

Curriculum Vitae

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Name:	Thomas H. Swanson	Address:	Montana Neurology, P.L.L.C.. 2825 Fort Missoula Road, Suite 130 Missoula, MT 59804 (406) 327 3895- <i>tel</i> (406) 327-3894- <i>fax</i>
Born:	August 20, 1957, Minneapolis, MN		

Education:

M.D., 1986 Wayne State University School of Medicine, Detroit, MI
B.S., 1979 Biology, Eastern Michigan University, Ypsilanti, MI

Training:

1990-92 Post-Doctoral Research Fellowship, University of Pennsylvania, Philadelphia, PA,
Laboratory of Dr. Marc Dichter
1990-92 Clinical Epilepsy Fellowship, University of Pennsylvania Graduate
Hospital Comprehensive Epilepsy Program, Philadelphia, PA
1987-90 Neurology Residency, Mayo Clinic, Rochester, MN
1986-87 Internal Medicine Internship, Henry Ford Hospital, Detroit, MI

Academic Appointments / Positions:

2009 University of Montana, Faculty Affiliate, Department of Pharmaceutical Sciences
2009- Montana Neurology
2008-2009 Montana Neurobehavioral Associates
2004-2008 Research Associate, Department of Neuroscience, Oberlin College
1998- Chief Executive Officer, Midwest Neuroscience Inc.
1998-2001 Adjunct Associate Professor of Psychology, Bowling Green State University, Bowling
Green, OH
1998-2005 President, Curtis Research Institute (501©3)
1998-01 Medical Director, Mercy Epilepsy Institute, Toledo, OH
1996-98 Associate Professor, Department of Neurology, Medical College of Ohio, Toledo, OH
1996-98 Director, Comprehensive Epilepsy Center, Medical College of Ohio, Toledo, OH
1996-98 Director, Neurodiagnostic Services, Medical College of Ohio, Toledo, OH
1993-96 Clinical Associate, Department of Neurology, The Cleveland Clinic Foundation,
Cleveland, OH
1992-93 Assistant Professor of Neurology, Medical College of Pennsylvania, Philadelphia, PA
1992-93 Director, EEG Laboratory, Mid-Atlantic Regional Epilepsy Center, Philadelphia, PA
1990-92 Post-Doctoral Research Fellow, University of Pennsylvania, Philadelphia, PA
1989-90 Senior Resident Associate, Mayo Clinic, Rochester, MN
1980-82 Graduate Teaching Assistant, Department of Biology, University of Houston,
Houston, TX
1980 Graduate Teaching Assistant, Department of Biology, Eastern Michigan University,
Ypsilanti, MI

Grants and Research Fellowship Awards:

Past Funding:

- 2000-01 Curtis Research Institute, principal investigator, \$30,000 direct costs, *AAV vector transduction in rat brain* (year 2 of 4)
- 1996-99 NIH RO1 #NS33539, co-investigator, \$66,321.00 total costs, *Human A1-Adenosine Receptor Action in Brain*, (year 1 of 4)
- 1994-99 NIH #K08NS01705-01A1, principal investigator, \$414,450.00 total costs, *The Role of Adenosine in Epilepsy*
- 1996-97 Abbott Laboratories, principal investigator, \$43,920.00 direct costs, *Safety and Efficacy of Tiagabine HCL as Adjunctive Treatment*
- 1997-98 Abbott Laboratories, principal investigator, \$3,5880.00 direct costs, *Safety and Efficacy of Tiagabine HCL as Adjunctive Treatment-open label extension*
- 1997-98 Glaxo-Wellcome, co-investigator, \$26,698.00 direct costs, *Lamotrogine or Valproate/Carbamazepine withdrawing to monotherapy*
- 1992-93 Grass Foundation Neurophysiology Fellowship, \$30,000.00 total costs
- 1990-92 Epilepsy Foundation of America, Research Grant, \$25,000.00 total costs, *The Role of Adenosine in Brain Function*
- 1990-92 Charles Dana Neuroscience Fellowship, \$80,000.00 total costs, (Dr. Marc Dichter, sponsor), David Mahoney Institute of Neuroscience, University of Pennsylvania, Philadelphia, PA

Awards and Honors:

- 2010 Western Division Nastar Giant Slalom Nationals Qualifier, 52 year-old age group
- 2007 Western Division Nastar Giant Slalom Regional Qualifier, 49 year-old age group.
- 2006 Named one of America's Top Doctors, Consumer Reports
- 2000, 03, 10 Smitty Stevens Annual Memorial Nastar Race Winner, Winter Conference on Brain Research
- 1987 Neurology Residents' Epilepsy Research Competition Award, *The Role of Adenosine in Epilepsy*
- 1988 G. Milton Shy Award from the American Academy of Neurology, *Creutzfeldt-Jakob Disease*
- 1985, 1986 National Dean's List, Wayne State University Medical School
- 1969-1974 Professional sled dog driver, Midwest and Canadian circuit. Midwest American Champion, 5-dog class; 2 time Midwest American Champion, 7-dog class.

Memberships and Services:

2009 St. Patrick Hospital / Community Medical Center joint Institutional Review Board
2009 Scientific Program Committee, American Epilepsy Society
2007-10 Executive Committee member and Facilities Chair, Winter Conference on Brain Research
2006-09 Board Trustee, Epilepsy Association of Northeast Ohio
2002-04 Board of Directors, Winter Conference on Brain Research
2002-05 Vestry Member, Grace Episcopal Church, Sandusky, Ohio
2000-09 Professional Advisory Board, Michigan Chapter, Epilepsy Foundation of America
1996-1998 IRB member, Medical College of Ohio
1996-1998 IACUC (animal use) member, Medical College of Ohio
American Association for the Advancement of Science
American Medical Association
American Academy of Neurology
American Epilepsy Foundation
Society for Neuroscience
Doris A. Flynn Foundation Epilepsy Fellowship Selection Committee
Cleveland Clinic Research Program Committee, Reviewer
Ad Hoc Reviewer, VA Merit Review Board
Field Reviewer, *Brain Research, J. Clinical Neurophysiology, Epilepsia, J. Neuroscience Methods. J. Neurosurgery*

Invited Lectures

Montana Neuroscience Foundation invited public lecture; 10-14-09; "Epilepsy Diagnosis, Treatments, and New Research"
Saint Patrick Hospital Grand Rounds, 4-20-09 "Treatment of TIA and Stroke".
Michigan State University, Department of Neurology Grand Rounds, 11/02; *Epilepsy, Diagnosis and Treatment*
Neurobiology Seminar Series, Department of Anatomy and Physiology, Medical College of Ohio, *What's new with adenosine A1 receptors*, September 1996.
Faculty, Comprehensive Clinical Neurophysiology Annual Course, 1995, 1996, 1997, 1998, 1999 *Synaptic Transmission & Physiologic Basis of the EEG*.
Seventh Annual Cleveland Clinic-Bethel Epilepsy Symposium, 1996: "Etiologies of the Epilepsies"

Medical License and Board Certification:

2008 Montana
2005 Michigan
1993 Ohio
1991 New Jersey
1990 Pennsylvania
1987 Minnesota
1986 Michigan

1996 Board Certified, American Board of Clinical Neurophysiology
1996 Board Certified, American Board of Psychiatry and Neurology, added qualifications in clinical neurophysiology, June, 1996
1992 Board Certified, American Board of Psychiatry and Neurology (Neurology)

Bibliography:

Original Papers:

- 1 Barraco, R. A., T. H. Swanson, J.W. Phillis, and R. E. Berman. 1984. Anticonvulsant effects of adenosine analogues on amygdaloid-kindled seizures in rats. *Neurosci. Lett.* 46:317-322.
- 2 Phillis, J.W., T. H. Swanson and R. A. Barraco. 1984. Interactions between nifedipine and adenosine in the rat cerebral cortex. *Neurochem. Int.* 6:693-699.
- 3 Swanson, T. H. and C. L. Green. 1986. Nifedipine: more than a calcium channel blocker. *Gen Pharmac.* 17(3):255-260.
- 4 Swanson, T. H., P. L. Zinkel and P. L. Peterson. 1987. Bilateral anterior cerebral artery occlusion in an alcohol abuser with sickle-cell trait. *Henry Ford Hosp. Med. J.* 35(1):67-70.
- 5 Swanson, T. H. 1987. The clinician's guide to Creutzfeldt-Jakob disease, *Henry Ford Hosp. Med. J.* 35(1):76-83.
- 6 Swanson, T. H. and J. W. Phillis. 1987. Progesterone in seizure therapy, *Neurology.* 37:1433.
- 7 Swanson, T. H. and J. W. Phillis. 1988. Effects of the muscurinic antagonists pirenzepine and gallamine on spontaneous and evoked responses of rat cerebral cortical neurons. *Br. J. Pharmac.* 94:192-198.
- 8 Cascino, G. D., B. Westmoreland, T. H. Swanson and F. W. Sharbrough. 1991. Seizure-associated speech arrest in elderly patients. *Mayo Clinic Pro.* 66:254-258.
- 9 Swanson, T. H., P. J. B. Garrett, L. J. Burdette, G. D. Cascino and F. W. Sharbrough. 1991. Outcome of patients with early seizures following anterior temporal lobectomy. *J. Epilepsy.* 4:199-203.
- 10 Swanson, T. H. 1995. The pathophysiology of human mesial temporal lobe epilepsy. *J. Clin. Neurophys.* 12(1):2-22.
- 11 Swanson, T. H., J. Drazba and S. A. Rivkees. 1995. Adenosine A1 receptors are located predominately on axons in the rat hippocampal formation. *J. Comp. Neurol.* 363:517-531.
- 12 Draughn, L. R. and T. H. Swanson. 1997. Axillary Somatosensory Evoked Potential Response: An Alternate Peripheral Recording Site. *J. Clin. Neurophys.* 15(1):64-68.
- 13 Swanson, T. H., S. E. Krahl, Y. Z. Liu and S. A. Rivkees. 1998. Evidence for physiologically active axonal adenosine receptors in the rat corpus callosum. *Brain Res.* 784:188-198.
- 14 Swanson, T. H., M. J. O'Connor and M. R. Sperling. 1998. Strong paired pulse depression of dentate granule cells in slices from patients with temporal lobe epilepsy, *J. Neural. Transm.* 105:613-625.

- 15 Rivkees, S.A., A. P. Ijzerman, and T. H. Swanson. 1998. New insights into the molecular mechanisms of A1 adenosine receptor action. *Drug Development Research*. 45:93-102.
- 16 Swanson, T. H. and Y. Z. Liu, Excitatory effect of adenosine analogs on rat and human hippocampal dentate gyrus. In preparation.

Book Chapters

- 1 Swanson, T. H. and M. R. Sperling. 1994. "Seizures That Do Not Look Like Seizures." In *Imitators of Epilepsy*. edited by Fisher. New York: Demos. 11-26.
- 2 Swanson, T. H. 1997. "The Electrophysiology of Human Epileptic Hippocampus and Temporal Cortex." In *The Treatment of Epilepsy: Principles and Practice*. edited by E. Wyllie. Philadelphia: Lea and Febiger. 2nd Edition.
- 3 Jones, S. W. and T. H. Swanson. 1997. "Basic Cellular Neurophysiology." In *The Treatment of Epilepsy: Principles and Practice*. edited by E. Wyllie. Philadelphia: Lea and Febiger. 2nd Edition.
- 4 Timofeeva, O. A. and T. H. Swanson. 1998. "Neurophysiology of Epileptic Seizures: Animal Experience." In *Epileptic Seizures*. edited by Hans Lüders. New York :John Wiley and Sons.
- 5 Swanson, T. H. and S. A. Rivkees. 1998. "Immunochemical Analysis of Neurotransmitter Receptors." In *Receptor Localization: Laboratory Methods and Procedures*. edited by M. Ariano. N.p.:John Wiley. in press.
- 6 Swanson, T. H. 1998. "Synaptic Transmission." In *Comprehensive Clinical Neurophysiology*,. edited by Levin and Lüders. N.p.:Wiley-Liss, Inc.
- 7 Swanson, T. H. 1998. "The Physiologic Basis of the EEG." In *Comprehensive Clinical Neurophysiology*. edited by Levin and Lüders. N.p.:W. B. Saunders.
- 8 Swanson, T.H. 2002. "The Origins of the Signals". In *Fundamental of EEG Technology, 2/e*. edited by Burgess, Klem, and Luders.N.p: Lippincott Williams & Wilkins, in press.

Abstracts

- 1 Swanson, T. H., C. L. Green and M. A. Morón. "Regional distribution of adenosine deaminase activity in rat brain" abstract in *The Physiologist*, (1985):28(4):329.
- 2 Fredholm, B. B., P. S. Hu, E. Lindgren, M. Duner-Engstrom and T. H. Swanson. "Interactions between calcium-channel agonists and antagonists at the pre-junctional adenosine receptor." abstract in *Ann. New York Acad. Sci.* (1988):522.
- 3 Swanson, T. H., K. A. Hirschorn, G. D. Cascino and F. W. Sharbrough. "Outcome of patients with early seizures following epilepsy surgery." abstract in *Epilepsia*, (1989):30:728.

- 4 Cascino, G. D., B. Westmoreland, T. H. Swanson and F. W. Sharbrough. "Speech arrest with EEG correlates "transient ictal attacks." (presented at the American Academy of Neurology annual meeting, Miami, 1990.)
- 5 Swanson, T. H. and L. M. Masukawa. "N6-Cyclopentyladenosine, a stable adenosine analog, exerts concentration-dependent effects on evoked granule cell activity." abstract in *Soc. Neurosci. Abstr.* (1991):17(2):1548.
- 6 Swanson, T. H. Adenosine increases the signal to noise ratio in fascia dentata by a pre-synaptic mechanism, abstract in *Soc. Neurosci. Abstr.*
- 7 Swanson, T. H. and L. M. Masukawa. "Carbamazepine blocks adenosinergic excitation in the hippocampus" abstract in *Epilepsia* (1991):32(3):35
- 8 Swanson, T. H. "The effects of A-1 specific adenosine analogs on synaptic transmission in the human hippocampal slice." abstract in *Int. J. Purine and Pyrimid. Res.* (1992):32(1):43.
- 9 Swanson, T. H., M. R. Sperling, M. J. O'Connor and H. O. Lüders. "Electrophysiologic evidence for increased feedback and decreased feedforward inhibition in human epileptic dentate gyrus." abstract in *Epilepsia* (1995).
- 10 Swanson, T. H., W. C. Zhen, S. A. Rivkees and J. Drazba. "Immunocytochemical localization of hippocampal adenosine A1 receptors to axons but not dendrites or cell bodies." abstract in *Society for Neuroscience Abstracts*. (1995).
- 11 Krahl, S. E., Y. Z. Liu and T. H. Swanson. "Evidence for Physiologically active Axonal A1 Adenosine Receptors." (presented at the Society for Neuroscience annual meeting, 1996.)
- 12 Draughn, L. R., and T. H. Swanson. "Axillary SSEP Response: An Alternate Peripheral Recording Site." abstract in *American Society for Neurophysiological Monitoring*, (Spring, 1997).
- 13 Swanson, T. H., S. E. Krahl, S. A. Rivkees and O. A. Timofeeva. "Rat brain adenosine A1 receptor antisense decreases specific adenosine ligand binding." (presented at the Society for Neuroscience annual meeting, 1997.)
- 14 Daube, J. R., M. A. Aminoff, P. Antuono, R. Brey, R. K. Deuel, J. Emmett, W. J. Koroshetz, T. H. Swanson, J. W. Phillis and S. D. Yankton. "The Importance of Animal Research in Neuroscience Advances: A Historical Perspective." (presented at the American Academy of Neurology annual meeting, 1998.)