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Place of Birth: New York, NY
Citizenship: USA

EDUCATION

B.A., University of Wisconsin, Zoology
M.S., Syracuse University, Zoology/Sensory Communication
Ph.D., New York University, Biology/Neurobiology

PROFESSIONAL EXPERIENCE

2012 - Southern Illinois University School of Medicine, Springfield, IL, Distinguished Scholar and Research Professor of Pharmacology & Otolaryngology
2004-2012 Southern Illinois University School of Medicine, Springfield, IL, Distinguished Scholar and Professor of Pharmacology
1998-2007 Southern Illinois University School of Medicine, Springfield, IL, Assistant Dean for Faculty Development (10%-time)
1989-2004 Southern Illinois University School of Medicine, Springfield, IL, Professor of Pharmacology and Surgery
1979-1989 Southern Illinois University School of Medicine, Springfield, IL, Associate Professor of Pharmacology and Surgery
1976-1979 Southern Illinois University School of Medicine, Springfield, IL, Associate Professor of Medical Sciences (Neurobiology)
1973-1976 Southern Illinois University School of Medicine, Springfield, IL, Assistant Professor, Dept. of Medical Sciences
1971-1972 SUNY-Albany, Albany, New York, NINCDS (NIH) Postdoctoral Fellow
1968-1969 New York University, Graduate Teaching Associate
1967 Syracuse University, Research Assistant, Laboratory of Sensory Communication
1966-1967 Syracuse University, Graduate Teaching Assistant

TEACHING EXPERIENCE

Medical Courses: Medical Neuroscience, Medical Pharmacology, Advanced Therapeutics, Anatomy and Physiology of Sensory Systems, Research in Auditory Pharmacology
Graduate Courses: Neuroscience, Adv. Pharmacology, Methods in Pharmacology, Cell & Molecular Biology

PROFESSIONAL SERVICE

Honors and Awards (+selective recent invited symposia)

Founders Day Award, New York University, New York
 Certificate of Merit, American Speech and Hearing Association
 Advisor to the Committee on Hearing and Bioacoustics, National Academy of Science
 Claude Pepper Award from the National Institute on Deafness and Other Communicative Disorders
 Council Member, Association for Research in Otolaryngology
 Founding member and Chair, Animal Research Committee, Association for Research in Otolaryngology (7 years)
 Member, Board of Directors, Center for Neural Communication Technology-University of Michigan
 Nineteenth Outstanding Scholar, Southern Illinois University, 2003
 Distinguished Scholar, Southern Illinois University, 2004
 Sigma Xi Kaplan Research Award, 2005
 Life Science Innovator-Illinois Biotechnology Industrial Organization-2006
 Tinnitus Research Consortium (Board Member-2005-present)
 Scientific Advisory Committee, American Tinnitus Association, 2005-2012
 Teacher of the Year, Southern Illinois University-School of Medicine-2009
 Guest Editor: Special Issue of Hearing Research- *Aging and Hearing*-2010
 Knowles Hearing Center Speaker-Northwestern University 2014
 Guest instructor, Neurobiology of Hearing Course, Salamanca Spain 2016
 Invited Speaker, JosFest Banff 2017
 Invited Speaker, Gordon Research Conference 2018
 Invited Speaker 7th International "Future of Hearing" Symposium/"Hearing4all", 2018 in Oldenburg, DB
 Invited Speaker ARO symposium 2020: Neuroplasticity and Tinnitus – In memory of Dr Larry E. Roberts
 Invited Speaker ARO Symposium 2021: Age-Related Plasticity Changes in the Central Auditory System

Offices Held in Professional Associations:

1980 – 1981	Vice-president, Sangamon Chapter of Sigma Xi
1980 - 1981	Secretary/Treasurer, Sangamon Chapter of Sigma Xi
1984 - 1985	Organizer and host of 9th Annual Midwest Neurobiology Meeting
1986 - 1989	Member Long-Range Planning Committee, ARO
1986- 1992	Advisor, Committee on Hearing and Bioacoustics, NAS
1987	NIH, Workshop on the Pharmacology of Hearing, Bethesda, MD
1987 - 1988	Board Member, Springfield Neuroscience Chapter
1989 - 1990	President, Springfield Neuroscience Chapter
1988 - 1990	Council Member, Sigma Xi
1991 - 1992	Panel for Hearing and Hearing Impairment-Advisory Board of NIDCD
1993 - 1994	Organizer and host of 17th Annual Midwest Neurobiology Meeting
1994 - 1997	Council Member, Assn. for Research in Otolaryngology
1990 - 1998	Chair, Use of Animals in Research-Ass. for Research in Otolaryngology (ARO)
2005 – 2016	Board Member, Tinnitus Research Consortium
2019	Co-organizer (with B.C. Cox) of the Midwest Auditory Research Conference (MARC)

UNIVERSITY SERVICE**Past Committees:**

Promotion and Tenure Committee, Misconduct in Science Committee, Faculty Council (elected) (President (three times), Vice President and Secretary), Education Policy Committee (elected), Information Technology Committee, Grievance Committee (Chairman) (elected), Search Committee-Associate Dean for Information Resources, Central Research Committee, Sophomore Education Committee, Internal Medicine & Psychiatry Departmental Review Committees, Executive Committee of the Medical School (as Faculty Council President), Pharmacology Chairman Search Committee, Laboratory Animal Care and Use Committee (Chairman-5 years), Industrial Relations Task Force, Conflict of Interest Committee

SERVICE

1974 - 1980	Evoked Response Audiometry Clinic
1992 - 1995	Director, Electron Microscopy Facility (1974-1980)
1984 - 1998	Music in Elementary Schools
1990 - 1991	Director of Parents Group Campaign for Assn. for Retarded Citizens
1992 - 2004	Lectures/workshops on the use of Animals in Research (Children, Adults)
1998 - 2003	Lectures in Mini-Medical School and Brain Awareness Week
2003 - 2005	District 186 Parents Planning Committee
2009 & 2012	Registering Voters in Rural Missouri
2007-2017	Fund raising NPR

Postdoctoral Fellows

M. J. Moore,
P. G. Finlayson
P. Backoff
R. Cai
B.I. Kalappa
S.P. Kommajosyula

Doctoral Students

A. Raza
P. Shaddock-Palombi
J. C. Milbrandt
H. Wang
B. Richardson
S. Sottile
M. Ghmire

Masters Students

S. D. Abbott

Visiting Graduate Students

Daniel Duque Doncos

RESEARCH**Research Interest and Specialties:**

Central Auditory Age-Related Hearing Loss (drug therapy for age-related hearing loss)
Central Sensory Plasticity and Tinnitus (Drug therapy for tinnitus)
Sensory Pharmacology, Anatomy, Physiology, and Neurochemistry (Auditory System)

Current Research Projects:

Molecular neurochemistry of attentional nicotinic cholinergic neurotransmission in Plasticity and Aging
Electrophysiology of the Aging Rat Auditory System
Molecular neurochemistry of attentional nicotinic cholinergic neurotransmission and electrophysiology in Tinnitus models

Grants Received (Active or Recently ended):

National Institutes of Health NIDCD, RO1 DC00151- *Coding in Auditory Neurons: Effects of Amino Acids*, 12/1/15-11/31/20, Principal Investigator (Years 33-38).

Congressionally Directed Medical Research Programs DOD-PR180160- *Nicotinic Receptor Pathology in Tinnitus: Auditory Cortex and Selective Desensitizing Nicotinic Agents*, 9/1/2019-8/31/2022, Principal Investigator

National Institutes of Health, NIDCD, R13 DC018245-01- *Midwest Auditory Research Conference* 07/01/2019-06/30/20 Principal Investigator

Office of Naval Research, *Targeting attentional mechanisms in tinnitus*, 4/22/16-4/21/19, Principal Investigator

PUBLICATIONS (100+ Peer Reviewed) <https://scholar.google.com/citations?user=zSosgP8AAAAJ&hl=en&oi=ao>

Articles in Professional Journals:

Casparly, D.M.: Classification of Subpopulations of Neurons in the Cochlear Nuclei of the Kangaroo Rat. Exp. Neurol., 37:131-151, 1972, PMID: 5077556.

Faingold, C.L. and D.M. Casparly: Changes in Reticular Formation Unit Response Patterns Associated with Pentylentetrazol-Induced Enhancement of Sensory Evoked Responses. Neuropharmacology, 16:143-147, 1977, PMID: 840372.

Rupert, A.L., D.M. Casparly and G. Moushegian: Response Characteristics of Cochlear Neurons to Vowel Sounds. Ann. Otol. Rhinol. Laryngol., 63:37-49, 1977, PMID: 835971.

Casparly, D.M., A.L. Rupert and G. Moushegian: Neuronal Coding of Vowel Sounds in the Cochlear Nuclei. Exp. Neurol., 54:414-431, 1977, PMID: 844520, PMID: 844520.

Faingold, C.L. and D.M. Casparly: Frequency Following Responses in Primary Auditory and Reticular Formation Structures: Alteration of Response Components with Masking and Pentobarbital. Electroenceph. Clin. Neurophysiol., 47:12-20, 1979, PMID: 88357.

Casparly, D.M., D.C. Havey and C.L. Faingold: Effects of Microintophoretically Applied Glycine and GABA on Neuronal Response Patterns in the Cochlear Nuclei. Brain Res., 172:179-185, 1979, PMID: 466463 .

Havey, D.C. and D.M. Casparly: A Simple Technique for Constructing "Piggy-Back" Multibarrel Microelectrodes. Electroenceph. Clin. Neurophysiol., 48:249-251, 1980, PMID: 615334.

Casparly, D.M., D.C. Havey and C.L. Faingold: Glutamate and Aspartate: Alteration in Threshold and Response Patterns of Auditory Neurons. Hearing Res., 4:325-333, 1981, PMID: 6267001.

Faingold, C.L., W.E. Hoffmann and D.M. Casparly: On the Site of Pentylentetrazol-Induced Enhancement of Auditory Responses of the Reticular Formation: Localized Cooling and Electrical Stimulation Studies. Neuropharmacology, 22:961-970, 1983, PMID: 6621826.

Moore, M.J. and D.M. Caspary: Strychnine Blocks Binaural Inhibition in Lateral Superior Olivary Neurons. J. Neurosci., 3:237-242, 1983, PMID 6822858.

Faingold, C.L., W.E. Hoffmann and D.M. Caspary: Bicuculline-Induced Enhancement of Sensory Responses and Cross-Correlations between Reticular Formation and Cortical Neurons. Electroenceph. Clin. Neurophysiol., 55:301-313, 1983, PMID: 6186462.

Caspary, D.M. and D.C. Havey: Effects of Acetylcholine on Cochlear Nucleus Neurons. Exp. Neurol., 82:491-498, 1983, PMID: 6628633.

Faingold, C.L., W.E. Hoffmann and D.M. Caspary: Effects of Iontophoretic Application of Convulsants on the Sensory Responses of Neurons in the Brain Stem Reticular Formation. Electroenceph. Clin. Neurophysiol., 58:55-64, 1984, PMID: 6203703.

Caspary, D.M., L. Rybak and C.L. Faingold: Baclofen Reduces Tone-Evoked and Spontaneous Activity of Cochlear Nucleus Neurons. Hearing Res., 13:113-122, 1984, PMID: 6325378.

Faingold, C.L., W.E. Hoffmann and D.M. Caspary: Mechanisms of Sensory Seizures: Brain-Stem Neuronal Response Changes and Convulsant Drugs. Fed. Proc., 44:2436-2441, 1985, PMID: 3886431.

Faingold, C.L., W.E. Hoffmann and D.M. Caspary: Comparative Effects of Convulsant Drugs on Sensory Responses of Neurons in the Amygdala and Reticular Formation. Neuropharmacology, 12:1221-1230, 1985, PMID: 4094658.

Faingold, C.L., M.A. Travis, G. Gehlbach, W.E. Hoffmann, P.C. Jobe, H.E. Laird and D.M. Caspary: Neuronal Response Abnormalities in the Inferior Colliculus of the Genetically Epilepsy Prone Rat. Electroenceph. Clin. Neurophysiol., 63:296-305, 1986, PMID: 2419087.

Faingold, C.L., G. Gehlbach and D.M. Caspary: Decreased Effectiveness of GABA-Mediated Inhibition in the Inferior Colliculus of the Genetically Epilepsy-Prone Rat. Exp. Neurol., 93:145-159, 1986, PMID: 3732456.

Faingold, C.L., G. Gehlbach, M.A. Travis and D.M. Caspary: Inferior Colliculus Neuronal Response Abnormalities in Genetically Epilepsy-Prone Rats: Evidence for a Deficit of Inhibition. Life Sci., 39:869-878, 1986, PMID: 3747711.

Caspary, D.M., K.E. Pazara, M. Kössl and C.L. Faingold: Strychnine Alters the Fusiform Cell Output from the Dorsal Cochlear Nucleus. Brain Res., 417:273-282, 1987, PMID: 3651816.

Finlayson, P.G. and D.M. Caspary: Synaptic Potentials of the Principal Cells of the Chinchilla Lateral Superior Olivary Nucleus. Hearing Res., 38:221-228, 1989, PMID: 254013.

Faingold, C.L., W.E. Hoffmann and D.M. Caspary: Effects of Iontophoresis of Agents Affecting the Action of Excitant Amino Acids on the Acoustic Responses of Neurons in the Inferior Colliculus. Hearing Res., 40:127-136, 1989, PMID: 2570054.

Gates, G.A., Caspary, D.M., Clark, W., Pillsbury, H.C., Brown, H.C., Dobie, R.A.: Presbycusis, Invitational Geriatric Otorhinolaryngology Workshop, Otolaryngology, Head and Neck Surgery, 100:266-271, 1989.

Caspary, D.M. and C.L. Faingold: Non-NMDA Receptors May Mediate Ipsilateral Excitation at LSO Principal Cell Synapses. Brain Res., 503(1):83-90, 1989, PMID: 2558777.

Faingold, C. L., G. Gehlbach and D.M. Caspary: On the Role of GABA as an Inhibitory Neurotransmitter in Inferior Colliculus Neurons: Ionophoretic Studies. Brain Res., 500(1):302-312, 1989, PMID: 2605499.

Caspary, D.M., A. Raza, B.A. Lawhorn-Armour, J. Pippen and S.P. Arneric: Immunocytochemical and Neurochemical Evidence for Age-related Loss of GABA in the Inferior Colliculus: Implications for Neural Presbycusis. J. Neurosci., 10(7):2363-2372, 1990, PMID: 1973948.

Faingold, C.L., C. Boersma Anderson, and D.M. Caspary: Involvement of GABA in Acoustically-Evoked Inhibition in Inferior Colliculus Neurons. Hearing Res., 52:201-216, 1991, PMID: 2061208.

Finlayson, P.G. and D.M. Caspary: Low Frequency Neurons in the Lateral Superior Olive Exhibit Phase-Sensitive Binaural Inhibition. J. Neurophysiol., 65(3):598-605, 1991, PMID: 2051197.

Palombi, P.S. and D.M. Caspary: GABA_A Receptor Antagonist Bicuculline Alters Response Properties of Posteroventral Cochlear Nucleus Neurons. J. Neurophysiol., 67:738-746, 1992, PMID: 1315848.

Finlayson, P.G. and D.M. Caspary: Excitatory and Inhibitory Response Properties In Young and Old Fisher-344 Rat Lateral Superior Olivary Nucleus. Neurobiol. of Aging, 14:127-139, 1993, PMID: 8487915.

Backoff, P.M. and D.M. Caspary: Age-Related Changes in Auditory Brainstem Responses in F-344 Rats: Effects of Rate and Intensity. Hearing Res., 73:163-172, 1994, PMID: 8188545.

Palombi, P.S., P.M. Backoff and D.M. Caspary: Paired Tone Facilitation in Dorsal Cochlear Nucleus Neurons: A Short Term Potentiation Model Testable *In Vivo*. Hearing Res., 75:175-183, 1994, PMID: 8071144.

Raza, A., S.P. Arneric, J. Milbrandt and D.M. Caspary: Age-Related Changes in Brainstem Auditory Neurotransmitters: Measures of GABA and Acetylcholine Function. Hearing Res., 77:221-230, 1994, PMID: 7928735.

Evans, M.S., K.E. Viola-McCabe, D.M. Caspary and C.L. Faingold: Loss of Synaptic Inhibition During Repetitive Stimulation in Genetically Epilepsy-Prone Rats (GEPR). Epilepsy Res., 18:97-105, 1994, PMID: 7957041.

Milbrandt, J. C., R. L. Albin and D.M. Caspary. Age-related Decrease in GABA_B Receptor Binding in the Fischer-344 Rat Inferior Colliculus. Neurobiol. Aging, 15(6):699-703, 1994. PMID: 7891824

Nakayama, M., R.H. Helfert, H.R. Konrad and D.M. Caspary: Scanning Electron Microscopic Evaluation of Age-Related Changes in the Rat Vestibular Epithelium. Otolaryngol. Head and Neck Surg, 111:799-806, 1994. PMID: 7991262

Caspary, D.M., P.M. Backoff, P.G. Finlayson and P.S. Palombi: Inhibitory Inputs Modulate Discharge Rate within Frequency Receptive Fields of Anteroventral Cochlear Nucleus Neurons. J. Neurophysiol, 72(5):2124-2133, 1994. PMID: 7884448

Milbrandt, J. C., and D.M. Caspary. Age-Related Reduction of [3H]Strychnine Binding Sites in the Cochlear Nucleus of the Fisher 344 Rat. Neuroscience, 67(3):713-719, 1995. PMID: 7675197

Caspary, D.M., J.C. Milbrandt and R.H. Helfert. Central Auditory Aging: GABA Changes in the Inferior Colliculus. Experimental Gerontology, 30 (3/4):349-360, 1995. PMID: 7556513

Palombi, P.S. and D.M. Caspary. GABA Inputs Control Discharge Rate Primarily Within Frequency Receptive Fields of Inferior Colliculus Neurons, J. Neurophysiol., 75(6):2211-2219, 1996. PMID: 8793735

Milbrandt, J.C., R. L. Albin, S. M. Turgeon and D. M. Caspary. GABA_A Receptor Binding in the Aging Rat Inferior Colliculus, Neuroscience, 73 (2) 449-458, 1996. PMID: 8783261

N'Gouemo, P., D.M. Caspary, and C.L. Faingold, Decreased GABA effectiveness in inferior colliculus neurons during ethanol withdrawal in rats susceptible to audiogenic seizures, Brain Res., 724(2):200-204, 1996. PMID: 8828569

Palombi, P.S. and D.M. Caspary. Physiology of the Aging Fisher 344 Rat Inferior Colliculus: Responses to Contralateral Monaural Stimuli, J. Neurophysiol., 76(5):3114-3125, 1996. PMID: 8930259

Palombi, P.S. and D.M. Caspary. Physiology of the Young Adult Fisher 344 Rat Inferior Colliculus: Responses to Contralateral Monaural Stimuli, Hearing Res., 100:41-58, 1996. PMID: 8922979

Palombi, P.S. and D.M. Caspary. Responses of Young and Aged Fischer 344 Rat Inferior Colliculus Neurons to Binaural Tonal Stimuli, Hearing Res., 100:59-67, 1996. PMID: 8922980

Milbrandt, J.C., C. Hunter and D.M. Caspary. Alterations of GABA_A receptor subunit mRNA levels in the aging Fischer 344 rat inferior colliculus. J. Comp. Neurol. 379:455-465, 1997. PMID: 9067836

Willott, J.F., J.C. Milbrandt, L. Seegers Bross and D.M. Caspary. Glycine Immunoreactivity and Receptor Binding in the Cochlear Nucleus of C57BL/6J and CBA/CaJ Mice: Effects of Cochlear Impairment and Aging. J. Comp. Neurol. 385:405-414, 1997, PMID: 9300767

Backoff, P.M., P.S. Palombi, and D.M. Caspary. Glycinergic and GABAergic Inputs Affect Short-term Suppression in the Cochlear Nucleus Hearing Res. 110(1-2):155-163, 1997, PMID: 9282898

Krenning, J., L.F. Hughes, D.M. Caspary, and R.H. Helfert. Age-related glycine receptor subunit changes in the cochlear nucleus of Fischer-344 rats. Laryngoscope 108(1):26-31, 1998. PMID: 9432062

Nakayama, M., D.M. Caspary, H.R. Konrad, J.C. Milbrandt, and R.H. Helfert. Age-related Changes in [3H]Strychnine Binding in the Vestibular Nuclei of Rats. Hearing Res. 127:103-107, 1999. PMID: 9925021

Caspary, D.M., T.M. Holder, J.C. Milbrandt, R. McKernan, D.K. Naritoku. Age-Related Changes in GABA_A Receptor Subunit Composition and Function in the Rat Auditory System. Neuroscience. 93(1):307-312, 1999. PMID: 10430494

Abbott, S. D., L.F. Hughes, C.A. Bauer, R.J. Salvi and D.M. Caspary. Detection of Glutamic Acid Decarboxylase Isoforms in Rat Inferior Colliculus Following Acoustic Exposure. Neuroscience. 93:1375-1381, 1999. PMID: 10501462

Gamma-aminobutyric acidergic and glycinergic inputs shape coding of amplitude modulation in the chinchilla cochlear nucleus. Hearing Res. 134:77-88, 1999. PMID: 10452378

Wang, J., D.M. Caspary, R.J. Salvi. GABA_A Antagonist Causes Dramatic Expansion of Tuning in Primary Auditory Cortex. Neuroreport 57:1137-1139, 2000. PMID: 10790896

Mossop, J.E., M. Wilson, D.M. Caspary and D.R. Moore. Down-regulation of Inhibition Following Unilateral Deafening. , Hearing Res. 147:183-187, 2000. PMID: 10962184

Milbrandt, J.C., T.M. Holder, M.C. Wilson, R.J. Salvi, D.M. Caspary. GAD Levels and Muscimol Binding in Rat Inferior Colliculus Following Acoustic Trauma., Hearing Res. 147:251-260, 2000. PMID: 10962189

Bauer, C.A, T.J. Brozoski, T.M. Holder and D.M. Caspary. Effects of chronic salicylate on GABAergic activity in rat inferior colliculus. Hearing Res. 147:175-182, 2000. PMID: 10962183

Palombi, P.S, P.M. Backoff and D.M. Caspary. Responses of young and aged rat inferior colliculus neurons to sinusoidally amplitude modulated stimuli. Hearing Res. 153:174-180, 2001. PMID: 11223307

Brozoski, T.J, C.A. Bauer, D.M. Caspary: Elevated Fusiform Cell Activity in the Dorsal Cochlear Nucleus of Chinchillas with Psychophysical Evidence of Tinnitus. J.Neurosci. 22(6):2383-90, 2002. PMID: 11896177

Wang, J., S.L. McFadden, D.M. Caspary, R.J. Salvi: Gamma-Aminobutyric Acid Circuits Shape Response Properties of Auditory Cortex Neurons. Brain Res. 944:219-231, 2002. PMID: 12106684

Caspary, D.M, P.S. Palombi, L.F. Hughes: GABAergic Inputs Shape Responses to Amplitude Modulated Stimuli in the Inferior Colliculus. Hearing Res. 168:163-173, 2002. PMID: 12117518

Turner, J.G., L.F. Hughes, D.M. Caspary: Divergent Response Properties of Layer V Neurons in Rat Primary Auditory Cortex. Hearing Res. 202:129-140, 2005. PMID: 15811705

Turner, J.G., J.L. Parrish, L.F. Hughes, L.A. Toth, D.M. Caspary: Hearing in Laboratory Animals: Strain Differences and Non-Auditory Affects of Noise. Comparative Medicine 55:12-23, 2005. PMID: 15766204

Ling, L.L., L.F. Hughes, D.M. Caspary: Aged-Related Loss of the GABA Synthetic Enzyme glutamic acid decarboxylase in Rat Primary Auditory Cortex. Neurosci. 132:1103-1113, 2005. PMID: 15857714

Turner, J.G., L.F. Hughes, D.M. Caspary: Effects of Aging on Receptive Fields in Rat Primary Auditory Cortex Layer V Neurons. J.Neurophysiol. 94:2738-2747, 2005. PMID: 16000522

Caspary, D.M., T.A. Schatteman, L.F. Hughes: Age-Related Loss of Response Inhibition in Rat Dorsal Cochlear Nucleus. J. Neurosci. 23;25(47):10952-10959, 2005. PMID:16306408

Brozoski, T.J., D.M. Caspary, C.A. Bauer: Marking multi-channel silicon-substrate electrode recording sites using radiofrequency lesions. J. Neurosci. Methods 150:185-191, 2006. PMID: 16095715

Turner, J.G., T.J. Brozoski, C.A. Bauer, J.L. Parrish, K. Myers, L.F. Hughes, D.M. Caspary: Gap detection deficits in rats with tinnitus: a potential novel screening tool. Behavioral Neurosci. 120:188-195, 2006. PMID: 16492129.

Caspary, D.M., L.F. Hughes, T.A. Schatteman, J.G. Turner: Age-Related Changes in the Response Properties of Cartwheel Cells in Rat Dorsal Cochlear Nucleus. Hearing Res. 217:207-215. 2006. PMID: 16644158

Bauer, C.A., J.G Turner, D.M. Caspary, K.S. Myers, T.J., Brozoski: Tinnitus and inferior colliculus activity in chinchillas with three distinct patterns of cochlear trauma. J Neurosci Res. 86(11):2564-2578, 2008. PMID: 18438941

Caspary, D.M., L.L. Lynne, J.G. Turner, and L.F. Hughes: Inhibitory Neurotransmission, Plasticity and Aging in the Mammalian Central Auditory System. J Exp Biol. 211(Pt 11):1781-91. 2008. PMID: 18490394

Schatteman T.A., L.F. Hughes, D.M. Caspary: Aged-related loss of temporal processing: altered responses to amplitude modulated tones in rat dorsal cochlear nucleus. Neurosci. 154(1):329-337, 2008. PMID: 18384967

Wang, H.N., L.L. Ling, T.J. Brozoski, J.G. Turner, L.F. Hughes, D.M. Caspary: Age-Related Changes in Glycine Receptor Subunit Composition and Binding in Dorsal Cochlear Nucleus. Neurosci. 160(1):227-39, 2009. PMID:PMC 19217931

Wang, H.N., T.J. Brozoski, J.G. Turner, L.L. Ling, J.L. Parrish, L.F. Hughes, D.M. Caspary: Plasticity at Glycinergic Synapses in the Dorsal Cochlear Nucleus of Rats with Behavioral Evidence of Tinnitus. Neurosci. 2009 Dec 1;164(2):747-59, 2009, PMID: 19699270

Hughes L.F., J.G. Turner J.L. Parrish, D.M. Caspary: Processing of Broadband Stimuli Across A1 Layers in Young and Aged Rats. Hear Res. Jun 1;264 (1-2):79-85, 2010, PMID: 19772906

Brozoski T.J., D.M. Caspary, C.A. Bauer, and B.D. Richardson: The Effects of Supplemental Dietary Taurine on Tinnitus and Auditory Discrimination. Hearing Research, 270(1-2):71-80, 2010, PMID: 20868734

Roberts LE, J.J. Eggermont, D.M. Caspary, S.E. Shore, J.R. Melcher, J.A. Kaltenbach: Ringing ears: the neuroscience of tinnitus. J Neurosci. 30(45):14972-9, 2010, PMID: 21068300

Wang H., T.J. Brozoski, L Ling, L. F. Hughes and D.M. Caspary: Impact of Sound Exposure and Aging on Brain Derived Neurotrophic Factor and TrkB Receptor Levels in Dorsal Cochlear Nucleus 80 Days Following Sound Exposure. Neurosci. 172:453-9, 2011, PMID: 21034795

Richardson, B.D., L.L. Ling, V.V. Uteshev, D.M. Caspary: Extrasynaptic GABA_A receptors and tonic inhibition in rat auditory thalamus. PLoS One. (1):e16508, 2011, PMID: 21298071

Wang H., T.J. Brozoski, and D.M. Caspary: Inhibitory Neurotransmission in Animal Models of Tinnitus: Maladaptive Plasticity. Hear Res. 279 (1-2):111-7, 2011, PMID: 21527325

Richardson, B.D., T.J. Brozoski, L.L. Ling, D.M. Caspary: Targeting inhibitory neurotransmission in tinnitus. Brain Res. 1485:77–87, 2012, PMID: 22405692.

Turner, J.G., J.L. Parrish, L. Zuiderveld, S. Darr, L.F. Hughes, D.M. Caspary, E. Idrezbegovic, B. Canlon: Acoustic Experience Alters the Aged Auditory System. Ear & Hearing 34(2):151-9, 2012 PMID: 23086424

Llano, D.A., Turner, J.G., Caspary, D.M.: Diminished Thalamocortical Inhibition in an Aging Mouse model of Chronic Tinnitus., J Neurosci. 32(46):16141-8, 2012, PMID:23152598

Caspary, D.M., L.F. Hughes, L.L. Ling: Age-Related GABA_A Receptor Changes in Rat Primary Auditory Cortex. Neurobiol Aging. 34(5):1486-1496, 2013, PMID: 23257264

Richardson BD, Ling LL, Uteshev VV, Caspary DM. Reduced GABA_A receptor-mediated tonic inhibition in aged rat auditory thalamus. J Neurosci. 33(3):1218-27a, 2013, PMCID: PMC3717293.

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