CURRICULUM VITAE

PERSONAL DATA

Name:	Sterling N. Sudweeks, Ph.D.
Address:	Brigham Young University Department of Cell Biology and Physiology 3045 LSB Provo, Utah 84602 (801) 422-8752

EMPLOYMENT

2001 - 2007, Assistant Professor, Brigham Young University
2007 – present, Associate Professor, Brigham Young University

EDUCATION AND EXPERIENCE

1991	Microbiology lab aid for U.S. Bureau of Mines Salt Lake City Research Center
1992	B.S. in Molecular Biology from Brigham Young University
1997	Ph.D. in Pharmacology from the University of Utah
1997-2001	Postdoctoral fellow, National Institute of Environmental Health Science/NIH, Research Triangle Park, North Carolina
2014	Visiting Professor – sabbatical, Laboratory of Dr. Jie Wu, Barrow Neurological Institute, Phoenix, Arizona

GRANTS/FUNDING

Research Award – BYU-James Bobbitt Endowment, Characterization of nAChR subtypes that are expressed in kidneys, $15,000, 2020-2022

Co-PI on NIH grant R0102066 - Nicotine and alcohol co-dependence, PI is Dr. Scott Steffensen, BYU Psychology, NIDA/NIH, $2,008,651.00, 2014-2019

Co-PI on NIH grant R0102059 - Neuropharmacological substrates of alcohol addiction, PI is Dr. Scott Steffensen, BYU Psychology, NIAAA/NIH, $1,468,985.00, 2012-2017

Co-PI on NIH grant R01AA013666 (Neuropharmacological substrates of alcohol addiction, PI is Dr. Scott Steffensen, BYU Psychology) NIAAA/NIH, $1,605,000.00, 2006-2011

PI on NIH grant 5K22ES011639 - Transition to Independent Position Award (Neuronal Nicotinic ACh Receptors and Alzheimer's Disease) NIEHS/NIH, $324,000.00, 2002-2006

BYU College of Biology and Agriculture, Undergraduate Education Fund Grant, $22,500, 2006

BYU ORCA Mentoring Environment Grants 2003, 2005, 2006, 2008
$20,000 each

BYU College of Life Sciences Teaching Enhancement Grant 2016
$10,000

OTHER HONORS AND AWARDS

BYU College of Life Sciences Outstanding Teaching Award, 2021

BYU Physiology & Developmental Biology Department award for Outstanding Teaching and Citizenship, 2018

Martin Rodbell Memorial Award for best Postdoctoral Research Seminar in the Laboratory of Signal Transduction NIEHS/NIH, 2000

The Fellows Award for Research Excellence (FARE) for NIH intramural fellows, 2000

Martin Rodbell Memorial Award for best Postdoctoral Research Seminar in the Laboratory of Signal Transduction NIEHS/NIH, 1999

University of Utah Research Committee Graduate Research Award, 1995-96

Sigma Xi Grant in Aid of Research, 1995

Trustees Scholarship at Brigham Young University, 1986-87

KSL-TV and Deseret News Science Sterling Scholar, Utah State Finalist, 1986

Bausch & Lomb Student Science Achievement Award, 1986

Eagle Scout, 1982

BIBLIOGRAPHY

PUBLICATIONS:

Sudweeks, S.N., and Twyman, R.E. Single Cell Reverse-Transcription Polymerase Chain Reaction (RT-PCR) and the GABA-A Receptor. *Neurochemistry International*, **28**(2):137-139 (1996)

Kriegler, S., Sudweeks, S., and Yakel J.L. The nicotinic alpha4 receptor subunit contributes to the lining of the ion channel pore when expressed with the 5-HT3 receptor subunit. *Journal of Biological Chemistry* **274(7)**:3934-6 (1999).

Jones, S., Sudweeks, S., and Yakel, J.L. Nicotinic receptors in the brain: correlating physiology with function. *Trends in Neurosciences* **22(12)**:555-61 (1999).

Kriegler, S., Sudweeks, S., and Yakel, J.L. MTSEA potentiates 5-HT3 receptors containing the nicotinic alpha4 subunit. *Neuropharmacology* **38(12)**:1913-5 (1999).

Sudweeks, S., and Yakel, J.L. Functional and Molecular Characterization of Neuronal Nicotinic ACh Receptors in Rat CA1 Hippocampal Neurones. *Journal of Physiology* **527(3):** 515-528 (2000).

Khiroug, S.S., Harkness, P.C., Lamb, P.W., Sudweeks, S., Khiroug, L., Millar, N.S., and Yakel, J.L. Rat nicotinic ACh receptor α7 and β2 subunits co-assemble to form functional heteromeric nicotinic receptor channels. *Journal of Physiology* **540(3):** 425-434 (2002).

Sudweeks S.N., Hooft J.A., Yakel J.L. 2002. Serotonin 5-HT(3) receptors in rat CA1 hippocampal interneurons: functional and molecular characterization. *Journal of Physiology* **544(3)**: 715-26 (2002).

Heather A. Wilson-Ashworth, Allan M. Judd, Richard M. Law, Brad D. Freestone, Shannon Taylor, Matthew K. Mizukawa, Kevin R. Cromar, Sterling Sudweeks, John D. Bell. Formation of transient non-protein calcium pores by lysophospholipids in S49 lymphoma cells. *The Journal of Membrane Biology*. **200(1)**:25-33 (2004).

Taylor, E.B., Hurst, D., Greenwood, L.J., Lamb J.D., Cline, T.D., Sudweeks, S.N., Winder, W.W. Endurance Training Increases LKB1 Protein but not AMPKK Activity in Skeletal Muscle. *Am J Physiol Endocrinol Metab*. **287(6)**:E1082-9 (2004).

David W. Allison, Allison J. Ohran, Sarah H. Stobbs, Manuel Mameli, C. Fernando Valenzuela, Sterling N. Sudweeks, Andrew P. Ray, Steven J. Henriksen, and Scott C. Steffensen. Connexin-36 Gap Junctions Mediate Electrical Coupling Between Ventral Tegmental Area GABA Neurons. *Synapse*. **60(1)**:20-31 (2006).

Branvold D.J., Allred D.R., Beckstead D.J., Kim H.J., Fillmore N., Condon B.M., Brown J.D., Sudweeks S.N., Thomson D.M., and Winder W.W. Thyroid Hormone effects on LKB1, MO25, phospho-AMPK, phospho-CREB, and PGC-1{alpha} in Rat Muscle. *J Appl Physiol*. Oct;**105(4)**:1218-27. Epub 2008 Jul 31. (2008).

Seegmiller R.E., Bomsta B.D., Bridgewater L.C., Niederhauser C.M., Montaño C., Sudweeks S., Eyre D.R., and Fernandes R.J. The Heterozygous Disproportionate micromelia (*Dmm*) Mouse: Morphological Changes in Fetal Cartilage Precede Postnatal Dwarfism and Compared to Lethal Homozygotes Can Explain the Mild Phenotype. *J Histochem Cytochem*. Nov;**56(11)**:1003-11. Epub 2008 Aug 4. (2008).

Ludlow KH, Bradley KD, Allison DW, Taylor SR, Yorgason JT, Hansen DM, Walton CH, Sudweeks SN, Steffensen SC. Acute and chronic ethanol modulate dopamine D2-subtype receptor responses in ventral tegmental area GABA neurons. *Alcoholism: Clinical and Experimental Research*. **33(5)**: 804-811. Epub 2009 Mar 6 (2009).

Drummond M., Conlee, R., Mack G., Sudweeks S., Schaalje G., Parcell A. Myogenic regulatory factor mRNA, protein expression and resistance exercise volume. *European Journal of Applied Physiology.* **108(4)**:771-778 Mar. (2010).

Smith CD, Compton RA, Bowler JS, Kemp JT, Sudweeks SN, Thomson DM, Winder WW. Characterization of the liver kinase B1-mouse protein-25 -Ste-20-related adaptor protein complex in adult mouse skeletal muscle. *J Appl Physiol.* **111(6)**:1622-8. Dec. (2011).

Merrill CB, McNeil M, Williamson RC, Poole BR, Nelson B, Sudweeks S, Edwards JG. Identification of mRNA for endocannabinoid biosynthetic enzymes within hippocampal pyramidal cells and CA1 stratum radiatum interneuron subtypes using quantitative real-time polymerase chain reaction. *Neuroscience.* Vol. **218**: 88-99, Aug. (2012).

Taylor DH, Burman PN, Hansen MD, Wilcox RS, Larsen BR, Blanchard JK, Merrill CB, Edwards JG, Sudweeks SN, Wu J, Arias HR, Steffensen SC. Nicotine Enhances the Excitability of Gaba Neurons in the Ventral Tegmental Area via Activation of Alpha 7 Nicotinic Receptors on Glutamate Terminals. *Biochem & Pharmacol* S1:007. doi: 10.4172/2167-0501.S1-007. Apr. (2013).

Adams JS, Sudweeks SN, Stark MR. Pax3 isoforms in sensory neurogenesis: Expression and function in the ophthalmic trigeminal placode. *Developmental Dynamics* **243**:1249–1261, DOI: 10.1002/DVDY.24108, Jan. (2014).

Steffensen SC, Shin SI, Nelson AC, Pistorius SS, Williams SB, Woodward TJ, Park HJ, Friend L, Gao M, Gao F, Taylor DH, Foster Olive M, Edwards JG, Sudweeks SN, Buhlman LM, Michael McIntosh J, Wu J. α6 subunit-containing nicotinic receptors mediate low-dose ethanol effects on ventral tegmental area neurons and ethanol reward. *Addict Biol.* doi: 10.1111/adb.12559. 13 Sep (2017)

Chen, D., Gao, F., Ma, X., Gang-gang, S., Huang, Y., Su, Q., Sudweeks, S.N., Gao, M, Turner, D., Eaton, J.B., Chang, Y., McIntosh, J.M., Lukas, R.J., Whiteaker, P., Steffensen, S.C., and Wu, J. Pharmacological and functional comparisons of α6/α3β2β3-nAChRs and α4β2-nAChRs heterologously expressed in the human epithelia SH-EP1 cell line. *Acta Physiology Sinica;* 39(10):1571-1581. doi: 10.1038/aps.2017.209. October (2018)

Gao F, Chen D, Ma X, Sudweeks S, Yorgason JT, Gao M, Turner D, Eaton JB, McIntosh JM, Lukas RJ, Whiteaker P, Chang Y, Steffensen SC, and Wu J. Alpha6-containing nicotinic acetylcholine receptor is a highly sensitive target of alcohol. Neuropharmacology Volume 149, 1 May 2019, Pages 45-54. DOI: 10.1016/j.neuropharm.2019.01.02. May (2019)

Jackson D and Sudweeks S. Nicotine and alpha3beta2 neuronal nicotinic acetylcholine receptors. Chapter 30 in the book: **The Neuroscience of Nicotine: Mechanisms and Treatment**. Editor: Victor Preedy. Academic Press, Elsevier. Amsterdam, The Netherlands. March 2019.

POSTERS AND PRESENTATIONS:

Sudweeks, S.N., and Twyman, R.E. Single Neuron PCR Analysis for GABA-A Receptor Subunits. Poster for Intermountain Neuroscience Chapter Meeting. October 25, 1993.

Sudweeks, S.N., and Twyman, R.E. Analysis of GABA-A Receptors in Cultured Fetal Mouse Cortical Neurons. Talk given at Intermountain Neuroscience Snowbird Symposium. Snowbird, Utah. May 19-20, 1994.

Sudweeks, S.N., and Twyman, R.E. RT-PCR Analysis of Single Cultured Mouse Cortical Neurons for GABA-A Receptor Subunits. Society for Neuroscience Abstracts, 1994.

Gahring, L.C., Twyman, R.E., Eichten, J.M., Sudweeks, S.N., Jackson, L., Baringer, J.R., and Rogers, S.W. Neuronal Glutamate Receptor Antibodies - Potential Excitotoxins? Society for Neuroscience Abstracts, 1994.

Sudweeks, S.N., and Twyman, R.E. Identification of Putative GABA-A Receptor β2 Splice Variant in Single Cultured Mouse Cerebellar Granule Cells. Society for Neuroscience Abstracts, 1995

Sudweeks, S.N., and Yakel, J.L. Single Cell RT-PCR Analysis of Rat Hippocampal Neurons for mRNA Expression of nAChR Alpha4 and Alpha7 subunits, GAD 65, GAD 67, and VGAT. Poster presented at Gordon Conference on Synaptic Transmission. Plymouth, New Hampshire. August 2-7, 1998.

Sudweeks, S.N., and Yakel, J.L. Single Cell RT-PCR Analysis of Rat Hippocampal Neurons for mRNA Expression of nAChR Alpha4 and Alpha7 subunits, GAD 65 and GAD 67. Society for Neuroscience Abstracts, 1998.

Sudweeks, S.N., Shao, Z., Pettit, D., and Yakel, J.L. Neuronal Nicotinic Receptors in Rat Hippocampal Interneurons: Functional and Molecular Characterization. Poster presented by J. Yakel at Symposium on Electrical Signaling in the CNS. Trieste, Italy. September 6-9, 1999.

Sudweeks, S.N., and Yakel, J.L. mRNA Expression of nAChR α2, α3, α4, α5, α6, α7, β2, β3, and β4 Subunits in Rat Hippocampal Neurons using Single Cell RT-PCR. Society for Neuroscience Abstracts, 1999.

Sudweeks, S. Molecular and Functional Correlations in Neuronal Nicotinic Acetylcholine Receptors. Talk given at the BYU Neuroscience Center, Provo, Utah. February 17, 2000.

Sudweeks, S., and Yakel, J.L. Analysis of 5-HT_3 and nAChR α4 mRNA for Single-cell Co-expression in Hippocampal Interneurons. Poster presented at Gordon Conference on Synaptic Transmission. New London, Connecticut. July 15-20, 2000.

Sudweeks, S.N., and Yakel, J.L. Analysis of mRNA co-expression of the nAChR alpha4 and 5-HT3A subunits in rat hippocampal neurons using single-cell RT-PCR. Society for Neuroscience Abstracts, 2000.

Sudweeks, S.N., and Yakel, J.L. Non-α7 rat neuronal nicotinic receptors in hippocampal interneurons are modulated by Alzheimer's disease β-amyloid peptide. Poster presented at

Channelopathies 2001 conference in Sheffield, England. July 1-3, 2001

Sudweeks, S.N., and Yakel, J.L. Rat neuronal nicotinic receptors in CA1 stratum oriens interneurons are blocked by Alzheimer's disease β-amyloid peptide. Society for Neuroscience Abstracts, 2001.

Yakel, J.L., Khiroug, S.S., Lamb, P.W. and Sudweeks, S.N. The rat nicotinic α7 and β2 receptor subunits co-assemble to form functional nicotinic receptor channels. Society for Neuroscience Abstracts, 2001.

Sudweeks, S.N., Cromar, K., Mizukawa M., Poffenberger, K., Tovar, F. Single-cell real-time quantitative RT-PCR analysis of neuronal nicotinic acetylcholine receptor subunits in rat hippocampal interneurons. Annual Meeting of the Society for Neuroscience. November 10, 2003. New Orleans, Louisiana. Program No. 465.5. *2003 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, 2003. Online.

Sudweeks, S., Burgon, R., Steinhafel, N., Georgi, S., Welch, K., Gibson, M., Mortensen, A., and Callister, B. Characterization of neuronal nicotinic acetylcholine receptor subunit combinations found in rat hippocampal interneurons. Society for Neuroscience Annual Meeting. Program No. 842.13. *2004 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, 2004. Online.

Burgon, R., and Sudweeks, S. Single-cell Real-time Quantitative RT-PCR Analysis of Neuronal Nicotinic Acetylcholine Receptor Subunit Expression in Rat Hippocampal Interneurons. Poster presented at: Quantitative PCR - The Validation Tool of Choice. La Jolla, California. March 21-22, 2005.

R.M. Burgon, M.M. Peterson, J. Lee, S.A. Georgi, C. Garner, J. Reid, A. Pickett, S.N. Sudweeks. Classification of neuronal nicotinic acetylcholine receptors in rat CA1 hippocampal interneuron subpopulations defined by calcium-binding protein mRNA expression. Intermountain Chapter of the Society for Neuroscience, Provo, Utah. November 3, 2005.

D.W. Allison, M.E. Haws, M.L. Horton, S.H. Stobbs, S.N. Sudweeks, S.C. Steffensen. Ethanol Modulates Electrical Coupling Between GABA Neurons in the Ventral Tegmental Area. Intermountain Chapter of the Society for Neuroscience, Provo, Utah. November 3, 2005.

R.M. Burgon, M.M. Peterson, S.N. Sudweeks. Classification of Neuronal Nicotinic Acetylcholine Receptors in rat CA1 Hippocampal Interneuron Subpopulations Defined by Calcium-Binding Protein mRNA Expression. Program No. 723.14. *2005 Abstract Viewer/Itinerary Planner.* Washington, DC: Society for Neuroscience, 2005. Online.

D.W. Allison, M.E. Haws, M.L. Horton, S.H. Stobbs, S.N. Sudweeks, S.C. Steffensen. Ethanol Modulates Electrical Coupling Between GABA Neurons in the Ventral Tegmental Area. Program No. 797.2. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2005. Online.

S.A. Georgi, N.W. Steinhafel, M.D. Gibson, A.D. Mortensen, S. Funk, S.N. Sudweeks. Characterization of Rat α3α7β2 and α4α5β4 Nicotinic Acetylcholine Receptors in Human Embryonic Kidney 293 Cells. Program No. 951.13. 2005 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2005. Online.

Cindy Marie Niederhauser, Carolina Montaño, Brandon D. Bomsta, Robert E. Seegmiller, Sterling N. Sudweeks, and Laura C. Bridgewater. Aggrecan 1 expression in Dmm mice. Presented at Experimental Biology 2006. San Francisco, California, April 1-5, 2006. FASEB J. 2006 20:A545

Malia L. Horton, Stuart P. Layton, Sterling N. Sudweeks, David W. Allison, and Scott C. Steffensen. Electrical Coupling Between Midbrain GABA Neurons is Modulated via Connexin-36 Gap Junctions. Poster presented at the Mary Lou Fulton Mentored Student Research Conference, Brigham Young University, Provo Utah, April 13, 2006.

David W. Allison, Malia L. Horton, Stuart P. Layton, Sterling N. Sudweeks, and Scott C. Steffensen. Ethanol modulates electrical coupling between GABA neurons in the ventral tegmental area. Program No. 292.10. 2006. Abstract Viewer/Itinerary Planner. Society for Neuroscience Annual Meeting, Atlanta, GA. October 16, 2006. Online.

Sterling N. Sudweeks, Matthew M. Peterson, Richard M. Burgon, and Sean A. Georgi. Classification of neuronal nicotinic acetylcholine receptors in rat hippocampal CA1 interneuron subpopulations defined by neuropeptide Y, somatostatin, and calcium-binding proteins mRNA expression. Program No. 326.6. 2006. Abstract Viewer/Itinerary Planner. Society for Neuroscience Annual Meeting, Atlanta, GA. October 16, 2006. Online.

Seegmiller RE, Niederhauser CM, Montano C, Bomsta BD, Wink AE, Sudweeks SN, Bridgewater LC. Aggrecan expression in Dmm mice. Presented at The American Society for Matrix Biology Biennial Meeting, Nashville, TN. Abstract published in MATRIX BIOLOGY 25: S43-S44 Suppl. S, NOV. 2006.

Micah J. Drummond, Robert K. Conlee, Gary W. Mack, Sterling Sudweeks, G. Bruce Schaalje, and Allen C. Parcell. Acute Myogenic Responses to Resistance Exercise Are Influenced by Exercise. Presented at the Annual meeting of the Southwest Chapter of the American College of Sports Medicine. San Diego, CA. Nov. 10-11 2006.

Stephen A Mcilmoil, Janae Strickland, James P Porter, Sterling N Sudweeks, and Allan M Judd. Interleukin-6 Inhibition of Bovine Adrenal Androgen Release Involves Suppression of Steroidogenic Enzymes and SF-1 Expression and Augmentation of DAX-1 Expression. Presented at The Endocrine Society's 89th Annual Meeting, Toronto Canada. June 2-5 2007.

Sterling N. Sudweeks, John Mizukawa, and Kasey Welch. Characterization of alpha3beta2 neuronal nicotinic acetylcholine receptors. Presented at the Annual Meeting of the Society for Neuroscience. Program No. 574.3. November 6, 2007. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.

Sterling N. Sudweeks. What happens when you make a deposit in your cranial vault? Talk given for the Department of Instructional Psychology and Technology, College of Education, Brigham Young University, Provo, Utah. November 28, 2007.

Sterling N. Sudweeks. The biological basis of learning and memory. Talk given for the Wasatch Associates, CITES program (Center for Improvement of Teacher Education and Schooling), College of Education, Brigham Young University, Provo, Utah. January 18, 2008.

Sudweeks, S., Mizukawa, J., Welch, K., Gay, E., and Yakel, J. Neuronal nicotinic acetylcholine receptor diversity in rat hippocampal interneurons. Presented at the XIII International Symposium on Cholinergic Mechanisms in Foz do Iguaçu, Parana, Brazil, August 16-20, 2008.

Sudweeks, S., Mizukawa, J., Welch, K., Martindale B., Beaufort, B., Gay, E., and Yakel, J. Characterization of neuronal nicotinic acetylcholine receptors in rat hippocampus. Program No. 328.6. November 17, 2008. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008. Online.

Sterling N. Sudweeks. The biological basis of learning and memory. Talk given for the Wasatch and Provo Associates, CITES program (Center for Improvement of Teacher Education and Schooling), College of Education, Brigham Young University, Provo, Utah. January 23, 2009.

Sterling N. Sudweeks. The neurological influence on happiness. Talk given at BYU OPAC conference, Brigham Young University, Provo, Utah. 3 March 2010.

Taylor, D. H., Burman, P. N., Wilcox, R. S., Ringer, K., Merrill, C. B., Sudweeks, S. N., Edwards, J. G., Arias, H. R., Steffensen, S. C.. Acute and chronic effects of nicotine on GABA neurons in the ventral tegmental area. Program No. 476.7. November 15, 2010. 2010 Neuroscience Meeting Planner. San Diego, CA.: Society for Neuroscience, 2010. Online.

Taylor, D. H., Burman, P., Wilcox, R. S., Merrill, C. B., Ringer, K., Sudweeks, S. N., Edwards, J. G., Arias, H. R., Wu, J., Steffensen, S. C.. Acute and chronic effects of nicotine on GABA neurons in the ventral tegmental area. Program No. 686.13. November 15, 2011. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.

Merrill, C., McNeil, M., Williamson, R., Poole, B., Nelson, B., Sudweeks, S. N., Edwards, J. G. (2012). Identification of endocannabinoid biosynthetic enzyme mRNA in hippocampal pyramidal cells and CA1 stratum radiatum interneurons. Program No. 336.13. October 15, 2012. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.

Sudweeks, S.N., Anderson, M.L., Jacobsen, C., Carpenter, B, Hansen, D., Tullis, B. The effects of β-amyloid on neuronal nicotinic acetylcholine receptors expressed in *Xenopus* oocytes. Program No. 328.04. October 15, 2012. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.

Sudweeks, S.N., Baugh, S., Wangemann, P. Neurobiology of Learning and Memory Formation. Presentation given at the Annual Conference of the Northern Rocky Mountain Educational Research Association. Jackson Hole WY. 4 October, 2013.

Shin, S. Mabey, J.K., White, D.N., Sandoval, S.S, Nielson, C.A., Schilaty, N.D., Taylor, D.H., Sudweeks, S.N., Edwards, J.G., McIntosh, J.M., Wu, J., Steffensen, S. Ethanol inhibits GABA neurons in the ventral tegmental area and dopamine release in the nucleus accumbens via presynaptic α6 nicotinic receptors on GABA terminals. Program No. 60.08. November 9, 2013. 2013 Neuroscience Meeting Planner. San Diego CA: Society for Neuroscience, 2013. Online.

Sudweeks, S.N., Characterization of Alpha6 Containing Neuronal nAChRs. Presentation given for the Department of Physiology and Developmental Biology, Brigham Young University, Provo, Utah. 12 September, 2014.

Jackson, D.C, Gunnell S., Dressman D., Jacobsen C., and Sudweeks, S.N., Interactions of hippocampal nAChR subtypes with beta amyloid and the kinase inhibitor genistein. Program No. 401.04. November 17, 2014. 2014 Neuroscience Meeting Planner. Washington DC: Society for Neuroscience, 2014. Online.

Woodward, T. J., Shin, S. I., Mabey J. K., Nelson A. C., Schilaty N. D., Taylor D. H., Wu J., Mcintosh M., Sudweeks, S.N., Edwards, J.G., and Steffensen S. C, Ethanol inhibits GABA neurons in the ventral tegmental area and dopamine release in the nucleus accumbens via presynaptic α6 nicotinic receptors on GABA terminals. Program No. 53.01. November 15, 2014. Neuroscience Meeting Planner. Washington DC: Society for Neuroscience, 2014. Online.

Hall M., Kolb J., Todd B. Jr., Pugh D., Vance B., Klienstuber B., Drecketts R., Jackson D., Arias H.R., and Sudweeks S.N. PAMs: A growing field in pharmacological drug development. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 7 April, 2016. (Awarded First prize among Neuroscience undergraduate student posters).

Jackson D., Hall M., Kolb J., Todd B. Jr., Pugh D., Vance B., Klienstuber B., Drecketts R., and Sudweeks S.N., Novel Pharmacological Target: Characterization of alpha3beta2 nAChRs expressed in Xenopus Laevis Oocytes. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 7 April, 2016. (Awarded First prize among Neuroscience graduate student posters).

Jackson D., Hall M., and Sudweeks S.N., Characterization of Human a3β2 nAChRs expressed in Xenopus Laevis Oocytes. LDS Life Science Symposium, Thanksgiving Point, Lehi, Utah. 20-22 July 2016.

Jackson D., Hall M., and Sudweeks S.N., Characterization of Human a3β2 nAChRs expressed in Xenopus Laevis Oocytes. Alzheimer's Association International Conference, Toronto, Canada. 26 July 2016.

Jackson D. C., Hall M., and Sudweeks S.N., Characterization of human alpha3beta2 nicotinic acetylcholine receptor kinetics reveals subtypes based on different subunit stoichiometries. Program No. 500.16., 15 November 2016. San Diego, CA. Neuroscience Meeting Planner. San Diego CA: Society for Neuroscience, 2016. Online.

Thompson S., Wright M., Grant T., Vance B., Ahern N., Ogden J., Drecketts R., Pugh D., Fisher Z., Werner S., Fowers J., Klienstuber B., Burgon R., Sego A., Jackson D., and Sudweeks S.N. Identifying Novel Cognitive Therapy Targets: Expression of nAChR mRNA in Rat Hippocampal Interneurons. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 13 April 2017.

Jackson D. and Sudweeks S.N. PAM-2: A Promising Drug in Cognitive Therapeutics. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 13 April 2017.

Sego A. and Sudweeks S.N. Novel α3β2 nAChR stable transfection HEK-293 cell line with TET inducible promoters. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 13 April 2017. (Awarded First prize among Neuroscience graduate student posters).

Jackson D., Hall M., and Sudweeks S. The human α3β2 neuronal nicotinic acetylcholine receptor forms two distinguishable subtypes. Talk given at nAChR 2017 Conference. Platanias Greece. 8 May 2017.

Sego A. and Sudweeks S. Novel HEK-293 α3β2 stable transfection cell line with inducible promoters. Poster and Lightning Talk given at nAChR 2017 Conference. Platanias Greece. 10 May 2017.

Sudweeks S.N., Jackson D.C., and Burgon R.M., Single-Cell Analysis of nAChR mRNA Expression in Rat Hippocampal Interneurons. Poster and Lightning Talk given at nAChR 2017 Conference. Platanias Greece. 10 May 2017.

Steffensen S. C., Gao F., Chen D., Ma X, Gao M., Taylor D. H., Eaton B., Sudweeks S.N., P. Whiteaker P., Wu J. Alpha 6-containing nicotinic acetylcholine receptor is a sensitive target for low-dose alcohol. Program No. 77.10., 11 November 2017. Washington D.C. Neuroscience Meeting Planner. Society for Neuroscience, 2017. Online.

Werner S., Sego A., Wright M., Nebeker S., Wagner R., Grant T., Thompson S., Gardner J., and Sudweeks S. Effects of Imipramine on α7β2 Nicotinic Acetylcholine Receptors. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 12 April 2018.

Werner S., Sego A., Nebeker S., Wright M., Gardner J., Wagner R., Grant T., Thompson S., and Sudweeks S. Finding a Treatment for Autism. Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 12 April 2018. (Awarded First prize among Neuroscience graduate student posters).

Sudweeks S. N., and Werner S.; Department of Physiology and Developmental Biology, and Neuroscience Center, Brigham Young Univ., Provo, UT. A novel treatment for autism spectrum disorder: Targeting the cholinergic system. Program No. 120.20. 2018 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2018. Online.

S. Nebeker, S. Werner, M. Kropelnicki, M. Mizukawa, C. Ulrich, R. Richter, M. Wright, C. Merrill, R. Wagner, S. Thompson, D. Read, M. Crumrine, R. Johnson and S. N. Sudweeks. *In Silico* Screening to Identify Potential Positive Allosteric Modulators of α3/β2 Neuronal Nicotinic Acetylcholine Receptors..Mary Lou Fulton Mentored Learning Conference, Brigham Young University, Provo, Utah. 18 April 2019. (Awarded the Gerontology Best Poster Award).

Sudweeks S. N. panel member for BYU College of Life Sciences College Conference breakout session, "How to Amp up your Teaching through TEGS (Teaching Enhancement Grants)", August 28, 2019.

E. Anderson, A. Stockard, S. J. Vogel, J. Brundage, A. Payne, D. Obray, M. Gao. J. Mcintosh, A. M. Lee, J. Yorgason, S. Sudweeks, J. We, S. C. Steffensen; Low dose alcohol enhances dopamine release in the nucleus accumbens via alpha6-containing nicotinic receptors on gabaergic inputs from the ventral tegmental area . Program No. 079.03. 2019 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2019. Online.

A. Sego, R. Richter, M. Wright, R. Wagner, C. Merrill, M. Kropelnicki, R. Johnson, S. N. Sudweeks; A stably transfected, doxycycline inducible, HEK-293 model for the characterization and screening of alpha3 beta2 neuronal nicotinic acetylcholine receptors. Program No. 644.05. 2019 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2019. Online.

Sudweeks S. N. panel member for BYU College of Life Sciences Lunch & Learn "Learning from some of the BEST college faculty". November 13, 2019.

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