

Daniel Stolzberg, Ph.D.

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Research Positions & Education

- 2021 – *present* Staff Scientist
Principal Investigator: Melissa Caras, Ph.D.
Department of Biology
University of Maryland
- 2019 - 2021 Assistant Research Scientist
Principal Investigator: Shihab Shamma, Ph.D.
Neural Systems Laboratory
Institute for Systems Research
University of Maryland
- 2017 – 2018 Post-Doctoral Fellow
Principal Investigator: Simon Peron, Ph.D.
Center for Neural Science
New York University
- 2013 – 2017 Post-Doctoral Fellow
Principal Investigator: Stephen Lomber, Ph.D.
Department of Physiology and Pharmacology
Schulich School of Medicine & Dentistry
Cerebral Systems Laboratory
University of Western Ontario
- 2007 – 2012 Ph.D. in Neuroscience
Primary Thesis Advisor: Richard J Salvi, Ph.D.
Center for Hearing & Deafness
University at Buffalo, the State University of New York
- 2006 – 2007 Research Technician
Supervisor: Richard J Salvi, Ph.D.
Center for Hearing and Deafness
University at Buffalo, the State University of New York
- 2002 – 2006 B.A. Cognitive Neuroscience (with departmental distinction)
Minor in Linguistics
University at Buffalo, the State University of New York

Research Support

Postdoctoral Research Grant	Brain and Mind Institute Postdoctoral Collaborative -----	2017
Postdoctoral Fellowship	Canadian Institutes of Health Research -----	2014 – 2017
Predoctoral Fellowship (F31)	NIH National Institute on Deafness and other Communication Disorders-----	2010 – 2012
Predoctoral Research Grant	Mark Diamond Research Fund Sp-10-22 -----	2010 – 2011
Predoctoral Research Grant	American Tinnitus Association-----	2008

Honors and Awards

Association for Research in Otolaryngology Postdoctoral Fellow travel grant-----	2013
Beverly Bishop, Ph.D., award for best short talk at Buffalo Chapter of the Society for Neuroscience annual meeting-----	2010
Neuroinformatics two-week workshop at Marine Biological Laboratory at Woods Hole w/ scholarship-----	2010

Peer-Reviewed Publications

- Stolzberg, D.**, Butler, B. E., & Lomber, S. G. (2017). Effects of neonatal deafness on resting-state functional network connectivity. *NeuroImage*, 165, 69–82. <https://doi.org/10.1016/j.neuroimage.2017.10.002>
- Stolzberg, D.**, Wong, C., Butler, B. E., & Lomber, S. G. (2017). Atlas: A magnetic resonance imaging-based three-dimensional cortical atlas and tissue probability maps for the domestic cat (*Felis catus*). *The Journal of Comparative Neurology*, 525(15), 3190–3206. <https://doi.org/10.1002/cne.24271>
- Schormans, A. L., Scott, K. E., Vo, A. M. Q., Tyker, A., Typlt, M., **Stolzberg, D.**, & Allman, B. L. (2016). Audiovisual Temporal Processing and Synchrony Perception in the Rat. *Frontiers in Behavioral Neuroscience*, 10, 246. <https://doi.org/10.3389/fnbeh.2016.00246>
- Kok, M. A., **Stolzberg, D.**, Brown, T. A., & Lomber, S. G. (2015). Dissociable influences of primary auditory cortex and the posterior auditory field on neuronal responses in the dorsal zone of auditory cortex. *Journal of Neurophysiology*, 113(2), 475–486. <https://doi.org/10.1152/jn.00682.2014>
- Radziwon, K. E., **Stolzberg, D. J.**, Urban, M. E., Bowler, R. A., & Salvi, R. J. (2015). Salicylate-induced hearing loss and gap detection deficits in rats. *Frontiers in Neurology*, 6, 31. <https://doi.org/10.3389/fneur.2015.00031>
- Newman, A. J., Hayes, S. H., Rao, A. S., Allman, B. L., Manohar, S., Ding, D., **Stolzberg, D.**, Lobarinas, E., Mollendorf, J.C., & Salvi, R. (2015). Low-cost blast wave generator for studies of hearing loss and brain injury: blast wave effects in closed spaces. *Journal of Neuroscience Methods*, 242, 82–92. <https://doi.org/10.1016/j.jneumeth.2015.01.009>
- Hayes, S. H., Radziwon, K. E., **Stolzberg, D. J.**, & Salvi, R. J. (2014). Behavioral models of tinnitus and hyperacusis in animals. *Frontiers in Neurology*, 5, 179. <https://doi.org/10.3389/fneur.2014.00179>
- Stolzberg, D.**, Hayes, S. H., Kashanian, N., Radziwon, K., Salvi, R. J., & Allman, B. L. (2013). A novel behavioral assay for the assessment of acute tinnitus in rats optimized for simultaneous recording of oscillatory neural activity. *Journal of Neuroscience Methods*, 219(2), 224–232. <https://doi.org/10.1016/j.jneumeth.2013.07.021>
- Chen, G.D., **Stolzberg, D.**, Lobarinas, E., Sun, W., Ding, D., & Salvi, R. (2013). Salicylate-induced cochlear impairments, cortical hyperactivity and re-tuning, and tinnitus. *Hearing Research*, 295, 100–113. <https://doi.org/10.1016/j.heares.2012.11.016>
- Stolzberg, D.**, Chrostowski, M., Salvi, R. J., & Allman, B. L. (2012). Intracortical circuits amplify sound-evoked activity in primary auditory cortex following systemic injection of salicylate in the rat. *Journal of Neurophysiology*, 108(1), 200–214. <https://doi.org/10.1152/jn.00946.2011>
- Stolzberg, D.**, Salvi, R. J., & Allman, B. L. (2012). Salicylate toxicity model of tinnitus. *Frontiers in Systems Neuroscience*, 6, 28. <https://doi.org/10.3389/fnsys.2012.00028>
- Stolzberg, D.**, Chen, G.-D., Allman, B. L., & Salvi, R. J. (2011). Salicylate-induced peripheral auditory changes and tonotopic reorganization of auditory cortex. *Neuroscience*, 180, 157–164. <https://doi.org/10.1016/j.neuroscience.2011.02.005>
- Yu, D., Ding, D., Jiang, H., **Stolzberg, D.**, & Salvi, R. (2011). Mefloquine damage vestibular hair cells in organotypic cultures. *Neurotoxicity Research*, 20(1), 51–58. <https://doi.org/10.1007/s12640-010-9221-z>
- Lobarinas, E., Dalby-Brown, W., **Stolzberg, D.**, Mirza, N. R., Allman, B. L., & Salvi, R. (2011). Effects of the potassium ion channel modulators BMS-204352 Maxipost and its R-enantiomer on salicylate-induced tinnitus in rats. *Physiology & Behavior*, 104(5), 873–879. <https://doi.org/10.1016/j.physbeh.2011.05.022>
- Lu, J., Lobarinas, E., Deng, A., Goodey, R., **Stolzberg, D.**, Salvi, R. J., & Sun, W. (2011). GABAergic neural activity involved in salicylate-induced auditory cortex gain enhancement. *Neuroscience*, 189, 187–198. <https://doi.org/10.1016/j.neuroscience.2011.04.073>

Ralli, M., Lobarinas, E., Fetoni, A. R., **Stolzberg, D.**, Paludetti, G., & Salvi, R. (2010). Comparison of salicylate- and quinine-induced tinnitus in rats: development, time course, and evaluation of audiologic correlates. *Otology & Neurotology: Official Publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 31(5), 823–831. <https://doi.org/10.1097/MAO.0b013e3181de4662>

Radziwon, K. E., June, K. M., **Stolzberg, D. J.**, Xu-Friedman, M. A., Salvi, R. J., & Dent, M. L. (2009). Behaviorally measured audiograms and gap detection thresholds in CBA/CaJ mice. *Journal of Comparative Physiology. A, Neuroethology, Sensory, Neural, and Behavioral Physiology*, 195(10), 961–969. <https://doi.org/10.1007/s00359-009-0472-1>

Sun, W., Lu, J., **Stolzberg, D.**, Gray, L., Deng, A., Lobarinas, E., & Salvi, R. J. (2009). Salicylate increases the gain of the central auditory system. *Neuroscience*, 159(1), 325–334. <https://doi.org/10.1016/j.neuroscience.2008.12.024>

Lobarinas, E., Sun, W., **Stolzberg, D.**, Lu, J., & Salvi, R. (2008). Human Brain Imaging of Tinnitus and Animal Models. *Seminars in Hearing*, 29(4), 333–349. <https://doi.org/10.1055/s-0028-1095893>

Sun, W., Hansen, A., Zhang, L., Lu, J., **Stolzberg, D.**, & Kraus, K. S. (2008). Neonatal nicotine exposure impairs development of auditory temporal processing. *Hearing Research*, 245(1-2), 58–64. <https://doi.org/10.1016/j.heares.2008.08.009>

Yang, G., Lobarinas, E., Zhang, L., Turner, J., **Stolzberg, D.**, Salvi, R., & Sun, W. (2007). Salicylate induced tinnitus: behavioral measures and neural activity in auditory cortex of awake rats. *Hearing Research*, 226(1-2), 244–253. <https://doi.org/10.1016/j.heares.2006.06.013>

Book Chapters

Allman BL, Sun W, Kraus KS, Ding D, Chen GD, **Stolzberg D**, Lobarinas E and Salvi R. (2011) Central auditory system neuroplasticity and hippocampal neurogenesis following cochlear insults. Neuroplasticity in the Auditory Brainstem. Editor: Angelo Salami, Nova Science Publishers, Inc. ISBN 978-1-61761-949-6

Salvi, R., Lobarinas, E., Chen, G.D., **Stolzberg, D.**, and Ding, D. (2011) Animal Models of Hearing Loss and Tinnitus. Handbook of Laboratory Animal Science, Volume II, Third Edition: Animal Models. Editors: Jann Hau and Steven J. Schapiro, CRC Press, Taylor & Francis Group, LLC ISBN 978-1-4200-8455-9

Invited Presentations

Stolzberg, D. Animal Models of Tinnitus, Center for Neural Science, New York University ----- Oct 2014
Stolzberg, D., Salvi, R., Allman, B., Current-Source Density and Multiunit Analysis across Layers of Primary Auditory Cortex Following Systemic Salicylate Administration in the Rat, Grand Island, NY, Tinnitus Research Initiative ----- Aug 2011
Stolzberg, D., Chen, G.D., Salvi, R. Changes in Cochlear Input and Receptive Field Shifts in Auditory Cortical Neurons During Salicylate-Induced Tinnitus, Buffalo, NY, Lake Ontario Auditory Neuroscience conference ----- Jun 2010

Ad-Hoc Reviewer

Publons Profile: <http://publons.com/a/1217045>

Journal of Neuroscience	Journal of Neuroscience Methods
Frontiers in Systems Neuroscience	Hearing Research
Journal of Neurophysiology	PLoS ONE
Brain Research	Journal of Neurological Sciences
Journal of the Acoustical Society of America	Neuroscience & Biobehavioral Reviews
Brain Stimulation	Frontiers in Behavioral Neuroscience
Frontiers in Neuroscience	Journal of the Association for Research in Otolaryngology
BioSystems	Cerebral Cortex
Neuroimage	

Other Activities

Review Editor for Frontiers in Behavioral Neuroscience, Pathological Conditions ----- 2021 - present
Developed *EPsych* open-source software for behavioral experiments using Matlab ----- 2010 – present

- Used in at least 12 peer-reviewed publications to date, by at least 7 laboratories.
- Github repository: https://github.com/dstolz/epsych_v1.1 (original version <https://github.com/dstolz/epsych>)

President of the University at Buffalo Neuroscience Graduate Student Association ----- 2010 – 2011
 Professional legal consultant. Simulations of tinnitus used as evidence in court proceeding ----- 2011
 Served on MDRF (Graduate Student Association) Grant Review Committee ----- 2010

Professional Memberships

Society for Neuroscience
 Association for Research in Otolaryngology