

Erich W. Wolf II, MD, PhD, FACS, FAANS

1614 WOLF CIRCLE LAKE CHARLES, LA 70605
TEL 337-478-9653 FAX 337-474-0988

Education

TULANE UNIVERSITY GRADUATE SCHOOL— PH.D. 1994

Doctor of Philosophy in Biomedical Engineering. Dissertation: "Electrophysiological Search for Magnetic Field Influence on Ion Channel Gating in N1E-115 Neuroblastoma Cells".

TULANE UNIVERSITY SCHOOL OF MEDICINE— M.D. 1993

Tulane University Hospital and Charity Hospital, New Orleans, LA.

TULANE UNIVERSITY GRADUATE SCHOOL— M.S. 1990

Department of Biomedical Engineering, non-thesis option.

TULANE UNIVERSITY SCHOOL OF ENGINEERING— B.S.E. 1983-1987

Department of Biomedical Engineering. *Magna cum laude* with departmental honors.

Clinical Experience

CENTER FOR NEUROSURGICAL AND SPINAL DISORDERS, LLC— 2002-PRESENT

Lake Charles, LA. Managing member. Private neurosurgical practice.

NEUROSURGERY CENTER OF LAKE CHARLES, LLC— 2000-2002

Lake Charles, LA. Private neurosurgical practice.

SEMMES-MURPHEY CLINIC— 1999

Memphis, TN. Neurosurgery Staff, junior associate.

SEMMES-MURPHY CLINIC & UT MEMPHIS— COMPLEX SPINAL SURGERY FELLOWSHIP 1999

Complex spine fellowship (6 months) under Dr. Kevin Foley. Emphasis in minimally-invasive and image-guided spinal surgery.

UNIVERSITY OF TENNESSEE, MEMPHIS— NEUROLOGICAL SURGERY RESIDENCY 1994-1999

Chairmen: Dr. James T. Robertson and Dr. Jon H. Robertson.

UNIVERSITY OF TENNESSEE, MEMPHIS— SURGICAL INTERNSHIP 1993-1994

Categorical surgical internship at UT Bowld Hospital, Baptist Central Hospital, and the Regional Medical Center.

Non-Clinical Experience

GENERAL DYNAMICS SPACE SYSTEMS DIVISION— SUMMER 1989

San Diego, CA. Graduate Intern.

UNIVERSITY OF CALIFORNIA AT SAN DIEGO— 1980-1985

San Diego, CA. Research assistant within the Neuroscience Department under Dr. Reginald G. Bickford.

Professional Achievements

BOARD CERTIFICATION BY THE AMERICAN BOARD OF NEUROLOGICAL SURGEONS 2004-PRESENT

Initial board certification in 2004 with recertification in 2014. Participation in Maintenance-of Certification (MOC).

FELLOW OF THE AMERICAN COLLEGE OF SURGEONS

FELLOW OF THE AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS

Organizational Memberships

AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS— FELLOW

AMERICAN COLLEGE OF SURGEONS,— FELLOW

CONGRESS OF NEUROLOGICAL SURGEONS— MEMBER

NORTH AMERICAN SPINE SOCIETY— MEMBER

LOUISIANA NEUROSURGICAL SOCIETY— PAST PRESIDENT (2009-2010)

LOUISIANA STATE MEDICAL SOCIETY— MEMBER

CALCASIEU PARISH MEDICAL SOCIETY— MEMBER

Consultant

BOSTON SCIENTIFIC NEUROMODULATION (2009-2010)

MEDTRONIC SPINE/BIOLOGICS (2007-2012)

DEPARTMENT OF DEFENSE GRANT #536198 AWARDED TO TULANE UNIVERSITY CENTER FOR BIOENVIRONMENTAL RESEARCH (1994-1996).

Publications

Wolf, E.W.: "Dynamic Detection of Spinal Cord Position During Postural Changes Using Near-Infrared Reflectometry." *Neuromodulation: Technology at the Neural Interface* 18(6):448-459, 2015.

Wolf, E.W.: "Reversal of Vasospasm, Letter to the Editor", *J. Neurosurg.*, 90(2):373-4, 1999.

Wolf, E.W., Banerjee, A., Smith, J.S., White, R.P., Dohan, F.C., Robertson, J.T.: "Reversal of cerebral vasospasm using an intrathecally administered long-acting nitric oxide donor", *J. Neurosurg.*, 89(2):279-288, 1998.

Kimura, M., White, R.P., Wolf, E.W., Robertson, J.T.: "Responses of human basilar and other isolated arteries to novel nitric oxide donors", *J. Cardiovasc. Pharm.* 32(4):695-701, 1998.

Kimura, M., White, R.P., Wolf, E., Robertson, J.T.: "Effects of new nitric oxide donors on isolated cerebral and peripheral arteries", *Hirosaki Medical Journal* 49(2):66-74, 1997.

Wolf, E.W., Smith, J.S., Banerjee, A., Robertson, J.T.: "A New Method for Collecting Ultrafiltrate Specimens from Microdialysis Catheters" *Contemporary Topics in Laboratory Animal Science.* 37(2):73-4, 1998.

Clejan, S., Dotson, R.S., Wolf, E.W., Corb, M.P., Ide, C.F.: "Morphological Differentiation of N1E-115 Neuroblastoma Cells by Dimethyl Sulfoxide Activation of Lipid Second Messengers: *Experimental Cell Research* 224 (1996) 16-27.

Clejan, S., Ide, C., Walker, C., Wolf, E., Corb, M., Beckman, B.: "Electromagnetic field induced changes in lipid second messengers" *Journal of Lipid Mediators and Cell Signaling* 13 (1996) 301-24.

Wolf, E.W. "Electrophysiological Search for Magnetic Field Influence on Ion Channel Gating in N1E-115 Neuroblastoma Cells." *Doctoral Dissertation.*, Tulane University, 1994.

Presentations

Wolf E.W.: "Accuracy of Near-Infrared Reflectometry for In Situ Detection of Spinal Cord Position in a Human Cadaveric Model." North American Neuromodulation Society, Las Vegas, NV, December, 2014.

Wolf, E.W.: "Real-Time Detection of Spinal Cord Position for Adaptive Stimulation using Near-Infrared Reflectometry.", North American Neuromodulation Society, Las Vegas, NV, December, 2013.

Wolf, E.W.: "Neural Integrity Monitoring," Willis Knighton Hospital, Shreveport, LA. January 16, 2007.

Wolf, E.W.: "New Advances in Neurological and Spinal Surgery", Association of Surgical Technologists, 34th Annual National Conference, New Orleans, LA, May 30, 2003.

Wolf, E.W.: "Frameless Stereotaxy and Minimally Invasive Spinal Surgery," Louisiana Council of AORN Chapters, New Orleans, LA. November 3, 2002.

Wolf, E.W.: "C-Spine Injuries," Louisiana State University Health Sciences Center Family Practice Residency Program, Lake Charles, LA. September 23, 2002.

Wolf, E.W., Proctor, K.G., Robertson, J.H.: "Temporal Changes in Cerebral Blood Flow- Metabolism Coupling Following Subarachnoid Hemorrhage", American Association of Neurological Surgeons, New Orleans, LA, April, 1999.

Wolf, E.W., Marsh, J., Schweitzer, J.B., Proctor, K.G., Robertson, J.H.: "Expression of Nitric Oxide Synthases Following Subarachnoid Hemorrhage" ANNS/CNS Joint Section on Cerebrovascular Surgery, Nashville, TN, January 31, 1999.

Wolf, E.W.: "Expression of Nitric Oxide Synthase Isoforms Following Subarachnoid Hemorrhage", Tennessee Neurosurgical Society, Nashville, TN, September 13, 1998.

Wolf, E.W., White, R.P., Dohan, F.C., Robertson, J.T., Robertson, J.H.: "Intrathecal Nitric Oxide Donor (DETA/NO) Reverses Cerebral Vasospasm", Society of University Neurosurgeons, Memphis, TN, March 27, 1998.

Wolf, E.W.: "Intrathecal DETA/NO for Reversal of Cerebral Vasospasm," invited lecture, Chemistry Section, National Cancer Institute, NIH, Frederick, MD. March 10, 1998.

Wolf, E.W.: "University of Tennessee Cerebrovascular Research Initiative," UT Department of Neurosurgery Grand Rounds, Memphis, TN. February 13, 1998.

Pasley, R., Benni, P., Wolf, E., Bada, H., Leffler, C., Daley, M.: "Simultaneous Cerebral Blood Volume Filling Demonstrated by NIR Reflectometry." Sixth International Conference on Fetal and Neonatal Physiological Measurement, Memphis, TN Oct 25-28, 1997.

Pasley, R., Benni, P., Wolf, E., Levine, V., Bada, H., Leffler, C., Daley, M.: "Dual Optode Near Infrared Monitoring for Dynamic Analysis." Sixth International Conference on Fetal and Neonatal Physiological Measurement, Memphis, TN Oct 25-28, 1997.

Pasley, R.L., Wolf, E., Bada, H., Leffler, C.W., Daley, M.L.: "Design of a near infrared reflectometer", Proceedings of the 19th Annual International Conference of the IEEE, Chicago, IL, 30 October 1997.

Robertson, JT, Wolf, EW, Banerjee, A, Poff, B: "A New Synthetic Absorbable Hydrogel as a Dural Sealant" Southern Neurosurgical Society, Pinehurst, NC, 6 June 1997.

Wolf, E.W., Banerjee, A., Soble-Smith, J., White, R.P., Robertson, J.T.: "Reversal of Cerebral Vasospasm Using an Intrathecally Administered Long-Acting Nitric Oxide Donor (DETA-NONOate)", Proceedings of the American Association of Neurological Surgeons, Denver, CO, 14 April, 1997.

Wolf, E.W.: "Cordotomy," UT Department of Neurosurgery Grand Rounds, Memphis, TN. March, 1997.

Kimura, M., White, R.P., Wolf, E.W., Robertson, J.T.: "Responses of Isolated Human Basilar Arteries to Nitric Oxide Donors", Proceedings of the American Society for Pharmacology and Experimental Therapeutics, San Diego, CA, 8 March, 1996.

Zhang, J., Wolf, E., Bada, H., Leffler, C., Daley, M.: "Correlation of Near Infrared Reflectometry with Intracranial Pressure During Intact and Loss of Vascular Tone" Proceedings of the 18th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Amsterdam, Netherlands, 31 October 1996.

Wolf, E.W.: "Temporal Lobectomy for Epilepsy," UT Department of Neurosurgery Grand Rounds, Memphis, TN. October, 1996.

Wolf, E.W., Atkins, K., Anton, M.T., Feler, C.A.: "Psychosocial Predictors of Outcome in Dorsal column Stimulation for Intractable Pain" Proceedings of the 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery, Marina del Rey, CA, 1995.

Wolf, E.W., Walker, C.F., and C.F. Ide: "Search for Altered Sodium Channel Gating Kinetics In Magnetically Stimulated Voltage-Clamped N1E-115 Cells" Proceedings of the 15th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. 1993.

Wolf, E.W., Walker, C.F., and C.F. Ide: "A Method for Studying Ion Channel Gating Under magnetic Stimulation Conditions Using the Whole-Cell Patch-Clamp technique" Proceedings of the 15th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. 1993.

Wolf, E.W., Ide, C.F. and C.F. Walker: "Survey for Magnetically Induced Plasma Membrane Damage" Proceedings of the 14th Annual International Conference to the IEEE Engineering in Medicine and Biology Society. 1992.

Wolf, E.W. and C.F. Walker: "Design and Practical Considerations in the Construction of Magnetic Induction Stimulators" Proceedings of the 13th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Orlando, FL, 1991.

Wolf, E.W. and J.J. Stockard: "P300 to Omitted Pattern Reversals: A New Technique For Eliciting Event Related Potentials In the Study of Dementia" American Electroencephalographic Society, New Orleans, Louisiana, October 21, 1983.

Wolf, E.W.: "P300 to Omitted Visual Stimuli: A New Technique For Assessment of Cognitive Impairment" Edward E. Shev Award Paper, Western Electroencephalographic Society, Palo Alto, California, March 5, 1983.

Wolf, E.W.: "WAVEGATE: A Computerized Sonic Stimulator for the Elicitation of Evoked Potentials" Honors thesis, Tulane University, 1987.

Medical Staff

CHRISTUS ST. PATRICK HOSPITAL 2000-PRESENT 524 Dr. Michael DeBakey Drive, Lake Charles, LA 70605.	STATUS: ACTIVE STAFF
LAKE CHARLES MEMORIAL HOSPITAL 2000-PRESENT 1701 Oak Park Blvd., Lake Charles, LA 70605	STATUS: CONSULTANT STAFF
WOMEN & CHILDREN'S HOSPITAL 2000-2004 4200 Nelson Road, Lake Charles, LA 70605	STATUS: COURTESY STAFF
WEST CALCASIEU CAMERON HOSPITAL 2000-2004 701 East Cypress Street, POB 2509, Sulphur, LA 70664-2509	STATUS: COURTESY STAFF
BAPTIST MEMORIAL HOSPITAL 1999 899 Madison Avenue, Memphis, TN 38146	STATUS: PROVISIONAL STAFF
VETERANS ADMINISTRATION MEDICAL CENTER 1999 1030 Jefferson Avenue, Memphis, TN 38105	STATUS: COURTESY STAFF
METHODIST HOSPITAL 1999 1265 Union Avenue, 1 Sherrard, Memphis, TN 38104	STATUS: COURTESY STAFF
REGIONAL MEDICAL CENTER 1999 877 Jefferson Avenue, Memphis, TN 38104	STATUS: COURTESY STAFF
SAINT FRANCIS HOSPITAL 1999 5959 Park Avenue, Memphis, TN 38119	STATUS: COURTESY STAFF

Patents

ISSUED U.S. PATENTS:

8,241,295	Apparatus and method for the dispensing of bone cement
8,239,038	Apparatus and method using near infrared reflectometry to reduce the effect of positional changes during spinal cord stimulation
8,235,291	PDA compatible text scanner
8,057,422	Transcutaneous telemetry of cerebrospinal fluid shunt programmable-valve pressure using near-infrared (NIR) light
8,057,401	System for transcutaneous monitoring of intracranial pressure
8,056,805	PDA compatible text scanner
8,052,688	Electromagnetic apparatus and method for nerve localization during spinal surgery
7,485,105	Transcutaneous telemetry of cerebrospinal fluid shunt programmable-valve pressure using near-infrared (NIR) light
7,435,229	System for transcutaneous monitoring of intracranial pressure (ICP) using near infrared (NIR) telemetry
7,364,077	PDA compatible text scanner

PUBLISHED U.S. PATENT APPLICATIONS:

20120059238	System for transcutaneous monitoring of intracranial pressure
20120044546	PDA compatible text scanner
20120029414	Transcutaneous telemetry of cerebrospinal fluid shunt programmable-valve pressure using near-infrared (NIR) light

20120022394 Electromagnetic apparatus and method for nerve localization during spinal surgery

20110164292 PDA compatible text scanner

20090204054 Transcutaneous telemetry of cerebrospinal fluid shunt programmable-valve pressure using near-infrared (NIR) light

20080237347 PDA compatible text scanner

20080086140 Electromagnetic apparatus and method for nerve localization during spinal surgery

20070167867 System for transcutaneous monitoring of intracranial pressure

20060284987 PDA compatible text scanner

20050187509 Transcutaneous telemetry of cerebrospinal fluid shunt programmable-valve pressure using near-infrared (NIR) light

20050187488 System for transcutaneous monitoring of intracranial pressure (ICP) using near infrared (NIR) telemetry

PUBLISHED INTERNATIONAL PATENT APPLICATIONS:

WO/2012/050619 Apparatus and method using near infrared reflectometry to reduce the effect of positional changes during spinal cord stimulation.

WO/2005/082025 System for transcutaneous monitoring of intracranial pressure (ICP) using near infrared (NIR) telemetry.