

## **CURRICULUM VITAE**

***Name:*** Richard William Byrne, M.D.

***Date of Birth:*** January 25, 1965

***Citizenship:*** United States

***Office Add:*** Department of Neurosurgery  
Rush University Medical Center  
1725 W. Harrison Street, #970  
Chicago, IL 60612

***Phone:*** (312) 942-6644

***Fax:*** (312) 942-2176

### **Education**

1983-1987 Bachelor of Science, University of Illinois, Champaign-Urbana, Illinois

1987-1991 Doctor of Medicine, Northwestern University Medical School

1991-1992 Surgical Internship, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

1992-1996 Neurosurgical Residency, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

1996-1997 Chief Resident, Neurosurgery, Rush-Presbyterian-St. Luke's Medical Center

1997 Chief Resident, Neurosurgery, Cook County Hospital

### **Additional Training**

1994 Postdoctoral Research Fellow, Children's Memorial Hospital, Chicago, Neurosurgery Research

1995 Vascular Neurosurgery Externship, Baptist Hospital, University of Tennessee, Memphis, Department of Neurosurgery (10/95)

### **Academic Appointments**

1995-1997 Instructor in Neurosurgery, Rush Medical College, Chicago, IL

1997 - 2004 Assistant Professor of Neurosurgery, Rush Medical College, Chicago, IL

1997- 1998 Assistant Professor of Neurosurgery, University of Illinois College of Medicine, Chicago, IL

2004 Associate Attending of Neurosurgery, Rush University Medical Center

2005 Associate Professor of Neurosurgery, Rush Medical College

2005-2007 Acting Chairman, Department of Neurosurgery, Rush Medical College

2006-2010 Medical Director, Rush University Neurosurgery

2006-2009 Residency Director, Rush University Department of Neurosurgery

2007-present Chairman, Department of Neurosurgery, Rush Medical College

2008 Professor of Neurosurgery, Rush Medical College

### **Hospital Appointments**

1995-1997 Adjunct Attending, Neurosurgery, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

1997 - Pres. Attending, Neurosurgery, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

1997-2003 Attending, Neurosurgery, Cook County Hospital, Chicago, IL

1998 -2003 Attending, Neurosurgery, Oak Park Hospital, Oak Park, IL

1998-1999 Attending, Neurosurgery, Westlake Hospital, Melrose Park, IL

2001-2003 Attending, Neurosurgery, Illinois Masonic Hospital, Chicago, IL

2002-2005 Attending, Neurosurgery, Neurosurgery and Orthopedic Institute

2003-2005 Attending, Neurosurgery, Ingalls Memorial Hospital, Harvey, IL

### **Research**

1997-present Director of Rush neuroanatomical dissection lab.

2006-present Neurosurgical Critical Care Simulation Lab

2002-present Clinical Outcomes in epilepsy surgery - Epilepsy surgery database manager

2004-2006 Duraseal for CSF leak in cranial surgery, institutional principal investigator.  
Confluent Surgical-DRS 03-002. ORA# 03110405 Grant award \$48,360

2005-present A prospective, multicenter, randomized, controlled study to compare the spinal sealant system as an adjunct to sutured dural repair with standard of care methods during spinal surgery. Institutional co-principal investigator. Confluent Surgical.

2003-2005 Cortical stimulation for control of epilepsy. Neuropace responsive neuro-stimulator: prospective, multicenter trial. ORA# 03100601 Grant funding- Neuropace. \$203,792

2006-present Cortical stimulation for control of epilepsy. Neuropace responsive neurostimulator:  
Pivotal prospective, multicenter trial. 2006-2007 Grant funding- Neuropace. \$301,280

2007 Phase III, Randomized, Open-label Study of IV Edotecarin vs Temozolomide or Carmustine (BCNU) or Lomustine (CCNU) in Patients with Glioblastoma Multiforme at First Relapse after Alkylator-based (Neo)adjuvant Chemotherapy (Pfizer Protocol # EDOAGL-8725-001) Institutional coinvestigator. Funding by Pfizer.

2004-2007 IL-13 convection enhanced treatment of glioblastoma. PRECISE Trial.  
Institutional principal investigator. ORA # 04040803 Grant by Neopharm- \$393,552

2004 Molecular biology of epileptogenesis. 2004 Grant by CINN foundation. \$25,000

- 2005 Molecular biology of epileptogenesis. 2005 Grant by CINN foundation. \$25,000
- 2005 Microsurgical technique in the laboratory rat- resident course.
- 2006 RTOG 0525. TMZ vs Dose intensive TMZ during chemotherapy for newly diagnosed glioblastoma multiforme. Institutional co investigator.
- 2008 Molecular biological investigation of patterns of methylation in medically intractable epilepsy. Co-investigator, V. Levinson PhD.
- 2008 Closed loop intraparenchymal delivery of anticonvulsants in a rat model. Principal investigator: Marvin Rossi, MD, PhD. Johnson & Johnson \$101,920.00
- 2008 AHRQ Ventriculostomy simulation study. Institutional principal investigator. Multicenter trial.
- 2009-11 Cranial dural sealant study, Hyperbranch. Institutional investigator. Multicenter trial
- 2009 Radiation therapy after resection of high grade gliomas of the temporal lobe. Collaboration with James Marsh, MD, Rad. Onc.
- 2009 Synthesis of a technetium labeled semiconducting single walled carbon nanotube linked to interleukin-13 for SPECT imaging of high grade astrocytoma cells in a xenograft rat model: A precursor to therapeutic delivery of targeted ultra-high charge ablative therapy. Collaboration with Marvin Rossi MD, PhD (PI) Dept. of Neurology, Rush Medical College. Philanthropic funding \$50,000
- 2009 Investigation of the role of PAX 5 and 6 genes in glioma. Philanthropic funding \$50,000. Mary Newman, PhD. Co-investigator.
- 2009 Cellular Substrates of Hyperexcitability in Temporal Lobe Epilepsy Collaboration with Travis Stoub, PhD and Dan Nicholson, PhD
- 2010 NCCTG N0874 ABTC 0902 Phase I/II Study of Vorinostat (Suberoylanilide Hydroxamic Acid [SAHA]), Temozolomide, and Radiation Therapy in Patients with Newly Diagnosed Glioblastoma Co-investigator with Robert Aiken MD

- 2010 N0572 A Phase I/II Trial of Sorafenib and CCI-779 in Patients with Recurrent Glioblastoma Co-investigator
- 2010 N0574 Phase III Randomized Trial of the Role of Whole Brain Radiation Therapy in Addition to Radiosurgery in Patients with One to Three Cerebral Metastases.
- 2010 N0776 Phase II Trial of Avastin® in Combination with Sorafenib in Recurrent Glioblastoma Multiforme. Co-investigator
- 2010 NCCTG N0874 ABTC 0902 Phase I/II Study of Dasatinib/Bevacizumab in Recurrent Glioblastoma. Co-investigator
- 2010 XL184-205 A Phase 2 Non-Comparative Randomized Open-Label Study of Multiple Regimens of Single-Agent XL184 in Subjects with Grade IV Astrocytic Tumors in First or Second Relapse Exelixis, Inc. 210 East Grand Ave. South San Francisco, CA 94083. Co-investigator
- 2010 XL184-002 A Phase 1 Dose Finding Study of the Safety and Pharmacokinetics of XL184 Administered Orally in Combination with Temozolomide and Radiation Therapy in the First Line Treatment of Subjects with Malignant Gliomas Exelixis, Inc. 210 E. Grand Ave. South San Francisco, CA 94083. Co-investigator
- 2011 A randomized, double-blind, controlled phase 2b study of the safety and efficacy of ICT-107 in newly diagnosed patients with stage 4 glioblastoma multiforme following resection and chemoradiation Institutional co-investigator.

### **Society Memberships**

- 1993-1999 Resident member, Congress of Neurological Surgeons
- 1993-1999 Resident member, American Association of Neurological Surgeons
- 1997-Present Rush Surgical Society
- 2000-Present American Association of Neurological Surgeons
- 2000-Present Congress of Neurological Surgeons
- 1999-2002 AANS/CNS Joint Section on Spine Surgery

2002-Present	AANS/CNS Joint Section on Tumors
2000-2003	AANS/CNS Joint Section on Stereotactic and Functional Surgery
1999-Present	Illinois State Neurosurgical Society
1998-Present	Epilepsy Society of Greater Chicago
2001-Present	American Epilepsy Society
2004-2005	American Association of Spine Physicians
2005-Present	Neurosurgical Society of America
2005-Present	Chicago Neurological Society
2006-Present	Chicago Medical Society
2007-present	AANS/CNS JSSFS
2007-present	North American Skull Base Society
2011	<b>Senior Society of Neurological Surgeons</b>

**Officer in Medical Society**

2006-2007	President, Rush Surgical Society
2006-2008	Executive committee, Rush Surgical Society
2006-2007	Treasurer, Chicago Neurological Society
2008-2009	Vice-President Chicago Neurological Society
2006-2008	Executive Committee, Chicago Neurological Society
2006-2008	Membership Chairman, Illinois State Neurosurgical Society
2008	Treasurer, Illinois State Neurosurgical Society
2006-2009	Executive Committee, Illinois State Neurosurgical Society
2008	Interurban Neurosurgical Society Board of Directors

2009-10	President, Chicago Neurological Society
2010	Secretary, Illinois State Neurosurgical Society
2011	CNS Executive Committee
<b>2012</b>	<b>Treasurer, Neurosurgical Society of America</b>

### **Certification**

National Board of Medical Examiners: Passed 1992

#### American Board of Neurological Surgery:

Primary Examination:	Passed March, 1995 (98th%ile)
Oral Examination:	Passed May, 2000
Recertification:	Passed March 2009 (94%)

Illinois State License #036-093952

### **Consultant**

2000	Chicago Enforcers football (XFL)
2001-Present	Epilepsy Foundation of Greater Chicago
2003-2011	FDA Neurological Devices Committee
2004-2008	Chicago Bulls basketball (NBA)
2007	Medical Committee USA Boxing

### **Committees**

1994	Sergeant at Arms Committee - Congress of Neurological Surgeons, Chicago, IL
1996-1998	Committee on Student Affairs, Rush Medical College, Chicago, IL
1998-2000	Ad-hoc Committee on Rules for Governance, Rush Medical College, Chicago, IL
2000-2002	Medical Records Subcommittee, Rush Medical College, Chicago, IL
1999	Reviewer, Critical Care Medicine
1999-Pres.	Neurosurgery Residency Committee, Rush Medical College, Chicago, IL

- 2000-Pres. Scientific advisory committee, Epilepsy Society of Greater Chicago, Chicago, IL
- 2001-Pres. O.R. Quality Improvement Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002 Nominating Committee, Rush Medical College, Chicago, IL
- 2002 Joint Council of State Neurosurgical Societies- Delegate
- 2002 Marketing and Growth Task Force, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002 Strategic Planning and Program Development Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002 Nominating Committee 2002, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002-2004 Neuroscience Strategic Planning Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002-2004 Neurologic and Orthopedic Institute of Chicago IRB Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002-2004 Chicago Institute of Neurosurgery and Neuroresearch Board of Directors, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002-2004 Chicago Institute of Neurosurgery and Neuroresearch Finance Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2002-Pres. Surgical Quality Improvement Committee, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- 2003-Pres. Consultant, Neurological Devices Panel of the Medical Devices Advisor Committee, Center for Devices and Radiological Health, Food and Drug Administration. Washington D.C.
- 2005-2006 Operating room value analysis committee, Rush University Medical Center
- 2006 CURE (Citizens United for Research in Epilepsy) Scientific Review Board

2006	Congress of Neurological Surgeons- Annual Meeting Local Host and Arrangements
2006-07	Original Science Committee CNS annual meeting 2007
2006-Pres	Physical medicine and rehabilitation chair search committee- Rush University Medical Center
2006-Pres	Rush Transformation committee
2006-Pres	Rush Health Associates Finance Committee
2007	Education Committee Congress of Neurological Surgeons
2007	Rush Associates Board Member
2007	Surgical Services Executive Committee- Rush University Medical Center
2007	CSNS delegate AANS meeting Washington DC
2007	Practical Course Committee, North American Skull Base Society, Chicago
2007	Epic ambulatory care committee, Rush University Medical Center
2007	Interventional Platform Committee, Rush University Medical Center
2007	CSNS delegate CNS meeting, San Diego, Ca
2007-8	Board Remediation subcommittee head, CNS
2007-8	CNS University functional neurosurgery moderator
2007	Membership committee, ACA CNS Tumor section
2007	Academic-Community Alliance, Tumor section
2006	Workforce Committee, CSNS
2007	Publications Committee, CSNS
2007	Trauma and Acute Care Committee, CSNS
2008	Scientific Program Committee, Neurosurgical Society of America
2008	Scientific Program Committee, CNS

2008-10 Scientific Program Committee, American Epilepsy Society

2008 CNS Committee on Best Practices and Ethical Standards

2007 Consensus Program Committee, CNS

2007 GME Plastic surgery fellowship review committee- Rush University

2008 CNS Consensus Session Vice Chairman and Implementation Head

2007 GME Committee Rush University

2008 GME Vascular Neurology internal review committee

2008 CSNS delegate, AANS annual meeting

2008 Dean of resident education, CNS University

2008 Chairman, Diagnostic Radiology search committee RUMC

2008 Medical executive committee, RUMC

2008 Emergency neurosurgical care task force- AANS Washington committee

2008 Guest Board Examiner American Board of Neurological Surgery 11/08

2008-9 Abstract Review subcommittee American Epilepsy Society

2008-9 CNS scientific program strategic planning/oversight subcommittee

2008-9 CNS Consensus Session Chairman

2008 Vice-Chairman Education Committee CNS

2008 Reviewer, *Neurosciences*

2008 CSNS Workforce committee, Vice-Chairman

2008 Reviewer, *Neurology*

2009 Reviewer, *AANS Neurosurgeon*

2009 CNS Scientific Program Committee 2010

2009 CNS Scientific Program Committee- Strategic Planning Committee 2010

2009	CNS Consensus Session 2010 senior advisor
2009	CNS General Scientific Program Session Chairman 2010
2009	CNS Annual Meeting Abstract Committee
2009	Neurosurgical Society of America Membership Committee
2010	<i>AANS Neurosurgeon</i> Editorial Board
2011	Rush University Executive Cancer Committee CNS Ethics Committee
2012	CNS Executive Committee
2013	Membership committee of Neurosurgical Society of America
2014	<b>Scientific Program Committee, AANS-abstract reviewer</b>
2015	<b>Co-Chair Rush Cancer Program Clinical Research</b>
2016	<b>Reviewer, Surgical Neurology International</b>

## **PUBLICATIONS**

### **Peer Reviewed Articles/Invited Articles**

1. Byrne R, Von Roenn K, Whisler W: Intramedullary spinal cord abscess: A report of two cases and a review of the literature. *Neurosurgery* 35(2): 321-326, August 1994.
2. Byrne R, Hayes E, George T, McLone D: Operative resection of 100 spinal lipomas in infants less than one year of age. *Pediatric Neurosurgery* 23 (4): 182-186, 1995.
3. Sramek J, Byrne R: Managing sports-related concussion. *Your Patient and Fitness* 12 (6): 31-34. 1998.
4. Knepper PA, Mayanil CS, Hayes E, Goosens W, Byrne RW, McLone PG. The presence of transcription factors in chick albumin, yolk and blastoderm. *In Vitro Cellular and Developmental Biology, Animal*. 35 (6); 357-63, 1999, June.

5. Smith MC, Byrne R: Multiple subpial transection in neocortical epilepsy: Part I. *Advances in Neurology*, vol 84, 621-34, 2000
6. Fathallah H, Rigen M, Zhao L, Bansal K, He B, Engelhard H, Cerullo L, Von Roenn K, Byrne RW, Munoz L, Rosseau G, Glick R, Lichtor T, DiSalvo E. Mathematical modeling of noise and discovery of genetic expression classes in gliomas. *Oncogene* 21:7164-7174, 2002.
7. Fathallah H, He B, Zhao L, Engelhard H, Cerullo L, Lichtor T, Byrne R, Munoz L, Von Roenn K, Rosseau G, Glick R, Chen S, Khan F: Genomic expression discovery predicts pathways and opposing functions behind phenotypes. *J. Biol. Chem*, 10.1074, 2003
8. Lad N, Jobe K, Polley J, Byrne R: Munchausen syndrome in postoperative cranial neurosurgery. *Neurosurgery*, 55(6):E1459-E1462, Dec 2004.
9. Byrne, RW: Convection enhanced delivery. A novel approach to drug delivery. *Journal of the American Brain Tumor Association* p1-4. Nov 2004
10. Sani S, Jobe K, Byrne RW: Successful repair of an intracranial nailgun injury to the parietal region and the superior sagittal sinus. *Journal of Neurosurgery*, 103(3):567-9 Sept. 2005.
11. Byrne R, Bagan B: Academic Center ERs Bear the Brunt of Chicago-Area Transfers. Peer reviewed research section, *AANS Neurosurgery Bulletin*, 13(4):14-15. Feb. 2005
12. Cosgrove G, Delashaw J, Grotenhuis A, Tew J, VanLoveren H, Spetzler R, Payner T, Rosseau G, Shaffrey M, Hopkins LN, Byrne R, Norbash A: Safety and Efficacy of a Hydrogel Sealant (Duraseal) for Watertight Dural Repair. *Journal of Neurosurgery*. 106 (1):52-8. Jan 2007
13. Byrne RW, Bagan B, Slavin K, Curry D, Koski T, Origitano TC: Neurosurgical Emergency Transfers to Academic Centers in Cook County. A Prospective, Multicenter Study. *Neurosurgery*. 62(3):709-716 March, 2008
14. Byrne RW: Complications of temporal lobectomy for medically intractable epilepsy. *CNS University of Neurosurgery Epilepsy* section. Dec 2007.
15. Kunwar S, Westphal M, Medhorn M, Ram Z, Sampson J, Byrne R, Land FF, Tatter S, Piepmeier JM, Barnett G, Vogelbaum M, et, al: Results from PRECISE: A randomized phase 3 study in patients with first recurrent GBM comparing CB administered via CED with Gliadel wafers. *Neuro Oncol* 9:565, 2007

16. Lewis P, Rue J, Byrne R, Capiola D, Steiner M, Bach B: Cervical Syrinx as a cause of Shoulder Pain in Two Athletes. *American Journal of Sports Medicine* 36(1):169-72 January 2008
17. Byrne RW, Jobe KW, Smith MC, Kanner A, Bergen D, Palac S, Balabanov A, Ajiboye N, Takagi I, Whisler W: Epidural Cylinder Electrodes for Presurgical Evaluation of Intractable Epilepsy: *Surgical Neurology* Aug;70(2): 160-4 2008
18. Sani S, Boco T, Cochran E, Patel AJ, Lewis S, Byrne, R: Acute Disseminated Encephalomyelitis Caused by Hemostatic Agent in the Brain. *Journal of Neurosurgery* 109(1):149-52 June 2008.
19. Boco T, Aaleaes S, Musacchio MJ, Byrne R, Cochran E. Papillary Tumors of the pineal region. 28(1):87-92 *Neuropathology*, Feb, 2008.
20. Seress L, Abraham H, Horvath Z, Doezi T, Jansozky J, Klemm J, Byrne R, Bakay R: A proportion of mossy cells of the hippocampal dentate gyrus survives decades of seizures in human mesial temporal lobe epilepsy. *Journal of Neurosurgery* 111:1237-1247, Dec. 2009.
21. Buvanendran A, Byrne RW, Kari M, Kroin J: Occult Cervical (C1-C2) Dural tear causing recurrent subdural hematomas. Repair with cervical epidural blood patch. *Journal of Neurosurgery-Spine* 9(5):483-7. November 2008
22. Byrne RW, Bagan B: Improving emergency neurosurgical care: regionalization or acute care surgery? Peer reviewed research section, *AANS Neurosurgeon* Vol 17:No4, 42-44. April 2009.
23. Byrne RW, Smith A, Ruban D, Roh D, Kanner A: Occult defects of the middle fossa floor with encephalocele in patients with temporal lobe epilepsy *World Neurosurgery* Vol. 73, Issue 5, Pages 541-546 May 2010
24. Kanner A, Byrne RW, Chicharro A, Wu J, Frey M: A lifetime psychiatric history predicts a worse postsurgical seizure outcome following an anterotemporal lobectomy. *Neurology*; 72;793-799. March 2009
25. Ruban D, Smith MC, Kanner A, Whisler WW, Byrne RW: Chronic epilepsy related to temporal lobe tumors: Long term surgical outcome. *Neurosurgery Focus*. Aug;27(2):E6 2009
26. Musacchio MJ Jr, Smith AP, McNeal CA, Munoz L, Rothenberg DM, von Roenn KA, Byrne RW: Neuro-Critical Care Skills Training Using a Human Patient Simulator. *Neurocrit Care*. 2010 Oct;13(2):169-75.

27. Boco,T, O’Leary S, Byrne RW, Whisler WW: History of Neurosurgery at Rush, *Neurosurgery*; 67(4):1036-43. Oct 2010.
28. Rosenow J, Byrne R: Individual Practice Options for Insurance Plan Participation *CNS Quarterly* 10(2):25-26. Oct. 2009
29. Dohrmann G, Byrne R: Advances in neurovascular and spine surgery, epilepsy surgery, surgery for movement disorders and intraoperative imaging. *Medical Principles and Practices* 2010;19(5):328-9. 2010 Jul 14.
30. Byrne RW, Bagan B, Bingaman W, Anderson, Selden N,: Emergency neurosurgical care solutions: Acute care surgery, regionalization, and the neurosurgeon. Results of the 2008 CNS Consensus Session, *Neurosurgery* Vol 68, issue 4:1063-1068 April 2011
31. Vitaz T, Byrne RW: Congress of Neurological Surgeons 2008 Consensus Session 4: Physician Reentry to the workforce *CNS Quarterly* 11(1): 37-38 January 2010.
32. Mangubat E, Byrne RW: Intratumoral Hemorrhage of Petroclival Meningioma *Skull Base* 20(6):469-474 March 2010.
33. Marsh J, Wendt J, Herskovic A, Gielda B, Russell W, Byrne RW: High grade glioma relationships to the neural stem cell compartment: a retrospective review of 104 cases. *International Journal of Radiation Oncology, Biology, and Physics*. (Vol. 78, Issue 3, pp 1-7) May 16 2011.
34. Marvin A Rossi, Glenn Stebbins, Christopher Murphy, David Greene, Spencer Brinker, David Sarcu, Aaron Tenharmel, Travis Stoub, Michael A Stein, Thomas J Hoepfner, Richard W Byrne, Michael E Moseley, Roland A Bammer, Steve Bild, Jennifer Dennis, Nichole Arnett, Antoaneta Balabanov, Donna Bergen, Andres M Kanner, Michael C Smith: Predicting White Matter Targets for Direct Neurostimulation Therapy [doi:10.1016/j.eplepsyres.2010.07.010](https://doi.org/10.1016/j.eplepsyres.2010.07.010) 91(2-3):176-86. 2010 Aug 21 *Epilepsy Research* August 2010.
35. John H. Sampson, M.D., Ph.D., M.H.Sc., Gary Archer, Ph.D., Christoph Pedain, Ph.D., Eva Wembacher-Schröder, Manfred Westphal, M.D., Ph.D., Sandeep Kunwar, M.D., Ph.D., Michael A. Vogelbaum, M.D., Ph.D., April Coan, M.P.H., James E. Herndon II, Ph.D., Raghu Raghavan, Ph.D., Martin L. Brady, Ph.D., David A. Reardon, M.D., Allan H. Friedman, M.D., Henry S. Friedman, M.D., M. Inmaculada Rodríguez-Ponce, Ph.D., Susan M. Chang, M.D., Stephan Mittermeyer, David Croteau, M.D., Raj K. Puri, M.D., Ph.D., and PRECISE Trial Investigators Poor drug distribution as a possible explanation for the results of the PRECISE trial. Clinical article. *J Neurosurg*. 2010 Aug;113(2):301-9.

36. **Erwin Zeta Mangubat, MD, MPH<sup>1</sup> Lisa Pitelka, MD<sup>2</sup>Guy J. Petruzzelli, MD, PhD, MBA<sup>3</sup> Richard W. Byrne, MD<sup>1</sup> Frontal sinus schwannoma: case report and review of the literature *Skull Base* 1(1):017-022 2011**
37. Sandeep Kunwar, Susan Chang, Manfred Westphal, Michael Vogelbaum, John Sampson, Gene Barnett, Mark Shaffrey, Zvi Ram, Joseph Piepmeier, Michael Prados, David Croteau, Christoph Pedain, Pamela Leland, Syed R. Husain, Bharat H. Joshi, Raj K. Puri and for the PRECISE Study Group‡ Phase III randomized trial of CED of IL13-PE38QQR vs Gliadel wafers for recurrent glioblastoma *Neuro Oncol* (2010) 12 (8): 871-881.
38. Shannon L, O'Toole J, Carl R, Weber C, Byrne RW: Non-operative management of a large lumbar subdural hematoma in a boxer. Accepted, in press, *Neurosciences* Feb. 2011
39. Sani S, Smith A, Kanner A, Morrin M, Palac S, Bergen D, Balabonov A, Smith M, Whisler W, Byrne R: Medically intractable temporal lobe epilepsy in patients with normal MRI: Surgical outcome in twenty-one consecutive patients. *Seizure* 20(6):475-9 March 2011
40. Wallace D, Byrne RW, Ruban D, Cochran E, Whisler WW: Temporal lobe pleomorphic xanthroastrocytomas and chronic epilepsy: Long term surgical outcome. PMID: 21741164 *Clin Neurol and Neurosurgery*. June 2011.
41. Byrne RW, Jenkins S, Litvak Z, Mutchnick, I, Elsham R, Stroink A: Outsourcing Neurosurgery: Medical Tourism and Global Solutions-competition and Opportunity Peer reviewed research section, accepted, in press *AANS Neurosurgeon* 2010
42. Byrne, RW: Amygdalohippocampectomy In the Loupe, *AANS Neurosurgeon* 2011
43. **Byrne, RW: Microvascular decompression for hemifacial spasm, In the Loupe, *AANS Neurosurgeon*, Vol 20:1 2011**
44. Kellogg R, Byrne RW: Resection of low grade glioma of the precentral gyrus using cortical and subcortical stimulation mapping, In the Loupe, *AANS Neurosurgeon*, 2011
45. **Kellogg R, Byrne RW: Insular abscess-transsylvian approach, In the Loupe, *AANS Neurosurgeon*, Vol 20:2 September 2011**
46. **Morrell M and RNS System Investigators: Responsive Cortical Stimulation for the treatment of medically intractable partial epilepsy. *Neurology* 2011;77;1295 DOI 10.1212**

47. Topical papaverine for treatment of intraoperative manipulation vasospasm In the Loupe *AANS Neurosurgeon* June 2011.
48. **Lad N, Shannon L, Byrne RW: Incidental Aneurysms in Epilepsy Surgery: Report of 3 cases and a review of the literature.** (doi: 10.3109/02688697.2011.601819) *Brit. Journal of Neurosurgery* Oct. 2011.
49. Somenak M, Petruzzelli G, Byrne R, Origitano TC: Surgical Outcomes in Olfactory Neuroblastoma Submitted *Laryngoscope* June 2011
50. Musacchio M, Mitchell B, Kapadia S, Patel N, Byrne RW: Simultaneously symptomatic presentation of a meningioma and a contralateral glioblastoma multiforme. Submitted to *Clinical Neurology and Neurosurgery*, Aug 2011.
51. Mangubat E, Wilson T, Patel N, Smith A, Byrne R: Assimilation of the atlas complicating Chiari I Malformation. Submitted to *World Neurosurgery* July 2011
52. Boco T, Johnson AK, Rivas FF, Ahmed S, Byrd S, Byrne RW: Newer MR imaging modalities in the evaluation of typical and atypical intracranial meningiomas. Submitted to *J Neuroradiology* Sept 2011.
53. Dmitry Ruban, MD; Richard W. Byrne, MD; Andres Kanner, MD; Michael Smith, MD; Elizabeth J. Cochran, MD; David Roh, BS; Walt W. Whisler, MD, PhD: Temporal Lobe Gangliogliomas Associated with Chronic Epilepsy: Long-Term Surgical Outcome. Submitted, June 2011
54. Marsh J<sup>\*</sup>, Herskovic A<sup>\*</sup>, Byrne R<sup>@</sup>, Godbole R<sup>^</sup>, Smart J<sup>\*</sup>, Turian J<sup>\*</sup>: Temporal Lobectomy for High Grade Gliomas: Impact on Outcomes and Implications for Postoperative Radiation Treatment Field Design. Submitted to *International Journal of Radiation Oncology, Biology, and Physics* Jan 2011
55. James C. Marsh, M.D.<sup>\*</sup>, Aidnag Diaz, M.D.<sup>\*</sup>, Julie A. Wendt, M.D.<sup>#</sup>, Benjamin T. Giolda, M.D.<sup>\*</sup>, Arnold M. Herskovic, M.D.<sup>\*</sup>, and Richard Byrne, M.D: Involvement of the neural stem cell compartment by low grade gliomas: a retrospective review of 80 cases: Submitted to *International Journal of Radiation Oncology, Biology, and Physics*. April 2011.
56. **Moazzam, A, Ghods A, Byrne RW: Deep Brain Stimulator Lead Displacement Secondary to Ipsilateral Selective Amygdalohippocampectomy: Case Report. Submitted to *Neuromodulation* Oct 2011**

57. Falowski S, Byrne RW: Corpus Callosotomy with the CO2 laser. Submitted to *Stereotactic and Functional Neurosurgery* March 2011.
58. Falowski S, Devries J, Wallace D, Kanner A, Smith MC, Byrne RW: Tailored temporal lobectomy in a consecutive series of 221 patients. The effect of extent of resection. Accepted, in press *Neurosurgery* August 2011
59. **Ghods A, Munoz L, Byrne RW: Cerebellar Metastasis, surgical outcomes. Accepted in press *Surgical Neurology International* Sept 2011**
60. Ghods A, Wallace D, Kanner A, Smith MC, Byrne RW: Panic aura in patients with mesial temporal lobe tumors. Submitted to *Epilepsy and Behavior*. Sept 2011
61. Falowski S, Devries J, Wallace D, Kanner A, Smith MC, Byrne RW: Long term outcome of patients after subdural electrode placement that do not undergo resective surgery. Submitted to *Journal of Neurosurgery* May 2011
62. Falowski S, , Byrne R:Subdural electrode.....
63. **Vannemreddy P, Byrne RW: Advances and limitations of cerebral cortex functional mapping. *Contemporary Neurosurgery* Vol 33(25):1-7 Dec 2011.**
64. **Kellogg R, Byrne RW: Trans-lamina terminalis approach to 3<sup>rd</sup> ventricular craniopharyngioma. In the Loupe, AANS Neurosurgeon. Nov 2011.**
65. **Ren Z, Wang Y, Duan T, Liggett T, Loda E, Bramha S, Goswami R, Byrne R, Stefoski D, Javed A, Miller S, Balabanov R: Molecular mimicry between human aquaporin-4 and bacterial aquaporin-Z: A potential trigger for neuromyelitis optica. Submitted to J Clin Invest. Nov 2011**

### **Book Chapters**

1. Hurley T, Byrne R: Neurosurgery. In: *Rush Review of Surgery*, 3<sup>rd</sup> Edition, Deziel D, Bines S. (eds). W.B. Saunders 1998.
2. D'Angelo C, Byrne R: Mild head trauma. In *Neurology for the Non-Neurologist*, 4<sup>th</sup> Edition, Wiener W., Goetz C. (eds). Lippincott 1998.
3. Byrne R: Mental status changes. In: *Surgical Oncology: An Algorithmic Approach*, Saclarides T, Millikan K, Godellas C. (eds). New York, Spinger-Verlag 1998.

4. Byrne R, Whisler W: Multiple subpial transections. In: *Operative Neurosurgery*, Schmidek H, Sweet W. (eds). W.B. Saunders 1999.
5. Smith MC, Kanner A, Byrne R: Multiple subpial transection and corpus callosotomy. In: *The Treatment of Epilepsy*, Wylie E (ed). Lea and Febiger 2000.
6. Byrne R, Whisler W: Multiple subpial transections: In: *Neurological Surgery, 4<sup>th</sup> Edition*, Youmans JR (ed), Philadelphia, W.B. Saunders 2000.
7. Byrne R, Foroohar M: Intradural- extramedullary tumors of the subaxial cervical spine. In: *Atlas of Neurosurgical Techniques*. Thieme, 2006.
8. Byrne R, Hurley T: Neurosurgery. In: *Rush Review of Surgery, 4<sup>th</sup> Edition*, Deziel D, Bines S. (eds). W.B. Saunders 2004.
9. Byrne R, Whisler W: Multiple subpial transections. In: *Operative Neurosurgery*, Schmidek H, Sweet W. (eds). W. B. Saunders 2004.
10. Smith MC, Kanner A, Byrne R: Special Surgical Procedures in Epilepsy: Multiple subpial transections and corpus callosotomy. In: *The Management of Epilepsy, 4<sup>th</sup> Edition*, Wylie E. (ed). Lea and Febiger 2006.
11. Smith MC, Byrne R: Is epilepsy surgery useful in Landau-Kleffner Syndrome? In: *Issues and Controversies in Epilepsy Surgery*, Miller J, Silbergeld D. (eds). Marcel Dekker 2004.
12. Byrne R, Whisler, W: Multiple Subpial Transections: Neurological Surgery, Fifth Edition, Youmans JR (ed), Philadelphia, W.B. Saunders 2003.
13. Kanner AM, Balabanov AJ, Hoepfner TP, Byrne R. Surgical treatment of the Landau Kleffner Syndrome. Lippincott, Williams and Wilkins, 2007, in press.
14. Smith MC, Byrne RW, Kanner A. Other surgeries for medically intractable epilepsy: MST and hypothalamic hamartoma. Shorvon, Engel (ed). 3<sup>rd</sup> Edition 2008. In Press.
15. Byrne RW, Whisler WW. Multiple Subpial Transections: In *Neurological Surgery 5<sup>th</sup> Edition*. Youmans, JR. (ed). Philadelphia WB Saunders 2010 In press.
16. Smith MC, Kanner A, Byrne RW: Corpus callosotomy and multiple subpial transections. In *The Management of Epilepsy 5th Edition*. Wylie E. editor. Lea and Febiger. Philadelphia 2010.
17. Smith A, Byrne RW: Neurosurgery In *Rush Review of Surgery, 5<sup>th</sup> edition*. Deziel D, Bines, S (eds) W. B. Saunders in press 2010

18. Connolly P, Umemura A, Baltuch G, Byrne R: Topectomy and Multiple Subpial Transections. In Youmans JR, Winn R (ed). Philadelphia WB Saunders Chapter 67:1-10. 2011

### **Abstracts**

1. Knepper, PA, Mayanil CSK, Byrne RW, Goosens W: Pax 3 transcription factor binds to Hyaluranon. *Investigative ophthalmology and visual science*, March 1995, vol 36, no. 4.
2. Byrne R, Whisler W, Kanner A, Smith M: Epidural strip monitoring for evaluation of intractable epilepsy. American Association of Neurological Surgeons, San Francisco, April 2000.
3. Byrne RW, Smith M, Kanner A, et al. Presurgical intracranial monitoring with epidural cylindrical electrodes. *Epilepsia* 2000; 41 (Suppl7): 79
4. Ristanovic RK, Chang B, Leurgans S, Bergen D, Kanner A, Smith MC, Byrne RW, Whisler WW, Hung E, Smith L, Frey M: Vagus nerve stimulation for treatment of epilepsy: Rush Epilepsy Center's Experience. American Epilepsy Society, Los Angeles, Dec 2000.
5. Kanner AM, Tilwalli S, Palac S, deToledo-Morrell L, Leurgans S, Smith MC, Byrne R, Bergen D, Whisler WW: Hippocampal resection in non-lesional temporal lobe epilepsy with and without hippocampal atrophy: A comparative Study. American Epilepsy Society/ and American Clinical Neurophysiology Society Annual Meeting. December, 2001.
6. Byrne RW, Kanner A, Smith MC, Whisler W. Epidural Cylinder Electrodes for Monitoring of Intractable Epilepsy. Congress of Neurological Surgeons Annual Meeting. October 2003.
7. Lad NP, Palac S, Polley J, Byrne R: Munchausen Syndrome in Postoperative Cranial Neurosurgery. Congress of Neurological Surgeons Annual Meeting. Oct. 2003.
8. Byrne R, Lad NP, Jobe K, Kanner A, Smith M, Ajiboye N, Takagi I: Management of Incidental, Unruptured Aneurysms in Temporal Lobe Epilepsy Surgery. American Association of Neurological Surgeons Annual Meeting. Orlando, May 2004.
9. Sturaitis M, Ford E, Palac S, Smith M, Byrne R, Cerullo L: Effect of Dexmedetomidine on Operative Conditions and Electrographic Responses

- During Asleep Craniotomy for Seizure Focus Resection. Congress of Neurological Surgeons Annual Meeting. Oct. 2003.
10. Tredway T, Jobe K, Byrne R: Recurrence of Germinoma Along the Operative Tract. Congress of Neurological Surgeons Annual Meeting. Oct. 2003
  11. Jobe K, Byrne R: Post-Surgical Seizure Outcome and Neuropathological Findings in Patients with Refractory Temporal Lobe Epilepsy and A Normal MRI. American Society for Stereotactic and Functional Neurosurgery Quadrennial Meeting. New York, NY. May 2003.
  12. Functional Language Recovery Following Surgical Treatment of Landau-Kleffner Syndrome. Kanner A, Byrne R, VanSlyke P, Smith M, Grote C, Whisler W, Morrell, F American Association of Neurology Annual Meeting 2005.
  13. Sturaitis, MK, Ford, EW, Palac, SM, Smith, MC, Byrne, RW: Effect of Dexmedetomidine on operative conditions and electrocorticographic responses during asleep craniotomy for seizure focus resection. American Epilepsy Society. Boston, Dec 2003. *Epilepsia* 44 Suppl. 9:331(Abst. 2.454), 2003
  14. Byrne RW, Smith MCS, Kanner A, Bergin D, Palac S, Balabanov A, Rossi M, Lad N, Ajiboye N, Takagi I, Whisler W: Long-term follow-up of subpial transection without cortical resection in the treatment of focal onset epilepsy. American Epilepsy Society, New Orleans, Dec 2004.
  15. Kanner AM, Byrne R, Tilwalli S, Smith MC, et al. A presurgical history of depression is associated with a worse postsurgical seizure outcome following a temporal lobectomy. *Neurology*, 2004; 62(Suppl 5):A389.
  16. Kanner AM, Tilwalli S, Byrne R. Psychiatric and neurologic predictors of postsurgical psychiatric complications following a temporal lobectomy. *Neurology*, 2005; 64(Suppl):1:A-358.
  17. Kanner AM, Byrne R, Van Slyke P, et al. Functional language recovery following a surgical treatment of Landau-Kleffner Syndrome. *Neurology*, 2005; 64(Suppl 1):A-359.
  18. Kanner AM, Frey R, Byrne R. Predictors of postsurgical gainful employment following an anterotemporal lobectomy. American Academy of Neurology, 2005.
  19. Byrne RW, Kanner A, Smith MC, Jobe K, Bergen D, Palac S, Balabanov, A, Hoepfner T, DeToledo-Morrell L, Lad N, Ajiboye NA, Takagi I, Whisler, W: Medically intractable temporal lobe epilepsy: surgical outcome in 24 consecutive patients with normal MRI. Neurosurgical Society of America, Santa Fe, 2004.

20. Balabanov A, Byrne R, Smith M, Bergen D, Palac S, Rossi M, Hoepfner T, Kanner A: Post-Surgical Seizure Outcome of Frontal Lobectomy. American Epilepsy Society, New Orleans, Dec 2004
21. Byrne R, Bagan B. Neurosurgical Emergency Coverage in Cook County. Neurosurgical Society of America. Orlando Fla. June 5<sup>th</sup> 2005.
22. Byrne R, Jobe K, Lad N: Incidental Aneurysms in Epilepsy Surgery. A Report of Three Cases and a Review of the Literature. Congress of Neurological Surgeons. Boston, Mass. 2005
23. Grote C, Akdag S, Nelson E, Byrne R, Balabanov A, Bergen D, Kanner A, Palac S, Rossi M, Smith M: Memory Outcome Following Tailored Epilepsy Surgery. INS Boston 2005
24. Rossi M, Hoepfner T, Kanner A, Byrne R, Balabanov A, Palac S, Smith M: Noninvasive presurgical estimation of cortical activation for optimizing intracranial electrode placement for responsive neurostimulation in refractory epilepsy. American Epilepsy Society annual meeting. 2005.
25. Rossi M, Stoub T, Hoepfner T, Kanner A, Balabanov A, Palac S, Bergen D, Byrne R, Smith M: Solving the forward solution for pediatric frontal lobe epileptic sources by seeding the source localization algorithm with coordinates derived from SISCOM data. American Epilepsy Society annual meeting 2005.
26. Byrne R, Patel N, Smith MC, Kanner A, Jobe K, Morrin M: Tailored Temporal Lobectomy for Medically Intractable Epilepsy. Long term outcomes in a series of 140 consecutive patients. Neurosurgery 59(2):481, August 2006
27. Boling W, Warf B, Palade A, Mujuru P, Andermann F, Wabulya A, Longoni N, Bittar R, Fabinyi G, Byrne R Pharmacoresistant Temporal Lobe Epilepsy in Children, Treatment in a Severely Underdeveloped African Region Congress of Neurological Surgeons, Chicago, Il Oct. 2006.
28. Kanner A, Byrne R, Chicharro A, Frey M: A lifetime history of depression is the sole predictor of post-surgical auras in seizure-free patients that underwent an antero-temporal lobectomy. American Epilepsy Society Annual meeting 2006.
29. Byrne R, Smith MC, Kanner AM, Sani S, Whisler W. Multiple subpial transection (MST) without resection: Longer-term follow-up in patients with medically intractable epilepsy. Congress of Neurological Surgeons. Chicago, Il Oct. 2006.
30. Musacchio M, Von Roenn KA, Munoz L, Byrne RW. Neurosurgical Critical Care Skills Training Using a Human Patient Simulator. Congress of Neurological Surgeons. Chicago, Il Oct. 2006.

31. Boco T, Byrne RW. Tumors of the spinal cord and canal – problems encountered. Complications of Spine Operations CME annual course. Chicago Neurosurgical Society, 2006.
32. Goodman R, McKhann G, Spencer D, Vives K, Gwinn R, Marsh R, Wharen R, Zimmerman R, Schwartz T, Smith J, Jallo G, Byrne RW. Safety and Preliminary Efficacy of a Responsive Neurostimulator (RNStm) for the Treatment of Intractable Epilepsy in Adults. Congress of Neurological Surgeons. Chicago, Il. Oct. 2006.
33. Byrne RW, Bagan BT, Slavin K, Curry D, Koski T. Origitano T. Prospective, Multicenter Evaluation of Neurosurgical Emergency Transfers in Cook County. Neurosurgery. 59(2):472-473, Aug. 2006.
34. Kanner AM, Byrne R, Smith MC, Balabanov AJ, Frey M. Does a life-time history of depression predict a worse postsurgical outcome following a left temporal lobectomy? Ann Neurol 2006; 60 (suppl 10): S19.
35. Kanner AM, Byrne R, Smith MC, Frey M. Depression is a predictor of persistent auras in seizure-free patients following an antero-temporal lobectomy. American Regional Epilepsy Congress. San Diego, CA, 2006
36. Boling W, Mujuru P, Warf B, Gross D, Bittar R, Fabinyi G, Byrne R, Medically intractable temporal lobe epilepsy in children; results from the first year of a comprehensive epilepsy program in east Africa. American Epilepsy Society annual meeting. 2006.
37. Smith J. R., Murro, A.M., Park, Y.D., Politsky, J.D., Fountas, K.N., Lobel, D.A., Jenkins, P. D., Goodman, R., McKhann, G., Spencer, D., Vives, K., Gwinn, R., Marsh, R, Wharen, R., Zimmerman, R., Schwartz, T., Jallo, G., Elisevich, K., Byrne, R., Carey, M., and Morell, M. Follow-up results with a closed loop stimulation system in the control of focal epilepsy. Annual meeting of the American Society for Stereotactic and Functional Neurosurgery (ASSFN)-Boston, June 1-4, 2006.
38. Richard W. Byrne, Andres M. Kanner, Adam P. Smith, Sepehr B. Sani, Matthew Morrin, Susan Palac, Donna C. Bergen, Antoaneta Balabonov, Michael Smith, Walter W. Whisler: Medically Intractable Temporal Lobe Epilepsy in Patients with Normal MRI: Surgical Outcome in twenty-four consecutive patients. American Association of Neurological Surgeons Annual Meeting, Chicago, April 26<sup>th</sup> 2008.
- 39. Medically Intractable Temporal Lobe Epilepsy in Patients with Normal MRI: Surgical Outcome in Twenty-Four Consecutive Patients: Adam P. Smith, MD; Richard W. Byrne,MD; Andres Kanner, MD; Sepehr Sani,MD; Matthew Morrin;**

- Susan Palac, MD; Donna Bergen, MD; Antoaneta Balabanov, MD; Michael Smith, MD; Walter W. Whisler, MD, PhD American Association of Neurological Surgery Annual Meeting Chicago, II April 2008
40. Complications of Subdural Electrode Epilepsy Recording: Larry R. Shannon, II, MD; Richard W. Byrne, MD; Michelle Cecchini, BS; Matthew Morrin; George S. Selas, BS; Andres Kanner, MD; Michael Smith, MD American Association of Neurological Surgeons Annual Meeting Chicago II. April 2008.
  41. Sani S, Smith A, Kanner A, Morrin M, Palac S, Bergen D, Balabanov A, Smith M, Whisler W, Byrne R: Medically intractable temporal lobe epilepsy in patients with normal 1.5T MRI: Surgical outcome in twenty-four consecutive patients. *Neurosurgery* March 2008
  42. Kanner AM, Frey M, Byrne R: Predictors of post surgical gainful employment following epilepsy surgery for the treatment of refractory temporal lobe epilepsy. 66 (suppl 2) A322 *Neurology* 2006
  43. Rossi M, Hoepfner T, Stoub T, Kanner A, Byrne R, Bergen D, Smith M: Preoperative depth lead placement planning to activate distant cortex replicates visual aura semiology during responsive neurostimulation (RNS). American Epilepsy Society annual meeting 2006.
  44. Antoaneta Balabanov MD, Richard Byrne MD, Michael Smith MD, Donna Bergen MD, Susan Palac MD, Marvin Rossi MD, Tomas Hoepfner PhD, Travis Stoub PhD and Andres M. Kanner MD: Does the extent of resection of temporal lateral neocortex matter in the post-surgical seizure outcome of antero-temporal lobectomies? American Epilepsy Society Philadelphia, Dec. 2007
  45. Boling W, Warf B, Palade A, Mujuru P, Andermann F, Wabulya A, Longoni N, Bittar R, Fabinyi G, Byrne R A model for evaluation and surgical treatment of medically intractable epilepsy in severely underserved settings. American Epilepsy Society Annual Meeting, Philadelphia, Pa. Dec 3, 2007
  46. Rossi, MA, Stein M, Stebbins G, Byrne RW, Stoub T, Hoepfner T, Moseley M, Bammer R, Shields C, Rostescu R, Balabanov A, Bergen D, Kanner A, Palac S, Smith M: Development of an intracranial lead placement planning system for strategically influencing the epileptic circuit. American Epilepsy Society Annual Meeting, Philadelphia, Pa. Dec 3, 2007.
  47. Boco T, Ahmed S, Rivas F, Byrd S, Byrne RW: Differentiating MRI characteristics of typical and atypical meningiomas. AANS annual meeting, Chicago II April 28<sup>th</sup>, 2008

48. Ruban D, Smith MC, Kanner A, Byrne RW: Temporal Lobe Tumoral Chronic Epilepsy: Long-Term Surgical Outcome CNS annual meeting. Orlando, Florida. September 21<sup>st</sup> 2008.
49. Travis R. Stoub, Ph.D.<sup>1</sup>, Matthew Morrin<sup>2</sup>, Changsheng Wang, M.D., Ph.D.<sup>1</sup>, Richard W. Byrne, M.D.<sup>2</sup> Quantifying Hippocampal Changes in Temporal Lobe Epilepsy American Academy of Neurology. 2008
50. Manuel Toledo, Antoaneta Balabanov, Richard Byrne, Michael Smith, Donna Bergen, Marvin Rossi, Thomas Hoepfner, Michael Stein, Travis Stoub, Andres Kanner: Postsurgical Outcome of Frontal Lobe Epilepsy. An Unexpected Finding. American Academy of Neurology. 2008
51. Subtracted activated SPECT validates depth lead placement in white matter for responsive neurostimulation therapy in refractory partial onset epilepsy: Marvin Rossi, T. Hoepfner, R. Byrne, D. Greene, A. Kanner, T. Stoub, M. Stein, A. Balabanov, D. Bergen. American Epilepsy Society Annual Meeting Seattle Dec 2008
52. Andres M. Kanner, Richard W. Byrne: Postsurgical Remission of Comorbid Presurgical Psychiatric Disorders Following an Anterotemporal Lobectomy. American Academy of Neurology 2009.
53. Dmitry Ruban, MD; Richard W. Byrne, MD; Andres Kanner, MD; Michael Smith, MD; Elizabeth J. Cochran, MD; David Roh, BS; Walt W. Whisler, MD, PhD Temporal Lobe Gangliogliomas Associated with Chronic Epilepsy: Long-Term Surgical Outcome. Congress of Neurological Surgeons Annual Meeting. 2009
54. SISCOM and Surgical Outcomes of Patients with Intractable Epilepsy David Wallace, Nicholas Cozzi, Marvin Rossi M.D. Ph.D., Manuel Toledo M.D., Richard Byrne M.D.
55. Temporal Lobe Pleomorphic Xanthoastrocytoma and Chronic Epilepsy: Long-Term Surgical Outcome David Wallace; Richard W. Byrne, MD; Dmitry Ruban, MD; Elizabeth J. Cochran, MD; David Roh; Walt W. Whisler, MD American Epilepsy Society Annual Meeting. Boston 2009.
56. .Somenek M, Petruzzelli G, Byrne R, Origiano TC: Surgical outcomes in Olfactory Neuroblastoma *Skull Base* 19, 10.1055 October 2009
57. Subtracted activated spect (SAS) validates propagation of direct neurostimulation therapy in double band heterotopia white matter: Marvin Rossi, O. Graf, T. Hoepfner, G. Stebbins, R. Byrne, T. Stoub, M. Stein, D. Bergen, A. Balabanov, A. Kanner and M. Smith American Epilepsy Society annual meeting Boston Dec 2009.

58. SISCOM and Surgical Outcomes of Patients with Intractable Epilepsy  
David Wallace, Nicholas Cozzi, Marvin Rossi M.D. Ph.D., Manuel Toledo M.D.,  
Richard Byrne M.D. American Association of Stereotactic and Functional  
Neurosurgery Annual Meeting New York 2010
59. Robert Goodman, Peter Weber, Thomas Witt, Robert Worth, Ryder Gwinn, Tony  
Whitworth, Joseph Smith, David Roberts, Charles Liu, Steve Glazier, Ashwini  
Sharan, James Leiphart, George Jallo, Kost Elisevich, Richard Byrne, Karl Sillay,  
William Bingaman, Robert Wharen, Daniel Yoshor, Robert Gross, William Elias,  
Jason Schwalb, Emad Eskandar, Richard Zimmerman, W. Richard Marsh, Werner  
Doyle, Ken Vives : Treatment of Medically Intractable Mesial Temporal Epilepsy  
with Responsive Brain Stimulation: Results of a Subset Analysis from the RNS®  
System Pivotal Investigation August 2010 - Volume 67 - Issue 2 - p 556  
doi: 10.1227/01.NEU.0000387033.77468.29
60. Richard W. Byrne MD, David Wallace, Andres Kanner MD, Michael C. Smith  
MD, Marvin Rossi MD, PhD, Bichun Ouyang PhD, Antoinetta Balabanov MD,  
Michael Stein MD, PhD, David Roh: Tailored Temporal Lobectomy for  
Medically Intractable Epilepsy: Predictors of Engel's Class I outcome. American  
Association of Stereotactic and Functional Neurosurgeons Annual meeting New  
York, NY June 13<sup>th</sup> 2010.
61. Byrne RW, Wallace D, Kanner A, Smith MC, Rossi M, Ouyang B, Balabanov A,  
Stein M, Bergen D: Tailored temporal lobectomy for medically intractable  
epilepsy: Effect of the extent of hippocampal resection. American Association of  
Stereotactic and Functional Neurosurgery annual meeting. New York, NY June  
13<sup>th</sup> 2010.
62. Memory outcome after tailored temporal lobe resection C. Grote, J. Zukerman,  
R. Byrne, M. Smith, A. Kanner Neuropsychology annual meeting Krakow,  
Poland. May 2010
63. Temporal lobectomy for medically intractable epilepsy: Effect of the extend of  
hippocampal resection in patients with hippocampal sclerosis and with normal  
pathology Academy of Neurological Surgeons Annual Meeting Nov 2010 Carmel  
Cal.

Involvement of the Neural Stem Cell Compartment by Low and  
High Grade Gliomas: A Retrospective Review of 80 Low Grade  
and 104 High Grade Tumors

International journal of radiation oncology,  
biology, physics [0360-3016] Marsh yr:2010  
vol:78 iss:3 pg:S282

64.

65. Memory and seizure outcome after tailored temporal lobe resection  
Grote C, Byrne R, Zukerman J, Smith M, Kanner A, Brook M. INS annual meeting Boston, Feb 2011
66. Risk Factors for Postoperative CSF Leak after Craniotomy  
André Grotenhuis, Richard W. Byrne, Randall Matthew Chesnut, Lawrence S. Chin, Garth Rees Cosgrove, Johnny B. Delashaw, Richard G. Ellenbogen, John G. Golfinos, Jeremy D.W. Greenlee, Stephen J. Haines, L. Nelson Hopkins, Jack Jallo, J. Paul Muizelaar, Anil Nanda, Alexander Norbash, Troy D. Payner, Gail Linskey Rosseau, Mark Edwin Shaffrey, Mitesh Vipin Shah, Robert F. Spetzler, John M. Tew, Harry R. Van Loveren, Martin E. Weinand, Jonathan A. White, Jack E. Wilberger CNS annual meeting 2010
67. Low Risk of Surgical Site Infection (SSI) after Craniotomy and the Use of the Duraseal™ Dural Sealant System for Prevention of CSF Leakage  
André Grotenhuis, Richard W. Byrne, Randall Matthew Chesnut, Lawrence S. Chin, Patrick J. Connolly, Garth Rees Cosgrove, Johnny B. Delashaw, Richard G. Ellenbogen, John G. Golfinos, Jeremy D.W. Greenlee, Stephen J. Haines, L. Nelson Hopkins, Jack Jallo, J. Paul Muizelaar, Anil Nanda, Alexander Norbash, Troy D. Payner, Gail Linskey Rosseau, Mark Edwin Shaffrey, Mitesh Vipin Shah, Robert F. Spetzler, John M. Tew, Harry R. Van Loveren, Martin E. Weinand, Jonathan A. White, Jack E. Wilberger Cns Annual meeting 2010.
68. Alterations in synaptic morphology in human epilepsy  
T.R. Stoub<sup>1</sup>, E. Ramos<sup>1</sup>, R.W. Byrne<sup>2</sup>, D.A. Nicholson Society for Neuroscience Annual Meeting 2011
- Venemreddy P, Byrne RW: AANS annual meeting Aril 2012 Miami
- Venemreddy.....

**Invited Presentations and Faculty**

1. Operative resection of 100 spinal lipomas in infants less than one year of age. Congress of Neurological Surgeons. October 1995
2. Head Trauma. Neurology for the non-neurologist, Chicago, Dec. 1997.
3. Surgical placement of the vagal nerve stimulator. Chicago symposium on vagal nerve stimulation for intractable epilepsy. Chicago, 1998
4. Tailored temporal lobectomy for intractable epilepsy. Loyola University Department of Neurosurgery Grand Rounds - Visiting Professor. January 1999.

5. Head Trauma. Grand Rounds, Department of Medicine, Oak Park Hospital, Oak Park, IL. 1998
6. Head Trauma. Neurology for the non-neurologist, Chicago, Dec. 1998
7. Intractable epilepsy associated with mesial temporal tumors. Rush-Presbyterian - St. Luke's Medical Center Neurology/Neurosurgery Grand Rounds. January 2000.
8. Epidural cylinder electrodes for evaluation of intractable epilepsy. Neurosurgical Society of America. Durango, CO. June 2000.
9. Byrne R, Smith M, Kanner A, Whisler W: Presurgical Intracranial monitoring with epidural cylindrical electrodes. American Epilepsy Society annual meeting, Los Angeles, Dec 2000.
10. Head Trauma. Neurology for the non-neurologist, Chicago, Dec. 1999.
11. Pediatric epilepsy surgery. Update in Pediatric Epilepsy. Rush Epilepsy Center CME Event. Oak Brook, IL. November 2000.
12. Tailored temporal lobectomy for intractable epilepsy. American Academy of Neurology. 2000
13. Epilepsy Surgery: An update. Panelist. SISCOM evaluation of intractable epilepsy. American Association of Neurological Surgeons, April 2001.
14. Head Trauma. Neurology for the non-neurologist. Chicago, Dec. 2000.
15. Functional Cortical Mapping. Panelist. Techniques in cortical stimulation mapping in epilepsy and brain tumor surgery. American Association of Neurological Surgeons, April 2001.
16. Brain tumor and epilepsy surgery. Osler Oral Board Review Course. April 2001
17. Vagal nerve stimulator surgery in 101 consecutive patients. Neurosurgical Society of America, Amelia Island Fla., June 2001.
18. Epilepsy Surgery. Indications and Techniques. AES Chicago Cable Television. November 2001
19. Brain tumor and epilepsy surgery techniques. Illinois Masonic Hospital Grand Rounds. Chicago IL, January 2002

20. Epilepsy surgery in eloquent cortex. West Virginia University. Invited Speaker. Contemporary Management of Intractable Epilepsies International Symposium. Morgantown, West Virginia, October 25<sup>th</sup>, 2003.
21. Mysteries of the Mind- Epilepsy. CBS series. Nov, 2003
22. Byrne RW, Kanner A, Smith MC, Jobe K, Bergen D, Palac S, Balabanov, A, Hoepfner T, DeToledo-Morrell L, Lad N, Ajiboye NA, Takagi I, Whisler, W: Medically intractable temporal lobe epilepsy: surgical outcome in 24 consecutive patients with normal MRI. Neurosurgical Society of America, Santa Fe, 2004.
23. Moderator, Contemporary Management in Epilepsy Surgery seminar. American Association of Neurological Surgeons Annual meeting. Orlando, Fla 2004.
24. Surgical Treatment of Medically Intractable Temporal Lobe Epilepsy. Update on the Treatment of Epilepsy. Rush University Medical Center. Sept 11, 2004.
25. Meeting Co-chair, Epilepsy in the 21<sup>st</sup> Century, Rush University Medical Center, Sept 11, 2004.
26. Surgical resection vs. Gamma Knife radiosurgery for cerebral metastasis. Symposium on The Role of Stereotactic Radiosurgery in the Management of Brain Metastasis. Chicago, Il Oct 23, 2004
27. Advances in the Surgical Treatment of Epilepsy. Wyoming medical society- Frontiers in Medicine. Jackson Hole, Wyoming Feb. 18, 2005
28. Advances in the Surgical Treatment of Epilepsy. Chicago Neurological Society. Loyola University, Maywood, Ill. Feb 26, 2005
29. Surgical Treatment of Epilepsy. Epilepsy Foundation Midwest Regional Meeting. Chicago, Il, April 2<sup>nd</sup> 2005.
30. Epilepsy Surgery in Eloquent Cortex: Multiple Subpial Transection vs Responsive Neurostimulation. Seminar Panel Member. American Association of Neurological Surgeons. New Orleans, La. April 18<sup>th</sup>, 2005.
31. Neurosurgical Emergency Coverage in Cook County. Illinois State Neurosurgical Society. March 4<sup>th</sup>, 2005.
32. Predictors of postsurgical gainful employment following an anterotemporal lobectomy. American Academy of Neurology. San Diego, CA, 2005.
33. Neurosurgical Emergency Coverage in Cook County. Neurosurgical Society of America. Orlando, Fla June 5<sup>th</sup>, 2005.

34. Complications from epilepsy surgery and surgery in eloquent cortex. Neurosurgical Complications Course. Chicago Neurological Society. Rosemont, Il. June 2005.
35. The Threat to Academic Medical Centers From Emergency Transfers. The View From Illinois. American College of Surgeons. San Francisco Oct 18<sup>th</sup>, 2005
36. Multicenter study of Neurosurgical Emergency Transfers. Illinois State Neurosurgical Society. March 3<sup>rd</sup>, 2006
37. Kanner AM, Byrne R, Smith MC, Balabanov AJ, Frey M. Does a life-time history of depression predict a worse postsurgical seizure outcome following a temporal lobectomy? American Neurological Association, Chicago, Il, 2006.
38. Depression is a predictor of persistent auras in seizure-free patients following an antero-temporal lobectomy. AES. San Diego, CA, 2006.
39. Safety and Preliminary Efficacy of a Responsive Neurostimulator (RNStm) for the Treatment of Intractable Epilepsy in Adults. Congress of Neurological Surgeons. Chicago, Il. October, 2006.
40. Prospective, Multicenter Evaluation of Neurosurgical Emergency transfers in Cook County. Congress of Neurological Surgeons. Chicago, Il Oct.2006.
41. Tailored Temporal Lobectomy for Medically Intractable Epilepsy. Long term outcomes in a series of 140 consecutive patients. Congress of Neurological Surgeons. Chicago, Il Oct. 2006.
42. Surgery of Spinal Cord and Spinal Canal Tumors. Problems Encountered. Chicago Neurological Society. Rosemont Il. Sept. 2006
43. Surgical Subspecialty Emergency Care. Who will answer the call? Frederic A. de Peyster Presidential Address, Rush Surgical Society April 11<sup>th</sup>, 2007
44. Co-Chair: Chicago Neurological Society: Advances in Epilepsy Surgery Chicago Ill, April 21<sup>st</sup>, 2007
45. Resective Surgery for Temporal and Extratemporal Epilepsy. Chicago Neurological Society. April 21<sup>st</sup>, 2007.
46. Moderator, Scientific Presentations, North American Skull Base Society. May 24th 2007.
47. Complications from epilepsy surgery and surgery in eloquent cortex. Neurosurgical Complications Course. Chicago Neurological Society. Rosemont Il. Sept. 2007.

48. Boling W, Warf B, Palade A, Mujuru P, Andermann F, Wabulya A, Longoni N, Bittar R, Fabinyi G, Byrne R A model for evaluation and surgical treatment of medically intractable epilepsy in severely underserved settings. American Epilepsy Society Annual Meeting, Philadelphia, Pa. Dec 3, 2007
49. Neurophysiology Monitoring During Epilepsy Surgery- The Surgeon's Perspective. American Association of Neurophysiology. Chicago Il., May 2nd, 2008
50. Epilepsy Surgery. Rush University Advances in Epilepsy Symposium December 13<sup>th</sup>, 2007.
51. Medically Intractable Temporal Lobe Epilepsy in Patients with Normal MRI: Surgical Outcome in Twenty-Four Consecutive Patients: Adam P. Smith, MD; Richard W. Byrne, MD; Andres Kanner, MD; Sepehr Sani, MD; Matthew Morrin; Susan Palac, MD; Donna Bergen, MD; Antoaneta Balabanov, MD; Michael Smith, MD; Walter W. Whisler, MD, PhD American Association of Neurological Surgery Annual Meeting Chicago, Il April 2008
52. Complications of Subdural Electrode Epilepsy Recording: Larry R. Shannon, II, MD; Richard W. Byrne, MD; Michelle Cecchini, BS; Matthew Morrin; George S. Selas, BS; Andres Kanner, MD; Michael Smith, MD American Association of Neurological Surgeons Annual Meeting Chicago Il. April 2008.
53. Moderator, Neurosurgical Society of America general scientific session III, June 4<sup>th</sup>, 2008. Whistler, Canada.
54. Anatomy of the mesial temporal lobe. CNS Practical Anatomy Course. St. Louis University. August 9, 2008.
55. Corpus Callosotomy and transsplenial approach to the pineal recess. CNS Practical Anatomy Course. St. Louis University. August 10<sup>th</sup>, 2008
56. Approaches to the ventricular trigone. Faculty, CNS Practical Anatomy Course. St. Louis University. August 8<sup>th</sup>, 2008
57. Cranio-orbital approach to middle fossa pathology. Faculty, CNS Practical Anatomy Course. St. Louis University. August 8<sup>th</sup>, 2008.
58. Far lateral transcondylar approach to the posterior fossa. Faculty, CNS Practical Anatomy Course. St. Louis University. August 10<sup>th</sup>, 2008.
59. Emergency Neurosurgery Care, Acute Care Surgery, and the Neurosurgeon. Moderator. Congress of Neurological Surgeons Annual Meeting, September 23, 2008. Orlando

60. Recertification for Neurosurgeons after a period of non-practice. Moderator. Congress of Neurological Surgeons Annual Meeting, September 24, 2008. Orlando.
61. Partnering with a hospital to grow a service line. Luncheon Seminar Faculty. Congress of Neurological Surgeons Annual Meeting, September 23<sup>rd</sup>, 2008. Orlando.
62. Epilepsy surgery and imaging scientific session. American Epilepsy Society annual meeting. Dec. 8<sup>th</sup>, 2008 Seattle.
63. Visiting Professor. University of Texas, San Antonio Department of Neurosurgery. January 29-30<sup>th</sup>, 2009
64. Practical Anatomy in Epilepsy Surgery. Grand Rounds. University of Texas, San Antonio. Jan 30, 2009
65. Developing and emergency and cerebrovascular service line. San Diego, Ca February 26<sup>th</sup>, 2009.
66. Practical anatomy in epilepsy surgery. Grand Rounds. Department of Neurology. Rush University Medical Center. March 3<sup>rd</sup>, 2009.
67. Positioning and preparation for cranial neurosurgery. Neurosurgery Fundamentals Course. Chicago, Il. March 6<sup>th</sup>, 2009.
68. Postsurgical Remission of Comorbid Presurgical Psychiatric Disorders Following an Anterotemporal Lobectomy Andres M. Kanner, Richard W. Byrne, Chicago, IL
69. Surgery in eloquent cortex. Cortical mapping seminar. AANS annual meeting. San Diego, Ca. May 2009
70. Chemotherapy for Malignant Glioma. Treatment of Malignant Glioma seminar. Neurosurgical Society of America. Hot Springs Va. June 9, 2009
71. Positioning for cranial neurosurgery. Foundations of neurosurgery course. Chicago, Il Sept. 26<sup>th</sup>, 2009
72. Epilepsy surgery: The surgeon's view. ISET regional conference. Christ Hospital, Oak Lawn, Il Nov 14<sup>th</sup> 2009.
73. Somenak M, Petruzzelli G, Byrne R, Origitano TC: Surgical Outcomes in Olfactory Neuroblastoma North American Skull Base Surgery Annual Meeting, New Orleans, Oct. 2009.

74. Visiting Professor, Henry Ford Hospital Department of Neurosurgery: Practical surgical anatomy of the temporal lobe. January 20<sup>th</sup>, 2010
75. Surgical anatomy of the choroidal fissure and implications for functional hemispherectomy. Henry Ford Hospital, cadaver neuroanatomy lecture. Jan 20<sup>th</sup>, 2010.
76. Visiting Professor, NorthShore University/University of Chicago Division of Neurosurgery. Technical and anatomic aspects of surgery of limbic and paralimbic gliomas. February 19, 2010.
77. Responsive neurostimulation for medically intractable epilepsy. Central Surgical Society Annual Meeting March 11, 2010, Chicago
78. Moderator: Cortical Mapping, advantages and pitfalls seminar. AANS annual meeting May 3<sup>rd</sup> 2010 Philadelphia
79. Cortical mapping for glioma surgery. Workshop, AANS annual meeting May 2<sup>nd</sup> 2010 Philadelphia
80. Richard W. Byrne MD, David Wallace, Andres Kanner MD, Michael C. Smith MD, Marvin Rossi MD, PhD, Bichun Ouyang PhD, Antoinetta Balabanov MD, Michael Stein MD, PhD, David Roh: Tailored Temporal Lobectomy for Medically Intractable Epilepsy: Predictors of Engel's Class I outcome. American Association of Stereotactic and Functional Neurosurgeons Annual meeting New York, NY June 13<sup>th</sup> 2010.
81. Robert Goodman, Peter Weber, Thomas Witt, Robert Worth, Ryder Gwinn, Tony Whitworth, Joseph Smith, David Roberts, Charles Liu, Steve Glazier, Ashwini Sharan, James Leiphart, George Jallo, Kost Elisevich, Richard Byrne, Karl Sillay, William Bingaman, Robert Wharen, Daniel Yoshor, Robert Gross, William Elias, Jason Schwalb, Emad Eskandar, Richard Zimmerman, W. Richard Marsh, Werner Doyle, Ken Vives : Treatment of Medically Intractable Mesial Temporal Epilepsy with Responsive Brain Stimulation: Results of a Subset Analysis from the RNS® System Pivotal Investigation CNS annual meeting 2010 San Francisco
82. Temporal lobectomy for medically intractable epilepsy: Effect of the extend of hippocampal resection in patients with hippocampal sclerosis and with normal pathology Academy of Neurological Surgeons Annual Meeting Nov 2010 Carmel
83. Neurologic exam in neurosurgery and in neurotrauma. Society of Neurological Surgeons PGY-1 Bootcamp July 22-23, 2010
84. Moderator CNS Opening Plenary Session October 17<sup>th</sup>, 2010 San Francisco

85. Temporal lobectomy for medically intractable epilepsy: Effect of the extent of hippocampal resection in patients with hippocampal sclerosis and with normal pathology Academy of Neurological Surgeons Annual Meeting Nov 2010 Carmel Cal.
86. Surgery of Limbic and Paralimbic tumors. Visiting Professor Department of Neurosurgery LSU Shreveport. December 2010.
87. CNS Surgical Masters: Amygdalohippocampectomy: 3D video and cadaveric dissection Neurocon meeting Jaipur India. Dec 15<sup>th</sup>, 2010
88. Mesial Temporal Lobe Surgery: Anatomic Landmarks. Neurocon meeting Jaipur India. Dec 17<sup>th</sup>, 2010.
89. Moderator, Cortical Mapping Breakfast Seminar, AANS Annual Meeting, Denver April 12, 2011.
90. Cortical Stimulation Mapping to maximize resection in high grade glioma. Update in treatment of high grade glioma seminar, AANS Annual Meeting, Denver April 9, 2011.
91. The Operating Room Environment. Society of Neurological Surgeons Fundamentals Course. Rosemont Il. July 8<sup>th</sup> 2011.
92. Microsurgery in neurosurgery. Society of Neurological Surgeons Fundamentals Course. Rosemont Il. July 9<sup>th</sup> 2011.