Curriculum Vitae

Jennifer I. Luebke, PhD
Waterhouse Professor and Chair of Anatomy & Neurobiology

Laboratory of Cellular Neurobiology
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Academic Training:

5/1990 PhD	Anatomy & Neurobiology, Boston University School of Medicine, Boston, Massachusetts (Linda L. Wright, mentor)
5/1984 BS	Randolph-Macon College, Ashland, Virginia

Additional Training:

7/1992-8/1995	Postdoctoral Fellow, Department of Physiology, Tufts University Medical School Boston, Massachusetts (Kathleen Dunlap, mentor)
6/1990-6/1992	Postdoctoral Fellow, Department of Psychiatry, Harvard Medical School, Boston, Massachusetts (Robert W. McCarley and Robert W. Greene mentors)

Academic Appointments:

6/2019-present	Waterhouse Professor and Chair Anatomy & Neurobiology, Boston University School of Medicine, Boston, MA
6/2018-5/2019	Chair *ad interim* Anatomy & Neurobiology, Boston University School of Medicine, Boston, MA
1/2017-present	Professor of Anatomy & Neurobiology, Boston University School of Medicine, Boston, MA
9/2015- present	Vice-Chair, Department of Anatomy & Neurobiology, Boston University School of Medicine
5/2010- present	Adjunct Associate Professor, Department of Neuroscience, Mount Sinai School of Medicine, New York, New York
9/2004- present	Associate Professor, Department of Anatomy & Neurobiology and Department of Psychiatry, Boston University School of Medicine, Boston, Massachusetts
9/1995-8/2004	Assistant Professor, Department of Anatomy & Neurobiology and Department of Psychiatry, Boston University School of Medicine, Boston, Massachusetts

Departmental and University Committees:

6/2017-8/2018	Chair, Sustainability Committee; Executive Committee of the Boston University Faculty Council
9/2016-8/2018	Chair, Supply Chain & Waste Stream Working Group of the Boston University Climate Action Plan Taskforce
9/2015-8/2018	School of Medicine Representative to the Boston University Faculty Council
9/2014-5/2018	Boston University Council Committee on Graduate Academic Programs and Policies (GAPP)
9/2014	Search Committee for Assistant Dean of Academic Affairs in Graduate Medical Sciences, BUSM
2/2014-present	Academic Standards Committee, Boston University Graduate Medical Sciences
11/2013-7/2018	Medical Student Evaluation and Promotions Committee (SEPC), BUSM
7/2013-8/2018	Graduate Education Committee (Chair) and Director of the Graduate Program in Anatomy & Neurobiology, BUSM
7/2013-present	PhD Steering Committee, Boston University Graduate Medical Sciences
5/2010-present	Committee on Post-Qualifying Exam PhD Training, Department of Anatomy & Neurobiology
3/2010-2014	PhD Qualifying Exam Committee, Member; Department of Anatomy & Neurobiology
5/2006-2014	Preclinical Sciences Curriculum Committee (now Pre-Clerkship Subcommittee)
9/2009	Advisory Committee for the Formation of the Center for Neuroscience, a neuroscience "umbrella" program at Boston University
3/2005-12/2009	PhD Qualifying Exam Committee (Chair), Department of Anatomy & Neurobiology
9/2004-7/2013	Graduate Student Ombudsman, Department of Anatomy & Neurobiology
5/2005-5/2008	Portfolio Committee (Chair), Department of Anatomy & Neurobiology
7/2006-7/2010	First Year Medical School Promotions Committee, BUSM

Teaching Experience and Responsibilities:

2018-present	Scientific Writing, Course Director
2018-present	Professional Skills, Course Director
1996-present	Medical Neurosciences, Boston University School of Medicine Course Director from 2008-2013
1998-present	Research Practicum in Anatomy & Neurobiology
1998-present	Neurobiology of Learning and Memory, Department of Anatomy & Neurobiology
2000-present	Systems Neurobiology, Department of Anatomy & Neurobiology
2000-present	Neurophysiology Review for Neurology Residents, Boston University School of Medicine
2005-present	Methods in Neuroscience, Department of Anatomy & Neurobiology Co-Course Director from 2005-2010
2005-present	Research Colloquium in Anatomy & Neurobiology
1998-2008	Basic Neuroscience Survey, Boston University School of Medicine
1996-2006	Medical Microscopic Anatomy, Boston University School of Medicine
1993-1995	Instructor in Neuroscience, Harvard University Summer Program Instructor in Neuroscience, Tufts University School of Medicine
1992	Instructor in Medical Gross Anatomy, Harvard Medical School
1987-1990	Instructor in Medical Gross Anatomy, Boston University School of Medicine Instructor in Medical Neuroscience, Boston University School of Medicine Instructor in Medical Microscopic Anatomy, Boston University School of Medicine Instructor in Dental Gross Anatomy, Boston University School of Dental Medicine

Major Mentoring Activities:

<u>Postdoctoral Trainees</u>

09/2017- 8/2020	Dhruba Pathak (Postdoctoral Fellow) Now a Research Scientist at Temple University

1/2016- 6/2019	Joe Goodliffe, PhD (Postdoctoral Fellow) Now a Staff Scientist at Decibel Therapeutics
3/2012-7/2015	Maria Medalla, PhD (Postdoctoral Fellow and K99 Awardee). Now Assistant Professor of Anatomy & Neurobiology, Boston University School of Medicine
5/2011-5/2015	Katie Youmans PhD (Postdoctoral Fellow in Pharmacology; Co-Advisor). Now Medical Science Liaison at Teva Pharmaceuticals
11/2006-4/2010	Anne Rocher, PhD (Postdoctoral Fellow). Now an Instructor at the Département des Neurosciences Fondamentales, Universite de Lausanne, Lausanne, Switzerland
5/2005-1/2007	James Nilson, MD, PhD (Postdoctoral Fellow). Now an attending Anesthesiologist at Tufts Medical Center

Doctoral Trainees

9/2017-present	Wayne Chang (PhD, Anatomy & Neurobiology)
5/2016-present	Chelsey Leblang (PhD, Anatomy & Neurobiology)
8/2012-7/2017	Teresa Guillamon-Vivancos (PhD, Anatomy & Neurobiology; Co-Advisor). Now a Postdoctoral Fellow in Spain
9/2008-5/2013	Johanna Crimins (PhD, Anatomy & Neurobiology). Now a Postdoctoral Fellow, Neuroscience Department Icahn School of Medicine at Mount Sinai
9/2008-1/2013	Joseph Amatrudo (PhD, Anatomy & Neurobiology). Now a Postdoctoral Fellow, Neuroscience Department Icahn School of Medicine at Mount Sinai
9/2008-5/2012	Kathy Kopeikina (PhD, Anatomy & Neurobiology; Co-Advisor). Now a Research Associate, Department of Physiology, Northwestern University Feinberg School of Medicine
8/2001-5/2005	Yu-Ming Chang (MD, PhD, Anatomy & Neurobiology). Now a Staff Radiologist, Neuroradiology Beth Israel Deaconess Medical Center; Instructor in Radiology, Harvard Medical School
1/2001-5/2007	Jason Kass (MD, PhD, Anatomy & Neurobiology; Co-Advisor). Now an Oncology Surgeon, Dana Farber Cancer Center

Masters Trainees

5/2019-Present	Rakin Naser (Masters, Anatomy & Neurobiology)
5/2019-Present	Junwoo Park (Masters, Anatomy & Neurobiology)
5/2018-5/2019	Nick Nicoletti (Masters, Anatomy & Neurobiology)
9/2017-5/2018	Anant Randhawa (Masters of Medical Science)
5/2016-5/2017	Michael Fowler (Masters of Medical Science)

5/2016-5/2017	Ana Rubakovic (Masters of Medical Science)
5/2014-5/2016	Carl Holland (Masters, Anatomy & Neurobiology)
5/2014-5/2016	Alexander Hsu (Masters, Anatomy & Neurobiology)
5/2013-5/2015	Joshua Gilman (Masters of Medical Science)
5/2013-5/2015	Jingyi Wang (Masters of Medical Science)

Masters and Undergraduate Trainees 1996-2013:

Brendan Hunt (Masters of Medical Science)
Joseph Schmidhofer (Masters, Anatomy & Neurobiology)
Adam Ludvigson (Masters Anatomy & Neurobiology)
Snehal Lokhande (Masters, Anatomy & Neurobiology)
Jane Yoon (Masters of Medical Science- MMS)
Michael Kinson (MMS)
Saba Faranaz (MMS)
Mate Fisher (BU Undergraduate Research Program)
Christopher Holland (MMS)
Yeukkei Cheung (MMS)
William Cooney (MMS)
Susan O'Brien (MMS)
Thomas Reid (MMS)
Robert Sawyer (MMS)
Amrik Singh (MMS)
Mary Jan (MMS)
Jen Nguyen (MMS)
Alefiya Shakir (BU Undergraduate Research Program)

Service on other PhD Dissertation Committees:

Current:

Wayne Chang (Anatomy & Neurobiology)
Chelsey Leblang (Anatomy & Neurobiology)

Completed (2005-2017):

Veronica Akle (Department of Anatomy & Neurobiology, Boston University School of Medicine)
Ariel Brown (Behavioral Neuroscience Program, Boston University School of Medicine)
Larissa Estrada (Department of Pharmacology, Boston University School of Medicine)
James Lister (Department of Anatomy & Neurobiology, Boston University School of Medicine)
Wen Lu (Department of Neuroscience, Tufts University School of Medicine)
Maria Medalla (Sargent College, Boston University)
Jon Rueckemann (Department of Anatomy & Neurobiology, Boston University School of Medicine)
Tara Stewart (Department of Pharmacology, Boston University School of Medicine)
Clare Timbie (Department of Anatomy & Neurobiology, Boston University School of Medicine)
Kendra Kobrin (Department of Pharmacology, Boston University School of Medicine)
Lissa Riley (Graduate Program in Neuroscience, Boston University School of Medicine)
Kavitha Sugunan (Department of Pharmacology, Boston University School of Medicine)
Maya Woodbury (Graduate Program in Neuroscience, Boston University)
Nadine Aziz (Department of Medicine, Boston University School of Medicine)
Ellen Witkowski (Graduate Program in Neuroscience, Boston University)
Neema Yazdani (Department of Pharmacology, Boston University School of Medicine)

Mary Kate Joyce (2019; Graduate Program in Neuroscience)

Other Professional Activities:

Professional Societies: Memberships, Offices, and Committee Assignments:

Memberships in:

American Association for the Advancement of Science (1995-Present)
Biophysical Society (2000-Present)
Cajal Club (2010-Present)
International Brain Research Organization (2002-Present)
International Society to Advance Alzheimer Research and Training (2004-Present)
Society for Neuroscience (1995-Present)

Editorial Service:

Associate Editor:
Frontiers in Neuroanatomy (2015- Present)

Invited Reviewer:
Acta Neuropathologica (2008-Present)
Alzheimer's and Dementia (2005-Present)
Brain Research (1995-Present)
Brain Research Reviews (1995-Present)
British Journal of Pharmacology (2004-2008)
Cerebral Cortex (2004-Present)
European Journal of Neuroscience (1995-1998)
Experimental Brain Research (2005-2015)
Frontiers in Neuroscience (2014-Present)
Hippocampus (2005-Present)
Journal of Comparative Neurology (2000-Present)
Journal of Neurophysiology (1999-Present)
Journal of Neuroscience (2006-Present)
Journal of Neuroscience Methods (1997-2001)
Neurobiology of Aging (2003-Present)
Neuron (2005-Present)
Neuroscience (1995-Present)
Neuroscience Letters (2001-Present)
Nutritional Neuroscience (1999-2003)
Progress in Neurobiology (2000-Present)

Major Committee Assignments:

8/2016-present National Institutes of Health, Center for Scientific Review, Brain Initiative, *ad hoc* reviewer.

10/2007-10/2013	National Institutes of Health, Center for Scientific Review, Neurotransporters, Receptors, Channels and Calcium Signaling Study Section, *Chartered Member*.
5/2005-9/2007	National Institutes of Health, Center for Scientific Review, NRSA Study Section
10/2006	National Institutes of Health, Special Emphasis Review Committee "Molecular and Cellular Basis of Cognitive Aging in Prefrontal Cortical Networks" Yale University, New Haven CT.

Other Scientific Review Committee Service:

2006-present	National Institutes of Health, Center for Scientific Review, *ad hoc* grant reviewer NTRC and other study sections
2008-present	Alzheimer's Association, *ad hoc* grant reviewer
2009-present	Medical Research Council, *ad hoc* grant reviewer
2010- present	United States-Israel Binational Science Foundation, *ad hoc* grant reviewer

Research Support:

Current:

09/11/2020 – 05/31/2023	**1R01AG071230-01** (PI: Luebke) CRCNS: Age-related changes to cortical dynamics underlying working memory $572,229 (Total Cost)
04/01/2018 – 01/31/2023	**R01-AG059028-01**(MPI: Luebke and Hof) Mechanisms of Age-related Cognitive Decline in the Rhesus Monkey $622,446 (Total Cost)
10/01/2016- 06/30/2021	**RF1-AG054199-01** (PI: Ikezu Co-I: Luebke) Exosome-mediated propagation of pathogenic tau protein $2,871,026 (Total Cost)

Past:

04/01/2018 – 01/31/2020	**3R01-AG059028-01S1** (MPI: Luebke and Hof) Mechanisms of Age-related Cognitive Decline in the Rhesus Monkey Electron Microscopy Supplement $55,000 (Total Cost)
09/14/2018 – 01/31/2020	**3R01-AG059028-01S2** (MPI: Luebke and Hof) Mechanisms of Age-related Cognitive Decline in the Rhesus Monkey Alzheimer's Disease Supplement $487,991 (Total Cost)

09/01/2015 -08/31/2019	**R01-HD083282-01** PI: Wolozin, Co-I: Luebke RNA binding proteins as novel targets in Alzheimer's disease. $2,558,608 (Total Cost)
04/01/2016 -03/31/2019	**CHDI Contract** PI: Luebke Empirical and computational analyses of striatal MSNs and FSIs and of L5 CPNs in the Q175 and DN17 models. $1,209,410 (Total Cost)
10/1/2016-9/30/2017	**R56-AG049870** MPI: Luebke and Hof Neural substrates of cognitive decline and curcumin intervention in aging monkeys.
04/01/2015-03/31/2018	**Nancy Lurie Marks Family Foundation** PI: Ikezu; Co-I: Luebke Characterization of Microglial Wnt signaling in maternal immune activation-related autism.
09/01/2014-08/31/2016	**R21-NS089340-01** MPI: Luebke and Haydar Effects of neural precursor lineage on pyramidal neuron function and morphology.
09/01/2000-5/31/2015	**5 R01-AG025062** MPI: Hof and Weaver; PI on subcontract to Boston University: Luebke Modeling cellular determinants of cognitive decline in aging.
02/01/2007-05/31/2012	**P01-AG00001** PI: Rosene Neural Substrates of Cognitive Decline in Aging Monkeys. Co-I: Luebke
08/01/2005-07/31/2010	**5 R01-AG025062** PI: Luebke Age-Related Changes in Monkey Cortical Pyramidal Cells.
05/01/2006-04/30/2008	**Anonymous non-profit foundation** PI: Abraham The function of Klotho in the normal and aging brain. Co-I: Luebke
07/01/2000-06/30/2002	**American Federation for Aging Research** PI: Luebke Functional Consequences of Cholinergic Degeneration in Aged Rhesus Monkeys.
08/01/2000-06/30/2005	**P01-AG00001** PI: Rosene Neural Substrates of Cognitive Decline in Aging Monkeys. Co-I: Luebke
04/01/1999 -03/31/2004	**P01-HD022539** PI: Galler Prenatal Malnutrition and Mental Retardation. Neurophysiology Subproject PI: Luebke

03/01/2000-02/28/2002	**National Science Foundation Research Project** PI: Luebke Inhibitory Roles of Layer I Neurons in Rat Barrel Cortex
02/01/1997-01/31/2000	**P01-AG00001** PI: Rosene Neural Substrates of Cognitive Decline in Aging Monkeys. Co-I: Luebke
12/01/1994-11/30/1998	**P01- HD022539** PI: Galler Fetal Protein Malnutrition and Mental Retardation. Neurophysiology Subproject PI: Luebke

Invited Lectures and Conference Presentations:

Regional/Local

July 19, 2018	Cortical Pyramidal Neurons in Neurodegenerative Disease. General Electric, GE Global Research Center Niskayuna, NY
October 6, 2017	Diversity and selective vulnerability of cortical pyramidal neurons. Keck Center at Rutgers University, NJ
March 16, 2016	Diversity and selective vulnerability of cortical pyramidal neurons. Boston University Center for Systems Neuroscience Seminar Series.
April 25, 2012	Effects of tauopathy on the morphology and physiology of pyramidal cells in the rTg4510 tau mutant mouse frontal cortex. Boston University Alzheimer's Disease Center Lecture Series.
April 13, 2012	Dendritic vulnerability in neurodegenerative disease: insights from analyses of cortical pyramidal neurons in transgenic mouse models. Boston University Parkinson's Disease Forum.
April 28, 2010	Effects of normal and pathological aging on the structure and function of layer 3 pyramidal cells. Department of Pharmacology Seminar Series, Boston University School of Medicine.
April 24, 2008	Diverse career trajectories of 3 graduates of the department of Anatomy & Neurobiology. Department of Anatomy & Neurobiology Seminar Series, Boston University School of Medicine, Boston, MA.
January 8, 2008	Effects of normal and pathological aging on the structure and function of layer 3 pyramidal cells. BiogenIdec, Neuroscience Seminar Series, Cambridge MA.
March 30, 2001	$5HT_3$ receptor modulation of GABAergic miniature inhibitory postsynaptic currents in rat CA1 pyramidal cells. Department of Pharmacology Seminar Series, University of New England, Biddeford, ME.

November 21, 1998 Control of neurotransmitter release by diverse presynaptic calcium channels" Biomedical Engineering Department Seminar Series, Trinity College, Hartford, CT.

May 15, 1998 Multiple calcium channel types control glutamatergic neurotransmission. Department of Physiology Seminar Series, Tufts University School of Medicine, Boston, MA.

April 12, 1998 Multiple calcium channel types control glutamatergic neurotransmission. Department of Pharmacology Seminar, Boston University School of Medicine, Boston, MA.

National

May 22, 2018 Vulnerability of spiny neurons in Huntington's disease- implications for single cell and circuit behavior. IBM, New York, NY

February 23, 2017 Empirically-based modeling of the striatal microcircuit in Huntington's Disease. CHDI Principal Investigators Meeting. New York, NY

November 9, 2016 Neural substrates of cognitive decline and curcumin intervention in aging monkeys. GE Global Research Center Niskayuna, NY

October 4, 2016 Empirically-based modeling of the striatal microcircuit in Huntington's Disease. IBM, New York, NY

March 31, 2015 Differential neuronal vulnerability in neurodegenerative disease: Insights from empirical and computational analyses of transgenic mouse models and rhesus monkeys. CHDI (Huntington's Disease Foundation) Princeton, NJ.

June 1, 2013 Structure-function relationships in rhesus monkey neocortical pyramidal neurons. Symposium on: Digital Reconstruction of Neuronal Morphology: Recognizing the Breakthroughs at the Krasnow Institute for Advanced Study at George Mason University, VA.

March 15, 2013 Structural determinants of physiological function in mammalian pyramidal neurons. Krasnow Institute for Advanced Study at George Mason University, VA.

March 21, 2012 Effects of tauopathy on the morphology and physiology of pyramidal cells in the rTg4510 tau mutant mouse frontal cortex. Department of Pathology and Cell Biology, Columbia University, New York, NY.

November 4, 2009 Empirical assessment and computational modeling of structure-function relationships in cortical pyramidal cells" Susan L. Wearne Memorial Seminar, Mount Sinai School of Medicine, New York.

January 18, 2007 Increased action potential firing rates in layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. Winter Conference on Learning and Memory, Park City, UT.

November 27, 2006 Effects of normal aging on the structure and function of cortical neurons in the rhesus monkey. Department of Neuroscience and Physiology Seminar Series, State University of New York Upstate Medical University, Syracuse, NY.

January 18, 2005 Increased excitability of neurons in aged rhesus monkeys is related to cognitive function. Department of Neuroscience and Neurobiology of Aging Laboratories Seminar Series, Mount Sinai School of Medicine, New York, NY.

December 12, 2003 Functional consequences of structural changes to neurons in the aging rhesus monkey. Department of Neuroscience and Neurobiology of Aging Laboratories Seminar Series, Mount Sinai School of Medicine, New York, NY.

January 30, 2002 Development of $GABA_A$ receptor-mediated miniature inhibitory postsynaptic currents (mIPSCs) in rat CA1 pyramidal cells. Winter Brain Conference, Aspen, CO.

July 20, 2001 Electrophysiology and morphology of neurons in the aging rhesus monkey" Department of Neuroscience and Neurobiology of Aging Laboratories Seminar Series, Mount Sinai School of Medicine, New York, NY.

International

October 8, 2014 Distinctive properties of mouse versus rhesus monkey layer 3 pyramidal neurons in visual and frontal cortices. Département des Neurosciences Fondamentales, Universite de Lausanne, Lausanne, Switzerland.

April 26, 2013 Structural and functional changes in tau mutant mice neurons are not linked to the presence of neurofibrillary tangles. Département des Neurosciences Fondamentales, Universite de Lausanne, Lausanne, Switzerland.

December 19, 2007 Effects of beta-amyloid on layer 2/3 pyramidal cells in the Tg2576 mutant mouse. Novartis International AG, Neuroscience Discovery Seminar Series, Basel, Switzerland.

Conference presentations (Abstracts and Posters. Note that in my field the abstracts are presented as part of a poster and the abstract is provided to meeting attendees, therefore these are listed together)

1. **Luebke, JI** and Rosene, DL (1998) Age-related changes in the rhesus monkey: electrophysiology and morphology of neurons in hippocampal slices. Soc. Neurosci. Abstr., Vol. 24, Part 2, p. 1233.
2. Rushmore, RJ, **Luebke**, **JI** and Galler, JR (1998) Electrophysiological properties of rat hippocampal principal cells are unaltered by prenatal protein malnutrition. Soc. Neurosci. Abstr., Vol. 24, Part 1, p. 46.

3. **Luebke, JI** and Rushmore RJ (1998) Diverse classes of layer I interneurons in rat barrel cortex. Soc. Neurosci. Abstr., Vol. 24, Part 1, p. 631.
4. **Luebke**, **JI,** St. John, J. and Rosene, DL (1999) Effects of aging on the electrophysiological properties of dentate granule cells in the rhesus monkey. Soc. Neurosci. Abstr., Vol. 25, Part 1, p. 809.
5. Shultz, PL, Mokler, D, Galler, JR and **Luebke, JI** (1999) Prenatal protein malnutrition results in increased frequency of miniature inhibitory postsynaptic currents in rat CA1 pyramidal cells. Soc. Neurosci. Abstr., Vol. 25, Part 2, p. 2019.
6. **Luebke**, **JI,** Cheung, Y and Mokler, DJ (2000) Development of $GABA_A$ receptor-mediated miniature inhibitory postsynaptic currents (mIPSCs) in rat CA1 pyramidal cells. Soc. Neurosci. Abstr., Vol. 26, Part 2, p. 1658.
7. Mokler, DJ, Galler JR and **Luebke, JI** (2000) $5HT_3$ receptor modulation of GABAergic miniature inhibitory postsynaptic currents in rat CA1 pyramidal cells. Soc. Neurosci. Abstr., Vol. 26, Part 2, p. 1929.
8. Mokler, DJ, Galler, JR, Morgane, PJ and **Luebke, JI** (2000) Alterations in serotonergic neurotransmission in hippocampal slices from rat pups exposed to prenatal malnutrition. FASEB Journal 14(8), A1399.
9. **Luebke, JI,** O'Brien, SE and Rosene, DL (2001) Electrophysiological and morphological properties of dentate granule cells in the aged rhesus monkey. AFAR Abstracts, p. 49.
10. **Luebke, JI**, Mangiamele, LA, Rosene, DL (2002) Effects of aging on the electrophysiological properties of layer II/III pyramidal cells in the prefrontal cortex of rhesus monkeys. Program No. 94.8 Soc. Neurosci. Abstr., Vol. 28.
11. **Luebke, JI** (2002) Development of $GABA_A$ receptor-mediated miniature inhibitory postsynaptic currents (mIPSCs) in rat CA1 pyramidal cells. Winter Brain Conf., Aspen, CO.
12. **Luebke, JI**, Mangiamele, L, Peters, A, Sandell, J and Rosene, DL (2003) Anatomical and physiological properties of the corpus callosum in aged monkeys. Soc. Neurosci. Abstr., Vol. 29.
13. **Luebke, JI**, Chang, Y-M, Rosene, DL, (2004) Intrinsic membrane and action potential firing properties of layer 5 pyramidal cells in the prefrontal cortex of young and aged rhesus monkeys. Program No. 98.4.Abstract Viewer/Itinerary Planner. Washington, DC: Soc. Neurosci. Abst., Vol. 30.
14. Chang, Y-M, Rosene, DL, Killiany, RJ, Mangiamele, LA, **Luebke, JI** (2004) Increased action potential firing rates of layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. Program No. 98.5. Soc. Neurosci. Abst., Vol. 30.
15. Kabaso, D, **Luebke, JI**, Henry, BI, Hof, PR and Wearne, SL (2004) Morphologic changes in dendritic structure and spine densities may account for age-related increases in action potential firing rates. Program Number: 638.18 , Soc. Neurosci. Abst., Vol. 30.
16. Coskren, P, **Luebke, JI**, Rocher, AB, Hof, PR, and Wearne, SL (2005) Effects of realistic 3D neuron morphology on the stability and robustness of a Hopfield-style network model of working memory. Program No. 538.4, 2005 Neuroscience Meeting Planner, Washington, DC: Soc. Neurosci. Abst., Vol. 31.
17. Kabaso, D, Nilson, J, **Luebke, JI**, Hof, PR and Wearne, SL (2006) Electrotonic analysis of morphologic contributions to increased excitability with aging in neurons of the prefrontal cortex of monkeys. Program No. 237.10 Soc. Neurosci. Abst., Vol. 31.
18. Coskren, P, **Luebke, JI**, Hof, PR and Wearne, SL (2006) Automated reduction of morphologically detailed multicompartment neuron models for the study of neurodegenerative disorders and aging. Soc. Neurosci. Abst., Vol. 31.
19. Chang, Y-M. and **Luebke, JI** (2006) Age-related increase in the slow outward calcium-activated potassium current in layer 3 but not layer 5 pyramidal cells in area 46 of the rhesus monkey. Soc. Neurosci. Abst., Vol. 31.

20. **Luebke, JI** (2006) Layer 3 pyramidal cells in the frontal cortex of Tg2576 mice exhibit significantly increased action potential firing rates and decreased glutamatergic synaptic responses in vitro. Soc. Neurosci. Abst., Vol. 31.
21. **Luebke, JI** (2007) Increased action potential firing rates in layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. Winter Conf. on Learning and Memory, Park City, Utah, 2007.
22. Kabaso, D, Weaver, CM, Kabaso, D, Rocher, A.B., Hof, PR, **Luebke, JI** and Wearne, SL (2007) Contributions of age-related changes in dendrites and spine geometry to increased excitability in neurons of the prefrontal cortex of monkeys. Program No. 477.4, Soc. Neurosci. Abst., Vol. 32.
23. Abraham, CR, Podvin, S, McKee, A., Dedeoglu, A, **Luebke, JI** and Chen, C-D. (2007) Molecular analysis of klotho function in the brain. Soc. Neurosci. Abst., Vol. 32.
24. Rocher, AB, Kinson, MS, Amatrudo, J, Todd-Brown, M, Yoon, J, Lewis, J, Shultz, P and **Luebke, JI** (2008) Electrophysiological properties of layer 2/3 frontal cortical pyramidal cells in rTg4510 mice. Soc. Neurosci. Abst., Vol. 33.
25. Rocher, AB, Kinson, MS, **Luebke JI** (2008) Significant structural changes in the absence of electrophysiological changes in neocortical pyramidal cells in one year old Tg2576 APP mutant mice. Federation of European Neuroscience Societies Forum, Geneva (Switzerland), July 12-16th, 2008.
26. Rocher, AB, Kinson, MS, **Luebke JI** (2008) Significant structural changes in the absence of electrophysiological changes in neocortical pyramidal cells in one year old Tg2576 APP mutant mice. International Conference on Alzheimer's Disease, Chicago (United States), July 26-31st, 2008.
27. Gao, YZ, Yadav, A, **Luebke, JI**, Henry, BI and Wearne, SL (2008) Spatial correlations in dendritic spine distributions in young and aged neocortical pyramidal neurons. Program No. 736.7, Soc. Neurosci. Abst., Vol. 33.
28. Yadav, A, Weaver, CM, Gao, YZ, **Luebke, JI** and Wearne, SL (2008) Altered mechanisms of calcium handling with age in neocortical neurons: the role of spine size and background synaptic activity. Program No. 43.20, Soc. Neurosci. Abst., Vol. 33.
29. Yadav, A, Weaver, CM, Gao, YZ, **Luebke, JI** and Wearne, SL (2008) Why are pyramidal cell firing rates increased with aging, and what can we do about it? BMC Neuroscience 9(Suppl 1): P51.
30. Yadav, A, Weaver, CM, Gao, YZ, **Luebke, JI**, Wearne, SL (2009) Quantifying functional flexibility of a neuron: Effects of age-related morphologic dystrophy in pyramidal neurons of the prefrontal cortex. Program No. 623.22, Soc. Neurosci. Abst., Vol. 34.
31. Yadav, A, Weaver, CM, Gao, YZ, **Luebke, JI** and Hof, PR (2010) Age-related morphologic changes alter robustness of neuronal function. Computational Neurosciences Meeting. 2010.
32. Yadav, A, Weaver, CM, Gao, YZ, **Luebke, JI** and Hof, PR (2010) Aged model neurons of the prefrontal cortex fire faster to maintain functional robustness in response to morphological dystrophy. Soc. Neurosci. Abst. 2010.
33. Crimins, JL, Rocher, A, Amatrudo, J, Lewis, J, and **Luebke, JI** (2010) Alterations in electrophysiological properties of layer 3 frontal cortical pyramidal cells are not age-dependent in rTg4510 tau mutant mice. Soc. Neurosci. Abst. 2010.
34. Ludvigson, AE, **Luebke, JI**, Lewis, J and Peters, A (2010) Structural abnormalities in the cortex of the rTg4510 mouse model of tauopathy: a light and electron microscopy study. Soc. Neurosci. Abst. 2010.
35. Rocher, A, Crimins, JL, Amatrudo, J, Lewis, J, and **Luebke, JI** (2010) Dendritic spines are significantly altered while glutamatergic synaptic signaling is preserved in cortical pyramidal cells in rtg4510 tau mutant mice. Soc. Neurosci. Abst. 2010.

36. Amatrudo, J, Rocher, A, Crimins, JC, Rosene, DL, and **Luebke, JI** (2010) Electrophysiological properties of layer 2/3 pyramidal cells of rhesus monkey primary visual cortex are unaltered with age. Soc. Neurosci. Abst. 2010.
37. Yadav A, Weaver CM, Gao, YZ, Dickstein DL, **Luebke JI**, and Hof PR. Aged model neurons of the prefrontal cortex fire faster to maintain functional robustness in response to morphological dystrophy. Program No. 745.6. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience (SFN), 2010.
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