David S. Sharlin, Ph.D.

Associate Professor

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ACADEMIC APPOINMENTS

Minnesota State University, Mankato Department of Biological Sciences 242 Trafton Center South Mankato, MN 56001

2016-present Associate Professor Minnesota State University, Mankato Department of Biological Sciences 2012-2016 Assistant Professor Minnesota State University, Mankato **Department of Biological Sciences EDUCATION** 2002-2007 Ph.D., September 2007 University of Massachusetts-Amherst Program in Molecular and Cellular Biology Dissertation Title: Environmental Toxicants and White Matter Composition: Understanding the Role of Thyroid Disruption 1995-1999 B.S., May 1999 University of New Hampshire

RESEARCH EXPERIENCE

2007-2012	Postdoctoral Fellow , National Institute of Diabetes, Digestive, and Kidney, National Institutes of Health, Laboratory of Endocrinology and Receptor Biology Mentor- Dr. Douglas Forrest <i>Research Focus:</i> Thyroid hormone action during cochlear development
2002-2007	Research Assistant , Department of Biology, University of Massachusetts Mentor- Dr. R. Thomas Zoeller <i>Research Focus:</i> The effects of hypothyroidism and polychlorinated biphenyl exposure on white matter development (Ph.D. Dissertation Research)
1999-2002	Research Technologist , Wellman Labs of Photomedicine, MGH/Harvard Medical School Mentor - Dr. Tayyaba Hasan <i>Research Focus:</i> Optimization of photodynamic therapy for the treatment of cancer and infectious diseases
1998-1999	<i>Independent Study</i> - Department of Zoology, University of New Hampshire Mentor- Dr. Edward Tillinghast <i>Research Focus:</i> Development Protease activity in Black Widow spider, <i>Lactrodectus mactans</i>

Department of Zoology

TEACHING EXPERIENCE

CLASSROOM

Minnesota State University, Mankato

Biol 220 - Human Anatomy Lecture and Lab Biol 324 - Neurobiology Biol 330 – Human Physiology (Laboratory) Biol 424/524 - Developmental Biology (formerly Biol 434 Developmental and Human Embryology) Biol 425 - Developmental Biology Laboratory Biol 619 - Special Topics in Biology (Environmental Endocrine Disruptors 2014; Modern Genome Manipulations 2015)

- Biol 602 Graduate Research Methods
- Biol 695 Graduate Seminar

The Foundation for Advanced Education in the Sciences, National Institutes of Health

Lecturer - Bio 246 - Human Health and Biological Diversity (new course for spring 2012) Lecturer - Bio 319 - Stem Cells and their Niches Summer Intern Journal Club Facilitator – Hormones in Development and Disease

Department of Biology, University of Massachusetts

Co-Instructor - Bio 597M – Environmental Endocrine Disruptors Teaching Assistant - Bio 100 - Introductory Biology Laboratory

Department of Natural Resources, University of New Hampshire

Teaching Assistant – NR435 - Contemporary Conservation Issues

LABORATORY (Undergraduate and Graduate Student Mentoring)

Minnesota State University, Mankato

<u>Master Students</u> 2018- Present 2017-2019 2017-2019 2015-2017 2013-2015 2013-1515 2012-2014	 M. Uscategui Calderon – Adaptive mechanisms to low thyroid hormone M. Tompach – Chst15 expression in the developing mouse cochlea A. Grond – Targeted over-expression of igf1 in the developing mouse brain C. Graber – Quantification of Igf1 mRNA in the hypothyroid brain S. Kline - Effects of hypothyroidism on the temporal expression of Igf1 in the rodent brain K. Short - Cardiovascular function in hypothyroid SHR rats R. Shin - Auditory function in mice lacking thyroid hormone transporters Mct8 and Oatp1c1
Undergraduate Studer	nts
2018-present	A. Lind – T3 responsive genes in the developing cochlea
2018-present	L. Krieg – Role of thyroid hormone transporters in adrenal gland development
2018 present	O. Valenta – Cochlear histology in mice lacking thyroid hormone transporters
2018 present	N. Jock – Optimizing detection of distortion product otoacoustic emissions (DPOAE)
2017-present	M. Swenson - Auditory function in mice lacking thyroid hormone transporters
2016-2018	E. Kim - Thyroid hormone, Igf1, and Brain Development
2016-2018	M. Burant - Growth hormone regulation of Igf1 in the hypothyroid brain
2016-2019	A. Onadipe - Thyroid hormone, Igf1, and Brain Development
2015-2016	L. Hesser - Measuring iodine in tissues using SEM_EDS
2015-2017	A. Wright - Growth hormone regulation of Igf1 in the hypothyroid brain
2015-2017	N. Moses - Auditory function in mice lacking thyroid hormone transporters Mct8 and Oatp1c1
2015-2016	I. Omar - Thyroid hormone, Igf1, and Brain Development
2014-2018	S. Petersen - Auditory function in mice lacking thyroid hormone transporters Mct8 and Oatp1c1
2014-2016	A. Rice - Triclosan and Development
2013-2015	B. Nygard - Pressure natriuresis in hypothyroid SHR Rats, Triclosan and Development
2013-2015	J. Verdon - Triclosan exposure and auditory function
2013-2015	J. Gute - Pressure natriuresis in hypothyroid SHR Rats
2013-2015	A. Zawed - The effects of hypothyroidism on photoreceptor outer segments
2013-2015 2013-2014	C. Graber - Chst15 as a novel target of the thyroid hormone receptor N. Rahman - Auditory function in mice lacking thyroid hormone transporters Mct8 and Oatp1c1
2013-2014 2013-2014	A. Nicholson - Chst15 as a novel target of the thyroid hormone receptor
2013-2014 2012-2013	S. Piroso - The effects of hypothyroidism on hair cell stereocillia
2012-2013	M. Haack - The effects of hypothyroidism on hair cells stereocillia
National Institutes of	
2010-2011	J. Chen - Characterization of a thyroid hormone receptor target gene in the developing cochlea
2009	A. Swaroop - Comparison of early stages of rod and cone generation in mouse retina
University of Massac	husetts
2006-2007	L. Meyer - MCT8 as an adaptive mechanism to thyroid hormone insufficiency
2005-2006	T. Toomey - Cloning of the thyroxine transporter, Oatp1c1
2004	A. Mousette - The effects of perchlorate exposure on the expression of the Na/I-symporter

<u>GRANTS</u> (including student sponsored)

<u>Funded (\$1,824,430 to</u>	
2017	NSF, S-STEM - Research Immersive Scholastic Experience in Biology (RISEbio): A Scholarship
	and Support Program Assisting Biology Students to Rise to their Full Potential - \$1,000,000
2017-present	NSF, MRI - Acquisition of Laser Scanning Microscope - \$575,000
2016-present	American Thyroid Association Research Grant - \$57,500
2016-2017	Strategic Priority Funding, MSU Mankato, Acquisition of an Anatomage - \$70,250
2015-2016	Faculty Research Grant, MSU, Mankato - \$4,980
2013-2014	Faculty Research Grant, MSU, Mankato - \$5,000
2010	American Thyroid Association / International Thyroid Congress Travel Grant - \$500
2004-2007	US EPA Science to Achieve Results (STAR) Predoctoral Fellowship Recipient - \$110,000
2007	Society of Toxicology Graduate Student Travel Grant - \$500
2004	Gordon Conference on Endocrine Disruptors Student Travel Grant - \$700
2002	American Society of Photobiology Annual Conference Travel Grant - \$500
<u>Unfunded</u>	
2018	Regenerative Medicine Minnesota, Thyroid Hormone Action During Cartilage Replacement, Role:
	Co-PI with Dr. Rachel Cohen as PI - \$250,000
2017	Council on Undergraduate Research, Curricular Transformation - \$10,000
2016	Strategic Priority Funding, MSU Mankato, Establishment of the Biological Sciences Gateway
2015/6	NSF, MRI - Acquisition of a Laser Scanning Microscope - \$571,712
2014	Strategic Priority Funding, MSU Mankato. Establishment of the Integrated Center for Biological
	Imaging and Observation (ICBIO - "I See Bio) - \$350,000
2013	Faculty Improvement Grant, MSU Mankato. Co-chair and participate in the 2013 American
	Thyroid Associations Trainees' and Career Advancement Educational Track - \$1,469.40
Student Spencered (a)	raduate and undergraduate)
	o <i>i</i>
2018	MSU, Mankato, Undergraduate Research Center Supply Grant (Onadipe) - \$500
2018	MSU, Mankato, Undergraduate Research Center Supply Grant (Swenson) - \$500
2017	MSU, Mankato, Foundation Grant - Undergraduate Research Center (Onadipe/Burandt) - \$1,000
2017	MSU, Mankato, Undergraduate Research Center Supply Grant (Peterson/Swenson) - \$500
2016	MSU, Mankato, Foundation Grant - Undergraduate Research Center (Moses) - \$515
2016	MSU, Mankato, Foundation Grant - Undergraduate Research Center (Wright/Burandt) - \$575
2016	MSU, Mankato, Department of Biological Sciences Graduate Student Grant (Graber) - \$1,000
2015	MSU, Mankato, Creating a Strong and Vibrant Graduate Community Grant (Kline) - \$750
2015	MSU, Mankato, Department of Biological Sciences Graduate Student Grant (Kline) - \$1,000
2015	MSU, Mankato, Undergraduate Research Center Supply Grant (Peterson/Moses) - \$500
2014	MSU, Mankato, Creating a Strong and Vibrant Graduate Community Grant (Short) - \$750
2014	MSU, Mankato, Foundation Grant - Undergraduate Research Center (Verdon) - \$625
2014	MSU, Mankato, Foundation Grant - Undergraduate Research Center (Gute) - \$500
2014	MSU, Mankato, Department of Biological Sciences Graduate Student Grant (Short) - \$1,000
2013	MSU, Mankato, Undergraduate Research Center Supply Grant (Zawed) - \$500
2013	MSU, Mankato, Undergraduate Research Center Supply Grant (Graber/Nicholson) - \$500
2012	MSU, Mankato, Undergraduate Research Center Supply Grant (Haack/Piroso) - \$500
AWARDS	
	Opliana of Opionan Engineering, and Technology, MOUNINgstate, Excellence in D
2018	College of Science, Engineering, and Technology, MSU Mankato, Excellence in Research
2015	College of Science, Engineering, and Technology, MSU Mankato, Excellence in Advising
2016/15/14/13	Impact Professor – Honors Program, MSU - Student Nominated
2011	Best Oral Presentation – NIDDK Postdoctoral Fellow Retreat - NIH
2009	Byron Prize for Best Dissertation – University of Massachusetts
2008	Dr. Butcher New Investigator Award – Neurobehavioral and Teratology Society
2006	Best Student Poster Award – MCB Program Annual Retreat
SERVICE	
Editorial Comises	

Editorial Service: 2015-present

Review Editor, Editorial Board of *Thyroid Endocrinology*, a specialty of *Frontiers in Endocrinology*.

Ad Hoc Review Service to Professional Journals

Endocrinology Environmental Endocrine Disruptors Environmental Toxicology and Pharmacology Endocrine Lancet: Diabetes & Endocrinology Toxicological Sciences Neurotoxicology Journal of Neuroendocrinology Journal of Neuroscience Biochimica et Biophysica Acta (BBA) - General Subjects Environmental Science and Technology Neurotoxicology Environmental Health Perspective Nutritional Neuroscience

Additional Ad Hoc Review Service

2018	Developmental Biology Textbook, Julia Paxson, Oxford University Press

- 2016 Chick Development eBook, Mary Tyler, Sinauer Associates, Inc., Publishers
- 2015 Expert reviewer, French National Research Agency (ANR)
- 2013 Ohio University Research Committee External Grant Reviewer
- 2012 United States Environmental Protection Agency (US-EPA) Technical Manuscript Reviewer

Minnesota State University, Mankato – Departmental Service

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2018-present	Biology MS Program Coordinator
2018-present	Advisory Committee Member
2018-2019	Tenure Track Anatomy/Comparative Search Committee Member (Chair)
2015-2017	Faculty Improvement and Sabbatical Committee (university wide committee)
2015-2017	Graduate Committee (AY16-17 Chair)
2014-2015	Tenure Track Microbiologist Search Committee Member
2014-2017	Faculty Advisor, Beta Beta Beta, National Biological Honor Society
2013-present	Marketing Committee
2012-2013	Tenure Track Physiologist Search Committee Member

2012-2014 Advisory Committee Member

American Thyroid Association

2019-present	Publication Committee
2018	Basic Fellow Tract, Career Tracks, Chair, 88th Annual Meeting of American Thyroid Association
2014	Co-Chair – Basic Fellow Tract, 84th Annual Meeting of American Thyroid Association
2013	Co-Chair – Basic Fellow Tract, 83rd Annual Meeting of American Thyroid Association
2012-2013	Basic Science Research Guidelines Task Force Member
2012-2019	Trainees and Career Advancement Committee

National Institutes of Health

2008-2009 Steering Committee Member for 2nd Annual NIH Career Symposium

Molecular and Cellular Biology Program, University of Massachusetts

2005-2006Steering Committee - Program in Molecular and Cellular Biology, University of Massachusetts2004-2005Colloquia Organizer - Program in Molecular and Cellular Biology, University of Massachusetts2003-2004Student President - Program in Molecular and Cellular Biology, University of Massachusetts2002-2003Social Chair - Program in Molecular and Cellular Biology, University of Massachusetts

Northeast Alliance for Graduate Education and the Professoriate (NEAGEP), University of Massachusetts

2003-2004	NEAGEP Post-Baccalaureate Intern Mentor
2002-2003	Minority Student Tutor

PROFESSIONAL AFFILATIONS

Endocrine Society American Thyroid Association American Association for the Advancement of Sciences

INVITED TALKS AND SEMINARS

2019	KS AND SEMINARS Health & Biomedical Sciences Summit – The Future of Healthcare: Talent, Expansion, Innovation, Minnesota State University, Mankato. Early Engagement with Authentic Laboratory Experiences: Pathways to Scientific Careers through the RISEbio Program. Co-presenters: Rachel Cohen, Allison Land, Brian Martensen, David Sharlin, and Brittany Smith
2018	Health and Biomedical Sciences Summit, Minnesota State University Mankato Thyroid Hormone and Smart Phone Apps: A Partnership with the American Thyroid Association Co-presenter: Guarionex Salivia, Department of Computer Information Sciences
2018	Scholars at Work Conference, Minnesota State University Mankato Helping Students RISE to Their Full Potential: The Research Immersive Scholastic Experience in Biology RISEbio) Program and How It Can Help Our Students Succeed Co-presenters: Rachel Cohen, Allison Land, Brian Martensen, David Sharlin, and Brittany Smith
2018	Alumni Foundation Breakfast, Minneapolis Club, Minneapolis, MN The RISE of Student Researchers - How engaging undergraduate students in thyroid research led to rethinking the freshman year Presented at MSU Mankato Alumni Foundation Breakfast
2018	Beta Beta Beta Honor Society, Minnesota State University Mankato The Magic Elixir of Life:Thyroid Hormone
2017	St. Catherine University, St. Paul, MN Auditioning for a Role in Cochlear Development: Thyroid Hormone Transporters
2017	Endocrine Society's 98th Annual Meeting (EndoCareers Forum), Orlando, FL. Teaching and Research at Primarily Undergraduate Institutions
2017	Winona State University, Winona, MN Dissecting the role of thyroid hormone transporters in cochlear development
2016	American Thyroid Association Annual Meeting, Denver, CO Adaptive Mechanisms to Thyroid Disrupting Chemicals
2016	Endocrine Society's 97th Annual Meeting (EndoCareers Forum), Boston, MA. Teaching and Research at Primarily Undergraduate Institutions
2014	Gordon Research Conference on Environmental Endocrine Disruptors, Barga (Lucca), Italy EDCs, thyroid hormone action, and auditory development in animal models
2013	Department of Biology, St. Thomas University, St. Paul, MN Hear, Hear! Thyroid Hormone and Cochlear Development
2012	American Thyroid Association Annual Meeting, Quebec City, Quebec, Canada Thyroid Hormone Transporters in Cochlear Development
2012	Department of Biological Sciences, University of Wisconsin – Parkside Hear, Hear! Thyroid Hormone and Cochlear Development
2012	Department of Biological Sciences, Minnesota State University, Mankato Hear, Hear! Thyroid Hormone and Cochlear Development
2012	Department of Biology, University of Wisconsin – Stevens Point Thyroid Hormone and Cochlear Development
2011	Department of Biology, University of Wisconsin - Eau Claire Thyroid Hormone and Cochlear Development
2011	NIDDK, NIH, Fellows Retreat. Bethesda, MD. Developmental and Cell-Specific Expression of Thyroid Hormone Transporters in the Mouse Cochlea
2010	International Thyroid Congress Meeting. Paris, France Identification of Novel Targets of Thyroid Hormone in the Developing Inner Ear by Global Transcriptional Profiling of Laser Microdissected Cells
2010	NIDDK, NIH, Fellows Retreat. Cambridge, MD.

Identification of Novel Targets of Thyroid Hormone Signaling in the Developing Inner by Global Transcriptional Profiling

- 2009 Molecular and Cellular Biology Program, University of Massachusetts, Amherst, MA The 3 W's of Thyroid Hormone Transporters: Where, When, and Why
- 2008 Neurobehavioral and Teratology Society Annual Meeting. Monterey, CA. White Matter Development And Thyroxine: A Balancing Act

<u>BIBLIOGRAPHY</u> (#graduate student mentee, *undergraduate student mentee)

Peer Reviewed Publications

Sharlin D.S., Ng L, Verrey F, Visser T, Liu Y, Olszewsji R.T., Hoa M, Heuer H, Forrest D. Deafness and loss of cochlear hair cells in the abscence of thyroid hormone transporters Slc16a2 (Mct8) and Slc16a10 (Mct10). Scientific Reports 8, Article number: 4403. 2018.

Bianco A.C. (chair), **[Authors Listed Alphabetically**] Anderson G., Forrest D., Galton VA, Gereben B., Kim B., Kopp P., Lia XH, Obregon M.J., Peeters R.P., Refetoff S., **Sharlin D.S**., Simonides W.S., Weiss R.E, Wiliams G.R. The American Thyroid Association Handbook to Investigate Thyroid Hormone Economy and Action in Rodent and Cell Models. Thyroid. 2014 Jan;24(1):88-168

Lee GS, He Y, Dougherty E.J., Jimenez-Movilla M, Avella M, Grullon S, **Sharlin D.S.**, Guo C, Blackford J.A., Awasthi S, Zhang Z, Armstrong S.P., London E.C., Chen W, Dean J, Simons S.S. *Disruption of Ttll5/Stamp gene (Tubulin tyrosine ligase-like protein 5/SRC-1 and TIF2 associated modulatory protein gene) in male mice causes sperm malformation and infertility*. J Biol Chem. 2013 May 24;288(21):15167-80.

Peeters R.P., Hernandez A, Ng L, Ma M, **Sharlin D.S.**, Pandey M, Simonds W.F., St Germain D.L., Forrest D. *Cerebellar Abnormalities in Mice Lacking Type 3 Deiodinase and Partial Reversal of Phenotype by Deletion of Thyroid Hormone Receptor a*1. Endocrinology. 2013 Jan;154(1):550-61

Yusuf D, Butland SL, [101 authors; arranged by transcription factor name], **D.S. Sharlin**, [9 authors], Wasserman WW. *The transcription factor encyclopedia*. Genome Biology, 2012;13(3):R24

****D.S. Sharlin**, T.J. Visser, D. Forrest. *Developmental and Cell-Specific Expression of Thyroid Hormone Transporters in the Mouse Cochlea*. Endocrinology. 2011 Dec;152(12):5053-64 ***Selected for a News and Views highlight*

L. Ng, A. Lu, A. Swaroop, **D.S. Sharlin**, A. Swaroop, and D. Forrest. *Two transcription factors can direct three photoreceptor outcomes from rod precursor cells in mouse retinal development*. J Neurosci. 2011 Aug 3; 31(31): 11118-25.

D.S. Sharlin, M.E Gilbert, M. Taylor, D.Ferguson and R. Thomas Zoeller. *The Nature of the Compensatory Response to Low Thyroid Hormone in the Developing Brain*. J Neuroendocrinol. 2010 Mar; 22(3):153-65.*Selected for cover highlight and cover art*

P. Wangemann, H.M. Kim, S. Billings, K. Nakaya, X. Li, R. Singh, **D.S. Sharlin**, D. Forrest, D.C. Marcus, P. Fong. *Developmental delays consistent with cochlear hypothyroidism contribute to failure to develop hearing in mice lacking Slc26a4/pendrin expression*. Am J Physiol Renal Physiol. 2009 Nov; 297(5): F1435-47.

****D.S Sharlin**, D. Tighe, M. Gilbert, R.T. Zoeller. *The Balance between Oligodendrocyte and Astrocyte Production in Major White Matter Tracts is Linearly Related to Serum Total Thyroxine*. Endocrinology, April 2008. Volume 149 (5): 2527-2536. ****This work was highlighted in the April 2008 issue of Endocrine News, Endocrine Society's trade journal**

K.J. Gauger, S. Giera, **D.S. Sharlin**, R. Bansal, E. Iannacone, and R.T. Zoeller. *Polychlorinated Biphenyls 105 And 118 Form Thyroid Hormone Receptor Agonists Following Cytochrome P4501A1 Activation In Rat Pituitary GH3 Cells.* Environ Health Perspect. 2007 Nov;115(11):1623-30.

D.S. Sharlin, R. Bansal, RT. Zoeller. *Polychlorinated Biphenyls Exert Selective Effects on Cellular Composition of White Matter in a Manner Inconsistent with Thyroid Hormone Insufficiency*. Endocrinology, February 2006. Volume 147 (2): 846-858.

K. O'Riordan, **D.S. Sharlin**, J. Gross, S. Chang, D. Errabelli, O. Akilov, S. Kosaka, G. Nau, T. Hasan. *Photoinactivation of Mycobacterium bovis BCG-Induced Granulomatous Infection*. Antimocrobial Agents and Chemotherapy, May 2006. Volume 50 (5): 1828-1834.

B. Ortel, **D.S. Sharlin**, D. O'Donnell, A. Sinha, E. Maytin, T. Hasan. *Differentiation enhances ALA-dependent photodynamic treatment in LNCaP prostate cancer cells*. British Journal of Cancer, Nov. 18, 2002. Volume 187 (11): 1321-7.

Book Chapters

D.S. Sharlin. *Disruption of auditory function by thyroid hormone receptor mutations.* In: Thyroid Hormone Disruption and Neurodevelopment. Springer Publishing. Editors N. Koibuchi, M.D., Ph.D. and P.M. Yen, M.D.. 2016. Chapter 9. Pgs 130-150.

D.S. Sharlin. *Thyroid disrupting chemicals as developmental neurotoxicants.* In: Environmental Factors in Neurodevelopmental and Neurodegenerative Disorders. Elsevier. Editors, L.G. Costa, Pharm.D. and M. Aschner, Ph.D.. 2015. Chapter 8. Pgs 167-192.

K.J. Gauger, **D.S Sharlin**, R.T. Zoeller. *Polychlorinated Biphenyls as Disruptors of Thyroid Hormone Action.* In: PCBs: Recent Advances. L.W. Robertson and L.G. Hansen, Eds. Univ Illinois Press, Champaign, IL. 2006. (Book Chapter)

Published Conference Abstracts

C. Cleary, S. Peterson^{*}, K. Junghans1, K. Laprocina, H. Heuer, **D.S. Sharlin**, C.J. Huang. Thyroid Hormone Transporter *Mct8 is Specially Expressed in the Adrenal Gland Inner Cortex and Partially Mediates the Thyroid Hormone Action in the Adrenal Cortex*. Endocrine Society's Annual Meeting. New Orleans, LA. March 2019

M. Tompach[#], D. Forrest, **D.S. Sharlin**. *Quantification and Localization of Carbohydrate Sulfotransferase 15 (Chst15) in Developing Hypothyroid Cochlea. Society for Neuroscience Annual Meeting*. San Diego, CA. November 2018.

A. Grond[#], K. Saatman, **D.S. Sharlin**. *Ectopic Brain-Derived Insulin-Like Growth Factor-1 Partially Rescues Neuroanatomical Defects Associated with Developmental Hypothyroidism*. Society for Neuroscience Annual Meeting. San Diego, CA. November 2018.

K. Kang, **D.S. Sharlin**, R.E. Cohen. *The relationship between seasonal breeding and deiodinase expression in the green anole lizards. Society for Neuroscience Annual Meeting.* San Diego, CA. November 2018.

R.E. Cohen, A.M. Land, B.F. Martensen, **D.S. Sharlin**, B.A. Smith. *Integrating neuroscience into a new freshman research initiative at a regional comprehensive university: The Research Immersive Scholastic Experience in Biology program.* Society for Neuroscience Annual Meeting. San Diego, CA. November 2018.

D. Rajaguru, M. Bauer, **D.S. Sharlin**, G.M. Goellner. *The Polyglutamine Protein FAM171B Localizes to Neuronal Cytoplasm.* Society for Neuroscience Annual Meeting. San Diego, CA. November 2018.

C. Graber[#], S. Kline[#], and **D.S Sharlin**. Insulin-like growth factor 1 (lgf-1) positive cells are permanently reduced in the murine brain following developmental hypothyroidism. Endocrine Society's 99th Annual Meeting. Orlando, FL. April 2017

A. Sudasinghe, **D.S. Sharlin**, and G.M Goellner G.M., *Expression of the Novel Polyglutamine Protein FAM171B in the Developing and Adult Mouse Brain.* The Society for Neuroscience Annual Meeting. San Diego, CA. November 2106

K.F. Short[#], J. Gute^{*}, B. Nygaard^{*}, P. Knoblich, **D.S Sharlin**. A Comparison of the Effect of Hypothyroidism on Blood Pressure of the Wistar Kyoto (WKY) Rat and the Spontaneously Hypertensive Rat (SHR). Endocrine Society's 97th Annual Meeting. San Diego, CA. March 2015

D.S. Sharlin, D. Forrest. *Thyroid Hormone Transporter Expression during Cochlear Development.* Endocrine Society's 91st Annual Meeting. Washington, DC. June 2009

D.S. Sharlin, D. Tighe, M. Gilbert, RT. Zoeller. *The Thyroid Hormone Transporter, MCT8, Selectively Responds to Thyroid Hormone Insufficiency in the Developing Rat Brain.* Endocrine Society's 89th Annual Meeting. Toronto, Canada. June 2006

D. Tighe, **D.S. Sharlin**, RT. Zoeller. *The Effects of PBDEs on Thyroidal Status in the Developing Rat.* Endocrine Society's 89th Annual Meeting. Toronto, Canada. June 2006

D.S. Sharlin, D. Tighe, M. Gilbert, RT. Zoeller. *The Effects of Low Dose PTU in Endpoints of TH action in the Developing Brian*. Society of Toxicology's 46th Annual Meeting. Charlotte, NC. March 2007

M. Gilbert, M. Taylor **D.S. Sharlin**, W. Anderson, D. Ferguson, RT. Zoeller. *Thyroid Hormone Insufficiency and Brain Development – Examining Neurotoxicity at Low Levels of Hormone Disruption*. Society of Toxicology's 46th Annual Meeting. Charlotte, NC. March 2007

D.S. Sharlin, R. Bansal, RT. Zoeller. *The mRNA Expression of the Thyroid Hormone Transporter, MCT8, Selectively Responds to Thyroid Hormone Insufficiency in Neurons of the Hippocampus.* Endocrine Society's 88th Annual Meeting. Boston, MA. June 2006

D.S. Sharlin, R. Bansal, RT Zoeller. *Polychlorinated Biphenyls Exert Selective Effects on Cellular Composition of White Matter in a Manner Inconsistent with Thyroid Hormone Insufficiency*. The 22nd International Neurotoxicology Conference. Research Triangle Park, NC. September 2005

D.S. Sharlin, R. Bansal, RT Zoeller. *PCB Induced Hypothyroxinemia Alters Oligodendrocyte Numbers in Two White Matter Tracts of the Developing Rat Brain.* Society for Toxicology Annual Meeting. New Orleans, LA. March 2005

D.S. Sharlin, R. Bansal, C. Herzig, RT Zoeller. *Maternal PCB Exposure Alters Oligodendrocyte development in the Developing Rat Brain.* Gordon Research Conference on Environmental Endocrine Disruptors. Colby-Sawyer College. New London, NH. June 2004

D.S. Sharlin, J. Gross, Gerald Nau, T. Hasan. *Photodynamic Destruction of Mycobacteria in a New Animal Model for Localized Infection*. 30th Annual Meeting of the American Society of Photobiology. Quebec City, Canada. July 2002

I.Rizvi, W. Rice, **D.S. Sharlin**, Tri Dinh, Weiping Yu, T. Hasan. *Targeted Photoimmunotherapy of epidermal Growth Factor Receptor: Mechanistic Parameters Governing Photoxic Efficiency.* 30th Annual Meeting of the American Society of Photobiology. Quebec City, Canada. July 2002

B. Ortel, A. Sinha, **D.S. Sharlin**, E. Maytin, T. Hasan. *Order Dependent Enhancement of ALA-PDT by Chemotherapy*. 30th Annual Meeting of the American Society of Photobiology. Quebec City, Canada. July 2002

B. Ortel, **D.S. Sharlin**, E.V. Maytin, B. Korsharshy, T.Hasan. *Combination of differentiation Therapy and ALA-PDT*. 13th International Congress on Photobiology and 28th Annual Meeting of the American Society of Photobiology. San Francisco, CA. July 2000.

I.Rizvi, A.C. Moor, B. Ortel, **D.S. Sharlin**, D. O'Donnell, T. Hasan. Acute and Long Term Effects of Fluence Rate on BPD Based Photodynamic Therapy of Prostate Cancer. 13th International Congress on Photobiology and 28th Annual Meeting of the American Society of Photobiology. San Francisco, CA. July 2000.