamics, San Francisco, California. February, 1991.
- 1991 Physiological Correlation of Transcranial Doppler Waveform Patterns in Brain Dead Patients. Presented, (oral), at the 5th International Symposium on Intracranial Hemodynamics, San Francisco, California. February, 1991.
- 1991 Assessment of Autoregulation in Patients with Arteriovenous Malformations. Presented, (poster), at the American Association of Neurological Surgeons Annual Meeting, New Orleans, Louisiana. April, 1991.
- 1991 Correlation of Cerebral Blood Flow and Glasgow Coma Score. Presented, (poster), at the American Association of Neurological Surgeons Annual Meeting, New Orleans, Louisiana. April, 1991.
- 1992 Transcranial Doppler Ultrasonographic Evaluation of Malfunctioning Shunts in Children. Presented, (oral), at 6th International Symposium on Intracranial Hemodynamics, Phoenix, Arizona. January, 1992.
- 1993 Metabolic and Ionic Changes Accompany Cellular Swelling After a Hypoxic Insult to the Rat Retina. In Vitro Observations. Presented, (oral), at the 5th International Brain Edema Symposium, Tokyo, Japan. May, 1993.
- 1993 Endovascular Therapy with Extracranial-Intracranial Bypass for the Treatment of Complex Cerebral Aneurysms. Presented (poster) at the Congress of Neurological Surgeons Annual Meeting, Vancouver, British Columbia. October, 1993.

- 1993 Angiographic and Transcranial Doppler Evidence of Delayed Basilar Artery Spasm in Head-Injured Patients. Presented (poster) at the Congress of Neurological Surgeons Annual Meeting, Vancouver, British Columbia. October, 1993.
- 1993 Prediction, Outcome, and Cerebral Blood Flow Characteristics of Post-Traumatic Cerebral Arterial Spasm. Presented at the 2nd International Neurotrauma Symposium, Glasgow, Scotland. July, 1993.
- 1993 Interaction of Neurosurgery and Endovascular Therapy in the Treatment of Intracranial Aneurysms. Presented (poster) at the Congress of Neurological Surgeons Annual Meeting, Vancouver, British Columbia. October, 1993.
- 1994 Cerebral Blood Flow in Neurosurgical Intensive Care. Presented, (oral), Advances in the Clinical Aspects of Cerebral Blood Flow, Allegheny General Hospital, Pittsburgh, Pennsylvania. May, 1994.
- 1996 MR Imaging in Angio-negative Subarachnoid Hemorrhage. Presented, (poster), at the 83rd Meeting of the Radiological Society of North America, September 1996.
- 1996 New Surgical Strategies for Carotid Endarterectomy, Presented at Medicine Grand Rounds, Rhode Island Hospital, Providence, RI, August, 1996.
- 1996 Evidence for Apoptotic Cell Death Following Ischemia in an Experimental Model of Ischemia and Human Brain Specimens. Presented, (poster), at the Annual Meeting of the Congress of Neurological Surgeons, Montreal, Canada, October, 1996.
- 1997 Strategies of Neuronal Protection. Luncheon Seminar, American Association of Neurosurgeons, New Orleans, LA, April, 1997.
- 1997 Update on Carotid Endarterectomy, Presented at Saint Annes Hospital, Fall River, MA, October, 1997
- 1997 Endovascular Treatment of Cerebral Aneurysms in the Octagenarian. Presented, (oral), at the Annual Meeting of the American Roentgen Ray Society, San Francisco, CA, April, 1997.
- 1998 Intraventricular Infusion of bFGF and Neuronal Apoptosis Following Transient Forebrain Ischemia in Rat Hippocampus. Presented, (poster), at the AANS Cerebrovascular Section Meeting, Orlando, FL, February, 1998.
- 1998 Neuroprotective Effects of Adenosine Triphosphate-Magnesium Chloride Intravenous Infusion Following Global Ischemia. Presented, (poster), at the Annual Meeting of the Congress of Neurosurgeons, Seattle, WA, October, 1998.
- 1998 Cerebral Protection. Luncheon Seminar, Congress of Neurological Surgeons, Seattle, WA, October, 1998.

- 1998 Negative Pressure Hydrocephalus Following Aneurysmal Subarachnoid Hemorrhage. Presented, (poster), at Congress of Neurological Surgeons Annual Meeting, Seattle, WA, October, 1998.
- 1999 Correlation of Electroencephalography and Neurological Exam in Awake Patients During Carotid Endarterectomy. Presented, (poster), at the Annual Meeting of The American Association of Neurological Surgeons, New Orleans, LA, April, 1999.
- 1999 Surgical Management of Poor Grade Aneurysm Patients. Luncheon Seminar, Congress of Neurological Surgeons, Boston, MA, October, 1999.
- 2001 Update on Cranial and Spinal Neurotrauma, Presented at South County Hospital, Wakefield, RI, July, 2000.
- 2002 Outpatient Carotid Endarterectomy, Presented at Neurosurgery Grand Rounds, UCLA School of Medicine, Los Angeles, CA March, 2002
- 2002 Developing A Cerebrovascular Surgery Practice, Presented at Neurosurgery Grand Rounds. UCLA School of Medicine, Los Angeles, CA March, 2002
- 2004 Johanson, C., McMillan, P., Duncan, J., C. Doberstein and Stopa, E. Volume transmission of cerebrospinal fluid: A role for promoting brain repair after injury to the CNS. *The Global College of Neuroprotection and Neuroregeneration Annual Conference*, Zermatt, Switzerland, June, 2004.

### Grants

1. "***Characterization of the Temporal Expression and Functional Role of P-53, bcl-2, bax, and ICE in Ischemia-Induced Apoptotic Cell Death.***" Rhode Island Hospital Developmental Grant Program. **\$20,000**, 1995 - 1996
2. "***Programmed Cell Death Following Traumatic Brain Injury.***" The Rhode Island Foundation, **\$5,000**, 1997
3. "***Choroid plexus, Growth Factors, Aging and Injury.***" National Institute of Neurological Diseases and Stroke, NIH R01 NS 27601, C Johanson, P.I., C Doberstein, Investigator, Ischemia project (CSF and hippocampus), 1995-1999.
4. "***Trauma, Sepsis, and Inflammation***", NIGMS, NIH Trauma Training Grant, I. Chaudry, P.I., C Johanson and C. Doberstein, Research Supervisors for ischemia projects, 1995-1999.
5. "***Cystatin C and TUNEL Immunostaining in Spinal Cord in Amyotrophic Lateral Sclerosis***", George Robinson Foundation, 1997, C Johanson, P.I., C. Doberstein, Co-investigator.

### **Chairman of Scientific Sessions for Professional Societies & Meetings**

"Neurosurgical Hemodynamics", The 5th International Symposium on Intracranial Hemodynamics, San Francisco, California, February 20, 1991.

"Neurosurgery and Cardiology", The 6th International Symposium on Intracranial Hemodynamics, Phoenix, Arizona, January 28, 1992.

### **Visiting Professorships**

2002 Division of Neurosurgery, UCLA School of Medicine.

### **Research Experience**

- 1983 Experimental Allergic Encephalomyelitis as an Animal Model for Multiple Sclerosis. Department of Immunology, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania.
- 1984 Effects of Making Site-Specific Mutations in 16s rRNA. Department of Biology, Haverford College, Haverford, Pennsylvania.
- 1986 Inhibition of Tumor Angiogenesis by Copper Depletion. Department of Neurosurgery, McGill University, Montreal, Quebec.
- 1989 Alterations in Intracranial Hemodynamics, Cerebral Blood Flow, and Metabolism in Subarachnoid Hemorrhage, Head Injury, Stroke, and Arteriovenous Malformations. Division of Neurosurgery, UCLA School of Medicine, Los Angeles, California.
- 1992 Cerebral Blood Flow and Metabolism in a Rat Model of Concussive Brain Injury. Investigations of Metabolic and Ionic Changes Using an In Vitro Retina Model of Ischemia.
- 1996 Molecular Mechanisms of Apoptotic Cell Death Following Global Forebrain Ischemia and Craniocerebral Trauma.

### **University Teaching Roles**

1998 – present	Bio 262: Neurologic Pathophysiology
5/01	Dean's Teaching Excellence Award, Brown Medical School
5/03	Dean's Teaching Excellence Award, Brown Medical School
5/06	Dean's Teaching Excellence Award, Brown Medical School
6/14	Dean's Teaching Excellence Award, Brown Medical School
6/16	Dean's Teaching Excellence Award, Brown Medical School

2014 – Present

Panelist, Careers in Medicine Seminar Series  
Brown Medical School

**Other Teaching Roles**

2016 – Present

Faculty, Society of Neurological Surgeons Intern  
Boot Camp, Boston, MA