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EDUCATION

- M.D., Stanford University School of Medicine, Stanford, CA (9/91-6/00)
- Ph.D., Neurosciences Program, *Identification of Voltage-Gated Calcium Channels Involved in Regulation of Excitatory Synaptic Transmission in Rat Hippocampus*, Research Supervisor: Prof. Richard W. Tsien, Stanford University School of Medicine, Stanford, CA (1/93-1/98)
- M.Sc., Faculty of Physiological Sciences, *In Vivo Monitoring of Striatal Neurochemistry: Neurotransmitter Interactions During Behaviour*, Research Supervisor: Dr. Marianne Fillenz, University of Oxford, Oxford, UK (10/89-9/91)
- B.A., with High Honors, Zoological Sciences (Chemistry Minor), University of Montana, Missoula, MT (9/84-6/89)

POSTGRADUATE TRAINING

- Fellow, Clinical Neurophysiology (EEG, Epilepsy and Evoked Potentials), Division of EEG and Epilepsy, Department of Neurology, Brigham & Women's Hospital, Harvard Medical School, Boston, MA (7/04-6/05)
- Resident, Neurology, Partners Program, Massachusetts General and Brigham & Women's Hospitals, Harvard Medical School, Boston, MA (7/01-6/04)
- Intern, Internal Medicine, Department of Medicine, Brigham & Women's and Faulkner Hospitals, Harvard Medical School, Boston, MA (7/00-6/01)

PROFESSIONAL POSITIONS HELD

- Founder, President & Managing Neurologist, Wyoming Neurologic Associates (2006-)
- Co-Founder, Frontier Neuro Health (2014-2018)
- Neurologist, Central Wyoming Neurology (2005-2006)

HOSPITAL POSITIONS HELD

- Staff Neurologist, Wyoming Medical Center (2005-)
- Consulting Neurologist (TeleStroke), Weston County Health Services (2020-)
- Consulting Neurologist (TeleStroke), Johnson County Healthcare Center (2020-)
- Consulting Neurologist (TeleStroke) Cody Regional Health-West Park Hospital (2020-)
- Consulting Neurologist, SageWest-Riverton (2020-)
- Consulting Neurologist, SageWest-Lander (2020-)
- Consulting Neurologist (TeleStroke), Memorial Hospital of Carbon County (2019-)
- Consulting Neurologist, Campbell County Memorial Hospital (2019-)
- Consulting Neurologist (TeleStroke), Hot Springs County Memorial Hospital (2019-)
- Consulting Neurologist (TeleStroke), Sheridan Memorial Hospital (2019-)
- Consulting Neurologist, Billings Clinic (2012-2020)
- Consulting Neurologist, Elkhorn Valley Rehabilitation Hospital (2008-)
- Consulting Neurologist, Memorial Hospital of Converse County (2008-2013, 2014-)

BOARD CERTIFICATION

- American Board of Psychiatry and Neurology: Neurology (2005, 2015-)
- American Board of Psychiatry and Neurology: Clinical Neurophysiology (2007, 2017-)
- American Board of Psychiatry and Neurology: Epilepsy (2016-)
- National Board of Physicians and Surgeons: Neurology (2015-)
- National Board of Physicians and Surgeons: Clinical Neurophysiology (2015-)
- National Board of Physicians and Surgeons: Epilepsy (2016-)

CURRENT LICENSE TO PRACTICE

- Wyoming Board of Medicine (2004-)
- Montana Board of Medicine (2012-)

SPECIAL LOCAL RESPONSIBILITIES

- Physician Advisory Council for Strategic Planning, Wyoming Medical Center (2019-2020)
- Telehealth Advisory Council, Wyoming Medical Center (2018-2020)
- Board Member, Northwest Regional Telehealth Resource Center (2016-2019)
- Board Member, Joint Operations Board, Wyoming Medical Center, (2015-2016)
- Program Director, Frontiers in Wyoming Medicine (2015, 2016)
- Wyoming Medical Center Board of Directors
 - Vice-Chairman (2015-2016)
 - Secretary (2013-2015)
 - Board Member (2012-2016)
- Wyoming Dementia Care
 - Board Member (2011-)
 - Chairman (2015-2017)
 - Vice-Chairman (2013-2015)
- Board Member, Wyoming Health Information Organization (2012-2015)
- Anticoagulation Committee, Wyoming Medical Center (2009-)
- Education Committee, Wyoming Medical Center (2009-2014)
- Chief of Staff, Wyoming Medical Center (2009-2011)
- Chairman, Wyoming Neuroscience and Spine Institute (2008-2011)
- Vice President of the Medical Staff, Elkhorn Valley Rehabilitation Hospital (2008-)
- Medical Director, Wyoming Stroke Enhancement Project (TeleStroke) (2008-2010)
- Medical Director, Wyoming Medical Center Stroke Program, ASA/AHA Gold Plus Award, Target Stroke Honor Roll Elite Plus, Primary Stroke Center Certified by The Joint Commission (2006-)
- Medical Director, Wyoming Epilepsy Center, Level 3 Certified, National Association of Epilepsy Centers (2006-)

PROFESSIONAL ORGANIZATIONS

- American Medical Association
- American Heart Association,
 - American Stroke Association Advisory Committee (2020-)
 - Elected Fellow Member (2019)
 - SouthWest Region Board of Directors (2011-2015, 2017-)
 - President (2020-)
 - SouthWest Region Stroke Advisory Committee (2011-)
 - Chairman (2014-2015)
 - SouthWest Region Research Committee (2014-2016)

- National Professional Education Committee (2016-2018)
- Pacific Mountain Affiliate Board of Directors, (2009-2011)
- American Epilepsy Society
 - Elected Fellow Member (2016)
 - Corporate Affairs Committee (2013-2015)
 - Medical Education Committee (2014-2018)
- American Academy of Neurology
 - Elected Fellow Member (2015)
- National Association of Epilepsy Centers
 - Board Nominating Committee (2015)
- American Association of Neuromuscular & Electrodiagnostic Medicine
 - State Liaison Program Volunteer (2019)
- Wyoming Medical Society
 - Past-President (2021-)
 - President (2019-2021)
 - Vice President (2018-2019)
 - Secretary (2017-2018)
 - Open Trustee (2014-2017)
- Wyoming Neurological Society
 - Vice President (2006-2014, 2015-)
 - Treasurer (2014-2015)
- Natrona County Medical Society

FACULTY POSITIONS HELD

- University of Washington, School of Medicine, Department of Neurology,
 - Clinical Assistant Professor (2015-)
 - Clinical Instructor (2011-2015)
- University of Wyoming Residency Program in Family Practice/Neurology
 - Adjunct Faculty (2006-)
- Rocky Vista University College of Osteopathic Medicine
 - Clinical Assistant Professor (2018-)
- Master of Physician Assistant Studies Program, Rocky Mountain College
 - Clinical Adjunct Professor (2014-)

HONORS

- American Heart Association, Physician of the Year (2019)
- Wyoming Medical Center, Physician of the Year (2010)
- Howard Hughes Medical Institute Pre-Doctoral Fellowship, Stanford University (1993-1998)
- Rhodes Scholarship, Montana and Magdalen College, University of Oxford (1989-1991)
- Watkins Scholarship for Senior Project, University of Montana (1988-1989)
- University of Montana Presidential Award of Merit, University of Montana (1988)
- Silent Sentinel Award for Academic Excellence, University of Montana (1988)

PUBLICATIONS

Papers

- Zetterström, T., Wheeler, D.B., Boutelle, M.G. and Fillenz, M. (1991). Striatal ascorbate and its relationship to dopamine receptor stimulation and motor activity. *Eur. J. Neurosci.* **3**(10):940-946.
- Wheeler, D.B., Randall, A. and Tsien, R.W. (1994). Roles of N-type and Q-type Ca²⁺ channels in supporting hippocampal synaptic transmission. *Science* **264**:107-111.
- Wheeler, D.B., Tsien, R.W. and Randall, A. (1994). Identification of calcium channels that control neurosecretion. *Science* **266**:830-831.
- Wheeler, D., Boutelle, M.G. and Fillenz, M. (1995). The role of N-methyl-D-aspartate receptors in the regulation of physiologically released dopamine. *Neuroscience* **65**:767-774.
- Wheeler, D.B., Randall, A. and Tsien, R.W. (1996). Changes in action potential duration alter reliance of excitatory synaptic transmission on multiple types of Ca²⁺ channels in rat hippocampus. *J. Neurosci.* **16**:2226-2237.
- Donohoe, M.T., Kravitz, R.L., Wheeler, D.B., Chandra, R., Chen, A. and Humphries, N. (1999) Reasons for outpatient referrals from generalists to specialists. *J. Gen. Intern. Med.* **14**(5):281-286.
- Jun, K., Smith, S.M., Piedras-Renteria, E., Wheeler, D.B., Lee, S.B., Lee, T.G., Scheller, R.H., Tsien, R.W. and Shin, H.-S. (1999). Ablation of P/Q-type calcium channels currents and progressive, fatal ataxia in mice lacking the $\alpha 1_A$ subunit. *Proc. Natl. Acad. Sci. U.S.A.* **96**(26):15245-15250.

Chapters & Reviews

- Wheeler, D.B., Sather, W.A., Randall, A. and Tsien, R.W. (1994). Distinctive properties of a neuronal calcium channel and its contribution to excitatory transmission in the CNS. *Adv. Second Messenger Phosphoprotein Res.* **29**, Molecular and Cellular Mechanisms of Neurotransmitter Release. L. Stjärne, P. Greengard, S. Grillner, T. Hökfelt and D. Ottoson (Eds.), Raven Press, New York. pp. 155-172.
- Wheeler, D.B., Randall, A., Sather, W.A. and Tsien, R.W. (1995). Neuronal calcium channels encoded by the $\alpha 1_A$ subunit and their contribution to excitatory synaptic transmission in the CNS. *Prog. Brain Res.* **105**, Gene Expression in the Central Nervous System. A.C.H. Yu, L.F. Eng, K.J. McMahan, H. Schulman and A. Stadlin (Eds.), Elsevier Science BV, Amsterdam. pp. 65-78.
- Tsien, R.W. and Wheeler, D.B. (1999). Voltage-gated calcium channels. In: *Calcium as a Cellular Regulator*. E. Carafoli and C.B. Klee (Eds.), Oxford University Press, New York. pp 171-199.
- Bergsman, J.B., Wheeler, D.B. and Tsien, R.W. (2000). Classification and function of voltage-gated calcium channels. In: *Pharmacology of Ionic Channel Function: Activators and Inhibitors (Handbook of Experimental Pharmacology, Volume 147)*. M. Endo, Y. Kurachi and M. Mishina (Eds.), Springer-Verlag, Heidelberg. pp 55-83.

Abstracts

- Boutelle, M.G., Wheeler, D.B. and Fillenz, M. (1990). Effects of ketamine on basal and tail pinch-stimulated levels of extracellular brain ascorbic acid. *Eur. J. Pharmacol.* **183**(3):965- 966.
- Wheeler, D.B., Boutelle, M.G., Zetterström, T. and Fillenz, M. (1990). Effects of apomorphine on extracellular brain ascorbic acid. *Eur. J. Pharmacol.* **183**(2):431.
- Fillenz, M., Wheeler, D.B. and Boutelle, M.G. (1991). Regulation of the physiological release of dopamine. In: *Monitoring Molecules in Neuroscience. Proceedings of the Fifth International Congress on In Vivo Methods*. H. Rollema, B. Westerink and W. J. Drifhout, eds. University Centre for Pharmacy, Groningen, Noordwijkkerhau, pp. 315-316.

- Wheeler, D.B. and Fillenz, M. (1991). Local N-methyl-D-aspartate receptors modulate basal and tail pinch-stimulated release of dopamine in rat striatum. *Eur. J. Neurosci.* **3**(Suppl. 4):167.
- Malgaroli, A., Wheeler, D.B., Naldi, E., Ciardo, A., Bergamaschi, A. and Tsien, R.W. (1993). A presynaptic alteration supporting LTP in hippocampal neurons: contrast with effect of α -latrotoxin. *Soc. Neurosci. Abstr.* **19**(2):911.
- Randall, A.D., Wheeler, D.B. and Tsien, R.W. (1993). Modulation of Q-type Ca^{2+} channels and Q-type Ca^{2+} channel-mediated synaptic transmission by metabotropic and other G-protein linked receptors. *Funct. Neurol.* **8**(Suppl. 4):44-45.
- Wheeler, D.B. Tsien, R.W. and Randall, A.D. (1993). A calcium channel with novel pharmacology supports synaptic transmission and plasticity in the hippocampus. *Soc. Neurosci. Abstr.* **19**(2):909.
- Wheeler, D.B., Randall, A.D. and Tsien, R.W. (1994). The basis of concerted actions of multiple Ca^{2+} channel types in excitatory synaptic transmission in area CA1 of rat hippocampal slice *in vitro*. *J. Physiol.* **403P**:30.
- Wheeler, D.B., Randall, A. and Tsien, R.W. (1995). Concerted actions of multiple Ca^{2+} channel types in excitatory synaptic transmission. *Soc. Neurosci. Abstr.* **21**(3):1754.
- Wheeler, D.B. and Tsien, R.W. (1996). Mechanisms of long-term potentiation induced by elevated extracellular calcium. *Soc. Neurosci. Abstr.* **22**(2):1509.
- Jun, K., Smith, S.M., Piedras-Renteria, E., Wheeler, D.B., Lee, S.B., Scheller, R.H., Tsien, R.W. and Shin, H.-S. (1999). Knockout of the Ca^{2+} channel α_{1A} subunit ablates P- and Q-type currents and causes generalized dystonia. *Soc. Neurosci. Abstr.* **25**(1):195.
- Mermelstein, P.G., Graef, I.A., Pitt, G.S., Wheeler, D.B., Dasgupta, N., Mukai, T., Crabtree, G.R. and Tsien, R.W. (1999). Calcineurin and GSK-3 β regulate NF- $\text{Atc}4$ -dependent gene transcription in hippocampal neurons. *Soc. Neurosci. Abstr.* **25**(1):469.

CLINICAL TRIALS

- Long-term, prospective, observational, multinational, parallel-cohort study monitoring safety in patients with MS newly started with fingolimod once daily or treated with another approved disease-modifying therapy Novartis Protocol CFTY720D2403 (2012-2020)
- A two-year observational study to evaluate the safety profile of fingolimod in patients with multiple sclerosis who switch from natalizumab to fingolimod Novartis Protocol CFTY720D2405 (2013-2017)
- A randomized, double-blind, placebo-controlled, multicenter, parallel-group study to evaluate the efficacy and safety of brivaracetam in subjects (≥ 16 to 80 years old) with partial onset seizures UCB Biosciences GmbH protocol N01358 (2013-2015)
- An open-label, multicenter, follow-up study to evaluate the long-term safety and efficacy of brivaracetam used as adjunctive treatment in subjects aged 16 years or older with epilepsy UCB Biosciences GmbH Protocol N01379 (2013-2015)
- A Phase 3, double blind, double-dummy, randomized, positive-controlled, multicentre study comparing the efficacy and safety of Lacosamide to controlled released Carbamazepine in subjects newly or recently diagnosed with epilepsy and experiencing partial-onset or generalized tonic-clonic seizures UCB Biosciences GmbH Protocol SP0993 (2013-2014)
- A multicenter, double-blind, double-dummy follow-up study evaluating the long-term safety of lacosamide (200 to 600mg/day) in comparison with carbamazepine (400 to 1200mg/day), used as monotherapy in patients with partial-onset or generalized tonic-clonic seizures (≥ 16 years of age) coming from the SP0993 study UCB Biosciences GmbH Protocol SP0994 (2013-2014)