

# Lauren L. Emberson

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## Academic Appointments

- 2015– **Assistant Professor**, *Princeton University*.  
Department of Psychology and the Princeton Neuroscience Institute  
Maternity leave for academic year of 2017-2018
- 2018–2019 **Visiting Research Professor**, *Vanderbilt University*.  
Department of Psychological Sciences  
Sponsor: Prof. Isabel Gauthier
- 2012–2015 **Postdoctoral Associate**, *University of Rochester*.  
Department of Brain & Cognitive Sciences  
Advisor: Dr. Richard Aslin
- 2010–2011 **Visiting Research Fellow**, *Brown University*.  
Department of Cognitive, Linguistic, & Psychological Sciences,  
Advisor: Dr. Dima Amso
- 2008–2010 **Visiting Graduate Student**, *Sackler Institute for Developmental Psychobiology*.  
Weill-Cornell Medical College, New York Presbyterian Hospital  
Cornell Linkage Program  
Ithaca-Manhattan Graduate Initiative In Neuroscience Program (Honorary Member)  
Advisors: Drs. Dima Amso, Jason Zevin & Bruce McCandliss

## Education: Degrees

- 2006–2011 **Ph.D**, *Cornell University*.  
Psychology Department  
Focus: Perception, Cognition and Development  
Minor: Cognitive Science  
Advisors: Drs. Michael Goldstein (chair) & Dima Amso  
Dissertation Title: *On the Dynamic Interaction of Perceptual and Learning and Memory Systems: Mechanisms for Adaptive Perceptual Change*
- 2001–2005 **B.Sc in Cognitive Systems**, *University of British Columbia (UBC)*.  
Specialization: Brain and Behaviour  
Thesis advisor: Dr. Lawrence Ward  
Thesis Title: *Somewhat Noisy Brains See Better: Prestimulus EEG Dynamics and Perceptual Performance*

## Research Funding & Fellowships

- 2018-2019 **Bill and Melinda Gates Foundation Funding: Developmental Neuroimaging Consortium**, *role: fNIRS Team Leader*.  
Budget: \$70,000.00
- 2017-2023 **James S. McDonnell Foundation Understanding Human Cognition Scholars Award**, *Title: Does Top-Down Processing Support Infant Development?*.  
Budget: \$600,000.00
- 2016 **Eric and Wendy Schmidt Transformative Technology Fund, CoPIs: Piazza, Hasson, Lew-Williams**, *Title: Novel Dual-Brain Imaging Device for Assessing Dynamic Brain-to-Brain Coupling Between Infants and Caregivers: A New Biomarker for Communicative Disorders*.  
Budget: \$577,000.00
- 2016 **250th Anniversary Fund for Innovation in Undergraduate Research**, *Title: Undergraduate Research Projects in a Required Course: Making Publication Possible*.  
Budget: \$16,850.00
- 2014-2018 **National Institute for Child Health & Development (NICHD) K99R00 Pathway to Independence**, *Title: Role of Statistically Induced Changes in Sensory Cortex in Perceptual Development*.  
Budget: \$914,237.00

- 2013–2015 **Canadian Institutes of Health Research (CIHR) Postdoctoral Fellowship and Research Funding**,  
*Title: Identifying Biomarkers for Developmental Delays in Infants Born Prematurely*, Mentor: Dr. Richard Aslin; Co-mentor: Dr. Janet Werker.  
 Similar to the NRSA postdoctoral fellowship. Scored in the 8th percentile
- 2011 **Sage Graduate Fellowship**, *Cornell University*.
- 2008–2010 **Post-Graduate Student Scholarship National Science and Engineering Counsel (NSERC-PGS)**.  
 Similar to the NSF graduate research fellowship
- 2006–2010 **Sage Graduate Fellowship: Summer Funding**, *Cornell University*.
- 2006–2007 **Sage Graduate Fellowship**, *Cornell University*.
- 2004 **Summer Research Fellowship**, *Discover McGill Behavioral Cognitive Neuroscience Program*, McGill University.  
 Advisor: Dr. Evan Balaban; Co-advisor: Dr. Daniel Levitin

## Awards & Travel Fellowships

- 2018 **Boyd McCandless Award: Early Career Award for APA Division 7, Developmental Psychology**.
- 2018 **Society for fNIRS: Early Investigator Award (awarded biennially)**, *One of 3 finalists*.
- 2016 **Association for Psychological Science (APS) Rising Star Award**.
- 2013 **Travel award to attend the Annual Meeting of the International Society for Developmental Psychobiology**, *San Diego, CA*.
- 2013 **Fellowship to attend Maryland Neuroimaging Center Summer Institute: Developmental Cognitive Neuroscience**, *University of Maryland*.
- 2013 **University of Rochester Nominee to Blavatnik Award for Young Scientists**, *New York Academy of Sciences*, One of ten University of Rochester nominees.
- 2009 **NSF Student Travel Award**, *Cognitive Science Society*.
- 2009 **Fellowship to Attend the Future of Cognitive Science Meeting**, *University of California, Merced*.
- 2006–2010 **Graduate Conference Travel Awards (annually)**, *Graduate School, Cornell University*.
- 2007–2009 **Conference Travel Award (annually)**, *Cognitive Science Program, Cornell University*.
- 2008 **Merck Fellowship**, *Summer Institute on the Biology of Developmental Disabilities, Cornell University*.
- 2007 **Graduate Research Award**, *Psychology Department, Cornell University*.  
 Funded research expenses for independent research project:
- 2007 **Travel Fellowship**, *Cognitive Science Program, Cornell University*.  
 Funded travel to complete independent research project
- 2005 **Award of Excellence**, *Undergraduate Research Conference, University of British Columbia*.
- 2005 **People's Choice Award**, *Undergraduate Research Conference, University of British Columbia*.

## Education: Workshops and Non-Degree Programs

- 2014 **Repetition Suppression Summer School**, *Jena, Germany*.
- 2013 **Maryland Neuroimaging Center Summer Institute: Developmental Cognitive Neuroscience**, *University of Maryland*.
- 2008 **Merck Fund Summer Institute on the Biology of Developmental Disabilities**, *Cornell University*.
- 2004 **Discover McGill Behavioural Cognitive Neuroscience Program**, *McGill University*.  
 Summer Undergraduate Research Program

## Peer-Reviewed Publications

Jaffe-Dax, S.†, Boldin, A.†, Daw, N. D. & Emberson, L. L. (in press). The computational role of top-down connections from the frontal cortex in infancy. *Journal of Cognitive Neuroscience*

- Emberson, L. L.**, Misyak, J. B., Schwade, J. A., Christiansen, M. H., & Goldstein, M. H. (in press). Comparing Statistical Learning Across Perceptual Modalities in Infancy: An Investigation of Underlying Learning Mechanism(s), *Developmental Science*
- Emberson, L. L.** (in press). Neuroscience Research Methods. In Janette Benson (Ed.) *Encyclopedia of Infant and Early Childhood Development, 2nd edition*.
- Zhang, Y.,† & **Emberson, L. L.** (2019). Opposing Timing Constraints Severely Limit the Use of Pupillometry to Investigate Visual Statistical Learning, *Frontiers in Psychology, 10*:1792.
- Xiao, N. G.† & **Emberson, L. L.** (2019). Infants Use Knowledge of Emotions to Augment Face Perception: Evidence of Top-down Perception Early in Life, *Cognition, 193*: 104019.
- Emberson, L. L.**, Mazzei, C.†, Loncar, N.‡, Treves, I. N. ‡ & Goldberg, A. (2019). The Blowfish Effect: Children and Adults Use Atypical Exemplars to Infer Subordinate Categories during Word Learning, *Journal of Child Language, 46*(5): 938-954.
- Emberson, L. L.** (2019). The role of learning and memory in early visual development. *Psychology of Learning and Motivation* (Eds. Diane Beck, Kara Federmeier). *70: Knowledge and Vision*, 129-160.
- Zhang, Y.†, Jaffe-Dax, S.†, Wilson, R., & **Emberson, L. L.** (2019). Prediction in infants and adults: A pupillometry study, *Developmental Science, 22*(4), e12790.
- Emberson, L. L.**, Boldin, A.,† Robertson, C.†, Cannon, G.‡ & Aslin, R. N. (2019). Expectation Affects Neural Repetition Suppression in Infancy. *Developmental Cognitive Neuroscience, 37*, 100587.
- Boldin, A.†, Geiger, R.‡ & **Emberson, L. L.** (2018). The Emergence of Top-Down, Sensory Prediction During Learning in Infancy: A Comparison of Full-term and Preterm Infants, *Developmental Psychobiology, 60*(5), 544-556.
- Reuter, T.†, **Emberson, L. L.**, Romberg, A., & Lew-Williams, C. (2018). Individual differences in nonverbal prediction and vocabulary size in infancy, *Cognition, 176*, 215-219.
- Kersey, A. J.†, & **Emberson, L. L.** (2017). Tracing Trajectories of Audio-visual Learning in the Infant Brain, *Developmental Science, 20*(6), e12480.
- Karuza, E. A., **Emberson, L. L.**, Roser, M., Aslin, R. N., Cole, D. & Fiser, J. (2017). Neural signatures of spatial statistical learning: Characterizing the extraction of structure from complex visual scenes. *Journal of Cognitive Neuroscience, 29*(12): 1963-1976.
- Zinszer, B. D., Bayet, L., **Emberson, L. L.**, Raizada, R. D. S., & Aslin, R. N. (2017). Decoding semantic representations from functional near-infrared spectroscopy signals. *Neurophotonics: sfNIRS 2016 Special Issue, 5*(1): 011003.
- Emberson, L. L.**, Rizzieri, A.‡, & Aslin, R. N. (2017). How Visual is Visual Prediction? *Infancy, 22*(6): 748-761.
- Emberson, L. L.\***, Zinszer, B. D.\*, Raizada, R. D. S., & Aslin, R. N. (2017). Decoding the Infant Mind: Multichannel Pattern Analysis (MCPA) using fNIRS, *PLoS One, 12*(4): e0172500.
- \* these authors contributed equally to this publication
- Emberson, L. L.**, Crosswhite, S. L.†, Richards, J. E., & Aslin, R. N. (2017). The Lateral Occipital Cortex Is Selective for Object Shape, Not Texture/Color, at 6 Months, *The Journal of Neuroscience, 37*(13), 3698-3703.
- Emberson, L. L.** (2017). How Does Experience Support Development? Considering the Role of Top-Down Mechanisms. In Janette Benson (Ed.), *Advances in Child Development and Behavior* (Vol. 52, pp. 1-42). Elsevier: Cambridge, MA.
- Emberson, L. L.**, Boldin, A.†, Riccio, J. E., Guillet, R., & Aslin, R. N. (2017). Deficits in Top-Down, Sensory Prediction in Infants At-Risk due to Premature Birth. *Current Biology, 27*, 1-6.
- Emberson, L. L.**, Palmeri, H.†, Cannon, G.‡, Richards, J. E. & Aslin, R. N. (2017). Using fNIRS to Examine Occipital and Temporal Responses to Repetition in Young Infants: Evidence of Selective Frontal Cortex Involvement, *Developmental Cognitive Neuroscience, 23*, 26-38.
- Emberson, L. L.**, Lewkowicz, D. J., & Bavelier, D. (2016). Perceptual Development. *Encyclopedia of Theory in Psychology* Ed. Harold Miller.
- Emberson, L. L.** (2016). Gaining Knowledge Mediates Changes in Perception (without Differences in Attention): A Case For Perceptual Learning. Commentary on Firestone & Scholl for *Brain and Behavioral Sciences, 39*, 28-30.
- Goodwin, J. R., Cannaday, A. E., Palmeri, H.†, Di Costanzo, A., **Emberson, L. L.**, Aslin, R. N., & Berger, A. J. (2016). Methodology for high-yield acquisition of functional near-infrared spectroscopy data from alert, upright infants. *Neurophotonics, 3*, 3, 031415.
- Emberson, L. L.** & Rubinstein, D.‡ (2016). Statistical Learning Is Constrained to Less Abstract Patterns in Complex Sensory Input (but not the Least). *Cognition, 153*, 63-78.
- Emberson, L. L.**, Crosswhite, S. L.†, Goodwin, J. R., Berger, A. J., & Aslin, R. N. (2016). Isolating the Effects of

Systemic Vasculature in Infant Neuroimaging Experiments Using Short Distance Optical Channels: A Combination of Local and Global Effects. *Neurophotonics: sfNIRS 2014 Special Issue*, 3, 3, 031406.

**Emberson, L. L.**, Richard, J. E., & Aslin, R. N. (2015). Top-down modulation in the infant brain: Learning-induced expectations rapidly affect the sensory cortex at 6 months. *Proceedings of the National Academy of Sciences*, 112, 9585-9590.

Aslin, R. N., Shukla, M., & **Emberson, L. L.**, (2015). Hemodynamic correlates of cognition in human infants. *Annual Review of Psychology*, 66, 349-379.

Karuza, E. A.\*, **Emberson, L. L.\*** & Aslin, R. N. (2014). *Invited Review: Combining fMRI and Behavioral Measures to Examine the Process of Human Learning*. *Neurobiology of Learning and Memory*, 109, 193-206.

\* these authors contributed equally to this publication

**Emberson, L. L.**, Liu, R., & Zevin, J. D. (2013). Is Statistical Learning Constrained by Lower Level Perceptual Organization? *Cognition*, 128: 82-102.

**#8 Hottest Article in Cognition** (ScienceDirect TOP25, April to June 2013)

**Emberson, L. L.** & Amso, D. (2012). Learning to Sample: Eye Tracking and fMRI Indices of Changes in Object Perception. *Journal of Cognitive Neuroscience*, 24: 2030-2042.

**Emberson, L. L.**, Conway, C. M., & Christiansen, M. H. (2011) Timing is everything: Changes in Presentation Rate have Opposite Effects on Auditory and Visual Implicit Statistical Learning, *Quarterly Journal of Experimental Psychology*, 64:1021-1040.

**Emberson, L. L.**, Lupyan, G., Goldstein, M. H., & Spivey, M. J. (2010). Overheard Cell-Phone Conversations: When Less Speech is More Distracting. *Psychological Science*, 21, 1383-1388.

Doesburg, S. **Emberson, L. L.**, Rahi, A., Cameron, D., & Ward, L. M. (2008) Asynchrony from synchrony: Long-range gamma-band neural synchrony accompanies perception of audiovisual asynchrony in speech. *Experimental Brain Research*, 185, 11-20.

‡ undergraduate student

† graduate student, lab staff and postdocs

## Manuscripts: Invited, Under Review, In Preparation

Baek, S.†, Jaffe-Dax, S.† & **Emberson, L. L.** (invited). How an infant's active response to experience supports perceptual-cognitive development. *Progress in Brain Research*, 258

Wu, M.-H., Kleinschmidt, D., **Emberson, L. L.**, Doko, D., Edelman, S., Jacobs, R., & Raizada, R. (in revision) Cortical Transformation of Stimulus-Space in order to Linearize a Linearly Inseparable Task, *Journal of Cognitive Neuroscience*

Jaffe-Dax, S.†, Bermano, A., & **Emberson, L. L.** (under review). Video-based motion-resilient reconstruction of 3D position for fNIRS/EEG head mounted probes.

Reuter, T. E.†, Mazzei, C.†, Lew-Williams, C. & **Emberson, L. L.** (under review). The emergence of verbal prediction in infancy: Unraveling the chicken-or-egg problem of comprehension and prediction.

**Emberson, L. L.** & Mazzei, C.† (under review) Rule-guided Behavior is Modulated by Perceptual Modality: The Benefits of the Temporal Nature of Audition.

Xiao, N.† & **Emberson, L. L.** (under review) Flexible, Top-Down Control of Motion Perception in Human Infants.

Jaffe-Dax, S.†, Bejjanki, V. R., & **Emberson, L. L.** (in preparation) Sequence Learning Attenuates Cortical Responses in both Frontal and Sensory Cortices in Early Infancy.

‡ undergraduate student

† graduate student, lab staff and postdocs

## Peer-Reviewed Conference Proceedings

Jaffe-Dax S†, Boldin A.M.,† Daw N.D. & **Emberson, L. L.** (2017). Pre-term infants exhibit impaired prediction and learning in Audio-Visual association paradigm. In Gunzelmann G, Howes A, Tenbrink T and Davelaar EJ (Eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society*, (p. 3740-3746). Austin, TX: Cognitive Science Society.

Ward, L. M., Kirschner, A. **Emberson, L. L.** & Kitajo, K. (2011). Endogenous Neural Noise and Reaction Time. *Proceedings for the 27th Meeting of the International Society for Psychophysics*, 27: 293-298.

**Emberson, L. L.**, & Rubinstein, D.‡ (2010). Learning from Environmental Regularities is Grounded in Specific Objects

not Abstract Categories. In S. Ohlsson and R. Catrambone (Eds.), *Proceedings for the 32nd Annual Conference of the Cognitive Science Society*, (p. 2518-2523). Austin, TX: Cognitive Science Society.

Iricinschi, C., **Emberson, L. L.**, Onnis, L. & Edelman, S. (2010). Hand Posture Influences on Space and Language: Crossing the Hands Affects Word Order Processing. *Space in language: Proceedings of the Pisa International Conference*.

**Emberson, L. L.**, Liu, R., & Zevin, J. D. (2009). Statistics All the Way Down: How is Statistical Learning Accomplished Using Novel, Complex Sound Categories? In N. Taatgen and H. van Rijn (Eds.), *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*. (p. 995-1000). Austin, TX: Cognitive Science Society.

**Emberson, L. L.**, Weiss, R. J., Barbosa, A. V., Vatikiotis-Bateson, E., & Spivey, M. J. (2008). Crossed hands curve saccades: Multisensory dynamics in saccade trajectories. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society* (pp. 369-374). Austin, TX: Cognitive Science Society.

**Emberson, L. L.**, Kitajo, K., & Ward, LM. (2007) Endogenous neural noise and stochastic resonance, In S. M. Bezrukov (Ed.), *Proceedings of The Conference of Noise and Fluctuations in Biological, Biophysical, & Biomedical Systems*. 6602-6608.

‡ undergraduate student † graduate student, lab staff and postdocs

## Selected Invited Talks

2020 **Departmental Colloquium**, *New York University*.

2020 **Departmental Colloquium**, *University of Toronto*.

2020 **Distinguished Seminar Series**, *University of Essex*.

2020 **Keynote Address**, *Developing Models of the World Workshop, Donders Institute for Brain, Cognition and Behaviour*.

2019 **Invited Address**, *National Taiwan Normal University-Haskins Laboratories Joint Workshop on Language Acquisition, Statistical Learning, and fNIRS Applications, National Taiwan Normal University*.

2019 **Cognitive Brown Bag**, *University of Wisconsin, Madison*.

2018 **Statistical Learning Workshop**, *Haskins Laboratory and Yale University*.

2018 **Computational Cognitive Neuroscience Series**, *Vanderbilt University*.

2018 **Developmental Brown Bag**, *University of California, Davis*.

2018 **Bill & Melinda Gates Foundation: Neuroimaging Workshop**, *Seattle, Washington*.

2018 **James S. McDonnell Foundation: Understanding Human Cognition Scholars Conference**, *Oxford, England*.

2018 **Psychology Colloquium**, *Carnegie Mellon University*.

2018 **University Seminar on Language & Cognition**, *Columbia University*.

2018 **Developmental Brown Bag**, *Yale University*.

2017 **Speech, Language, Hearing Sciences Colloquium**, *City University of New York, CUNY*.

2017 **Colloquium at Center for Human Health and Development**, *University of Michigan*.

2017 **Development and Learning Brown Bag**, *University of Tennessee at Knoxville*.

2017 **Cognitive Science of Learning Colloquium**, *Vanderbilt University*.

2017 **Cognitive Science Colloquium**, *Princeton University*.

2016 **Psychology Colloquium**, *Drexel University*.

2016 **Cognitive Science Colloquium**, *University of Arizona*.

2016 **First and Second Language Acquisition Workshop**, *Hebrew University*.

2015 **Neuroscience in Social Decision Making**, *Princeton University*.

2015 **Yale-Shimidzu BrainSTORM Workshop on fNIRS**, *Yale University*.

- 2015 **Pre-conference Workshop: Early development, conceptual change, and continuity: Insights from cognitive neuroscience**, *Cognitive Development Society*.
- 2015 **Social Brown Bag**, *Princeton University*.
- 2015 **Society for Neuroscience Rochester Chapter**, *University of Rochester Medical Center*.
- 2015 **Departmental Colloquium**, *Psychology Department, Hobart & William Smith*.
- 2015 **Developmental Area Meeting**, *Psychology Department, University of British Columbia*.
- 2014 **Departmental Colloquium**, *Psychology Department, University of Massachusetts, Amherst*.
- 2014 **Departmental Colloquium**, *Psychology Department, Princeton University*.
- 2014 **Departmental Colloquium**, *Psychology Department, University of California, San Diego*.
- 2014 **Departmental Colloquium**, *Psychology Department, University of Toronto, Scarborough*.
- 2014 **Pre-Conference Workshop: Learning to Attend, Attending to Learn: Neurological, Behavioral and Computational Perspectives**, *Society for Neuroscience, San Diego, CA, 2013..*
- 2013 **Weekly Seminar Series**, *Laboratory for Laser Energetics (LLE), University of Rochester..*
- 2013 **Colloquium**, *Ontario Institute for Studies in Education (OISE), University of Toronto*.
- 2013 **Departmental Colloquium**, *McCausland Center for Brain Imaging, University of South Carolina*.
- 2013 **Departmental Colloquium**, *Psychology Department of The Ohio State University*.
- 2013 **Invited Symposium Presentation**, *The 96th Meeting of the Optical Society of America, Frontiers in Optics*.
- 2012 **GENIUS Olympiad Symposium on Learning and Memory**, *State University of New York (SUNY), Oswego*.
- 2011 **Monthly Users Meeting**, *Brown MRI Research Facility, Brown University*.
- 2010 **Sackler Science Weekly Colloquium Series**, *Sackler Institute for Developmental Psychobiology, Weill-Cornell Medical College*.
- 2008 **Sackler Science Weekly Colloquium Series**, *Sackler Institute for Developmental Psychobiology, Weill-Cornell Medical College*.
- 2008 **Perception, Cognition, and Development Lunch**, *Psychology Department, Cornell University*.

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## Professional Service

- 2019–  
present **Organizer of Cognitive Research Seminar and Cognitive Lunch Speakers Series**.  
Psychology Department, Princeton University
- 2019–  
present **Member of Program Committee for sfNIRS 2020**.  
Society for Functional Near-Infrared Spectroscopy
- 2019 **Chair of 2020 Boyd McCandless Award Committee**.  
APA Division 7
- 2019 **Member of National Institutes of Health Reviewing Panel**.  
Promoting Research on Music and Health: Phased Innovation Award for Music Interventions (R61/R33)
- 2019 **Session Moderator**.  
*Vision Sciences Society, Developmental Session*
- 2018–  
present **Member of Editorial Board**.  
*Infancy*
- 2018–  
present **Member of Educational Committee**.  
Society for Functional Near-Infrared Spectroscopy
- 2018–  
present **Member of Scientific Advisory Counsel**.  
R01 NIMH Brains Award: PI Judith Morgan  
“Brain-Behavior Synchrony in Very Young Children and their Depressed Mothers”

- 2017– **Ad Hoc Editor, selected.**  
 present Proceedings of the National Academy of Sciences  
 eLife
- 2012– **Ad Hoc Reviewer for Granting Agencies, selected.**  
 present National Science and Engineering Counsel (NSERC–Canadian Government)  
 Wellcome Trust  
 Women in Science Early Career Grant
- 2009– **Ad Hoc Reviewer for Conferences, selected.**  
 present Annual Meeting for the Cognitive Science Society  
 Cognitive Development Society  
 International Congress for Infancy Research  
 Society for Research In Child Development: Cognitive Processes Panel  
 Society for Research In Child Development: Learning and Memory Panel  
 Society for fNIRS
- 2009– **Ad Hoc Reviewer for Journals, selected.**  
 present Cerebral Cortex  
 Cognition  
 Cognitive Science  
 Developmental Psychobiology  
 Developmental Psychology  
 Developmental Science  
 European Journal of Neuroscience  
 Experimental Psychology  
 Frontiers in Systems Neuroscience  
 Human Brain Mapping  
 Journal of Experimental Psychology: Learning, Memory, and Cognition  
 Journal of Cognitive Neuroscience  
 Journal of Vision  
 Language, Cognition & Neuroscience  
 Medical Science Monitor  
 MIT Press: Philosophy and Cognitive Science  
 Nature Scientific Reports  
 Neuroimage  
 Neuropsychologia  
 PloS One  
 Proceedings of the National Academy of Sciences  
 Philosophical Transactions of the Royal Society B: Biological Sciences  
 Quarterly Journal of Experimental Psychology  
 Taylor & Francis
- 2013 **Participant, Responsible Conduct of Research Workshop**, University of Rochester, Day long workshop on research ethics.
- 2008 **Graduate Coordinator, Merck Fund Summer Institute on the Biology of Developmental Disabilities**, Cornell University.

## Selected Media Attention

### Print and Online Articles

- Science Daily*, “The ‘blowfish effect’: Children learn new words like adults do, say Princeton researchers,” July 29, 2019  
*Princeton University Press Release*, “The ‘blowfish effect’: Children learn new words like adults do, say Princeton researchers,” July 25, 2019  
*The Chicago Press*, “Social Graces: No Baby Talk” Jan 22nd 2019  
*New York Times*, “Dial P for Privacy: The Phone Booth Is Back,” March 10th 2018  
*Princeton University Press Release*, “Premature babies don’t use sensory-prediction brain process that may be key to development,” January 26th 2017  
*Princeton Alumni Weekly*, “Life of the Mind: In Short,” October 7th 2015  
*Wall Street Journal*, “Babies Make Predictions, Too,” August 12th 2015  
*Princeton Sun*, “Princeton Psychologist Explores Expectations in Babies’ Brains,” August 12th 2015

*Princeton University Press Release*, "Infants Use Expectations to Shape Their Brains" July 20th 2015

*University of Rochester Press Release*, "Babies' Expectations May Help Brain Development," July 21st 2015

*New York Times*, "The Words of the Year," December 19th 2010

*New York Times*, "When Speakerphone is Less Distracting," September 28th 2010

*Reuters*, "Annoyed by cellphones? Scientists explain why," May 20th 2010

appeared in *CNN*, *Fox News*, *MSNBC*, *USA Today*, *The Telegraph*, *The National (Canada)*, *The Examiner (UK)*, *ABC News*, *Canada.com*, *Washington Post (blog)*, *Discover Magazine (blog)*, *The Globe and Mail (Canada)* and others

*Scientific American*, "Cell Bound: Why It Is Hard to Ignore Public Mobile Phone Conversations," September 22nd 2010

*TIME Magazine*, "Why Hearing Half of a Cell-Phone Conversation Drives You Nuts," September 22nd 2010

## Podcasts and Radio

*British Broadcasting Corporation (BBC)*, "The Why Factor," August 14th 2017

*Canadian Broadcasting Corporation Radio (CBC)*, "DNTO," January 15th 2011

*National Public Radio (NPR)*, "Here and Now" October 13th 2010

*Scientific American*, *60-Second Science Daily Podcast*, "It's Not Just You: Overhearing Half a Phone Call IS Annoying," May 21st 2010

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## Teaching and Outreach

- 2019 **Instructor for FRS 129: How Does Experience Build a Brain?**, *Princeton University*, Freshman research seminar selected by the Dean of the College to provide enhanced educational opportunities for freshmen.  
Enrollment: 15, Applications to enroll: 80+
- 2017 **Guest lecturer for NEU 202/PSY 259: Introduction to Cognitive Neuroscience**, *Princeton University*.  
Guest lecture on developmental cognitive neuroscience
- 2016 **Instructor for PSY/NEU 405: Developmental Cognitive Neuroscience**, *Princeton University*.  
Enrollment: 15 seniors majoring in Psychology, Neuroscience
- 2016 **Guest lecturer for PSY 100: Introduction to Psychology**, *Princeton University*.  
Guest lecture on modern developmental psychology
- 2016 **Instructor for PSY 300: Research Methods in Psychology**, *Princeton University*.  
Enrollment: 32 juniors majoring in Psychology
- 2015 **Guest lecturer for PSY 100: Introduction to Psychology**, *Princeton University*.  
Guest lecture on modern developmental psychology
- 2015 **Instructor for PSY 300: Research Methods in Psychology**, *Princeton University*.  
Enrollment: 43 juniors majoring in Psychology
- 2014 **Instructor for BCS/PHL 327: Theory of Perception**, *University of Rochester*, Co-taught with Dr. Alison Peterman, Faculty in Philosophy.  
Enrollment: 16 upperclassmen and graduate students  
Student Evaluation: 4.8/5
- 2014 **Instructor for BCS 205: Laboratory in Development and Learning**, *University of Rochester*.  
Enrollment: 14 upperclassmen  
Student Evaluation: 4.3/5
- 2013 **Instructor for BCS 205: Laboratory in Development and Learning**, *University of Rochester*.  
Enrollment: 18 upperclassmen  
Student Evaluation: 4.5/5
- 2012 **Invited Judge for the New York City Science and Engineering Fair (NYSEF)**, *City University of New York (CUNY)*.  
Area: Behavioral and Social Sciences

- 2008 **Teaching Assistant for PSYCH 616/416: Modeling Perception and Cognition**, *Cornell University*.  
 Taught by Dr. Michael Spivey  
 Topic: Neural network and dynamic systems computational modelling  
 Student Evaluation: 4.6/5
- 2007–2008 **Graduate Student School Outreach Program (GSSOP)**, *Cornell University*.  
 Designed and taught mini-course: “Your Brain’s Illusions: Why scientists love to study trickery!”  
 2008: Sophomore Anatomy & Physiology Class, Ovid, NY  
 2007: AP Biology Class at Cascadilla School, Ithaca, NY
- 2007–2008 **Workshop Organizer and Teacher; Expand Your Horizons (EYH)**, *Cornell University*.  
 Program to Encourage Young Girls to Pursue Scientific and Mathematic Studies  
 Student evaluations (2008): 4.4/5
- 2007 **Course development and teaching of PSYCH 103 freshman seminar**, *Cornell University*.  
 Course title: “This is Your Brain on Happiness”  
 Student Evaluation: 4.7/5
- 2005–2006 **Head Teaching Assistant for Cognitive Systems 200**, *University of British Columbia*.  
 Duties included:  
 administrative contact for 200+ student class  
 co-ordinated grading of exams and class projects  
 organized and guided student groups for final project

## Student Advising

- 2017–  
 present **Senior thesis advising: Princeton Neuroscience Institute, Princeton University**.  
 Ananya Mittal (2019-2020)  
 Samantha Einspahr (2019-2020)  
 Veronica Carrasco (2019-2020)  
 Fernanda Fernandez (2018-2019)  
 Isaac Treves (2017-2018)
- 2015–  
 present **Senior thesis advising: Psychology Department, Princeton University**.  
 Alice Wang (2018-2019)  
 Hila Gherin (2017-2018)  
 Nicole Loncar (2016-2017)  
 Natasha Dombrowski (2016-2017)  
 Gabriel Barber (2016-2017)  
 Ann Lites (2016-2017)  
 Indira Kissoondyal (2015-2016)  
 Victoria Higgins (2015-2016)
- 2015–  
 present **Graduate advising: Psychology Department, Princeton University**.  
 So Ri Baek (2018-present), primary advisor  
 Tracy Reuter (2015-present), secondary advisor  
 Yue (Felicia) Zhang (2015-present), primary advisor

## Selected Conference Presentations

- Zhang, F. & **Emberson, L. L.** (2019). Stages of predictive processing in infants and toddlers: Forming expectations, experiencing prediction error and what it means for learning and memory. Symposium at the *Cognitive Development Society*, Louisville, KY.
- Reuter, T., Mazzei, C., Lew-Williams, C. & **Emberson, L. L.** (2019). Prediction supports infants? language processing and language development. Talk at the *CUNY Conference on Human Sentence Processing*, Boulder, CO.
- Xiao, N. G., & **Emberson L. L.** (2019). Top-down perception at 6 months of age: Evidence from motion perception. Oral Presentation at Annual Meeting of the *Vision Sciences Society*: Naples, Florida.
- Xiao, N. G., & **Emberson L. L.** (2019). Top-down perception at 6 months of age: Evidence from motion perception. Oral Presentation at Annual Meeting of the *Vision Sciences Society*: Naples, Florida.
- Robertson, C., Reuter, T., Zinszer, B. & **Emberson, L. L.** (2019). Decoding Infants’ Pre-activation of Lexical Representations via fNIRS. Poster at *Society for Research in Child Development Biennial Meeting*: Baltimore, Maryland.

- Reuter, T. & **Emberson, L. L.** (2019) What gets Predicted? Evaluating the Specificity of Infants' Verbal Predictions. Poster at *Society for Research in Child Development Biennial Meeting*: Baltimore, Maryland.
- Xiao, N. G., Robertson, C. E., & **Emberson L. L.** (2019). Top-down sensory prediction in neonates: fNIRS evidence. Poster at *Society for Research in Child Development Biennial Meeting*: Baltimore, Maryland.
- Xiao, N. G., Jaffe-Dax, S., Liu, S., Quinn, P. C., Lee, K., & **Emberson L. L.** (2019). Infants prefer to learn from own-over other-race adults: Evidence from computational modeling. Symposium Presentation at *Society for Research in Child Development Biennial Meeting*: Baltimore, Maryland.
- Zhang, F. & **Emberson, L. L.** (2019). Investigating prediction error in auditory and visual domain of infants using pupillometry. Poster at *Society for Research in Child Development Biennial Meeting*: Baltimore, Maryland.
- Wang, A., Jaffe-Dax, S. & **Emberson, L. L.** (2019). The neural mechanisms supporting habituation to audio-visual associations in infants: An fNIRS and looking time study. Poster at *Society for Research In Child Development*: Baltimore, Maryland.
- Jaffe-Dax, S. Bejjanki, V. R. & **Emberson, L. L.** (2019). Infants' brain response to predictable stimuli is weaker but more synchronized. Poster at *Society for Research In Child Development*: Baltimore, Maryland.
- Jaffe-Dax, S., Gayle, M., & **Emberson, L.L.** (2018). Incorporating neural reliability measures to isolate functional connectivity differences across populations. Poster presentation at *Society for Research in Near-Infrared Spectroscopy*: Tokyo, Japan.
- Jaffe-Dax, S., Treves, I.N., Bejjanki, V.R., & **Emberson, L.L.** (2018). Predictability modulates response amplitude and boosts background connectivity in infants and in adults. Poster presentation at *Society for Research in Near-Infrared Spectroscopy*: Tokyo, Japan.
- Jaffe-Dax, S., Bermanno, A.H., & **Emberson, L.L.** (2018). Automated Spatial Co-Registration Method from Simple Video. In Society for NIRS Conference (Tokyo, Japan). Poster presentation at *Society for Research in Near-Infrared Spectroscopy*: Tokyo, Japan.
- Xiao, N. G., Robertson, C., & **Emberson, L. L.** (2018). Top-down Sensory Prediction in Neonates: fNIRS Evidence. Oral presentation at *Society for Research in Near-Infrared Spectroscopy*: Tokyo, Japan.
- Emberson, L. L.**, Reuter, T., Robertson, C., Mazzei, C., Lew-Williams, C. & Zinszer, B. (2018). Decoding pre-activation of lexical representations during language comprehension in infancy. Oral presentation at *Society for Research in Near-Infrared Spectroscopy*: Tokyo, Japan.
- Xiao, N. G. & **Emberson L. L.** (2018). Cued emotion: Top-down influence of facial expression perception in infancy. Symposium Talk at *Development 2018: A Canadian Conference on Developmental Psychology*: St.Catharine's, Ontario, Canada.
- Jaffe-Dax, S. & **Emberson, L. L.** (2018) Predictive coding in infancy: Infants' brains respond more strongly to less predictable stimuli. Poster at *The Probabilistic Brain workshop*: Durham, UK.
- Reuter, T., Mazzei, C., Lew-Williams, C., & **Emberson, L. L.** (2018). Prediction and learning: A chicken-or-egg problem in language development. Oral presentation at the *University of Delaware Linguistics and Cognitive Science Student Conference*: Newark, Delaware.
- Zhang, F., Jaffe-Dax, S., Wilson, R. C., & **Emberson, L. L.** (2018). Violation of expectation in infants and adults: A pupillometry study. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Zhang, F. & **Emberson, L. L.** (2018). Prediction Error in Auditory and Visual Domain of 6-month-old: A Pupillometry Study. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Mazzei, C., Arnon, I., & **Emberson, L. L.** (2018). Where the Wild 2- to 3-year-olds Are: Methods for Assessing Developmental Trajectories of Statistical Learning Across Modalities. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Jaffe-Dax, S. & **Emberson, L. L.** (2018). Infants' brains respond more strongly to less predictable stimuli: The case of sequence learning. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Jaffe-Dax, S. & **Emberson, L. L.** (2018). Connectivity development from infancy to adulthood—a reliable functional connectivity comparison. Oral presentation in symposium “Extracting Neural Representations from EEG and fNIRS Signals for Studies of Development and Learning” at the *International Congress for Infant Studies*: Philadelphia, PA.
- Reuter, T., Mazzei, C., Lew-Williams, C., & **Emberson, L. L.** (2018). Prediction and learning: A chicken-or-egg problem in language development. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Xiao, N. G. & **Emberson, L. L.** (2018). Cued emotion: Top-down influence of facial expression perception in infancy. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Ghersin, H., Xiao, N. G. Dombrowski, N. B., Boldin, A. M. & **Emberson, L. L.** (2018). Top-down information boosts

- infants' face perception. Poster presentation at the *International Congress for Infant Studies*: Philadelphia, PA.
- Jaffe-Dax S, Boldin A.M., Daw N.D. & **Emberson, L. L.** (2017). Pre-term infants exhibit impaired prediction and learning in Audio-Visual association paradigm. Poster presentation at the *39th Annual Conference of the Cognitive Science Society*, London, England.
- Emberson, L. L.** & Karuza, E. A. (2017). Being Predictive (as Opposed to Predicted) Incurs a Processing Cost: Why? Poster presentation at *International Conference on Interdisciplinary Advances in Statistical Learning*, Bilbao, Spain.
- Emberson, L. L.** (2017) Statistical Learning Across Multiple Representational Dimensions: Learning Biases Shift with Category Familiarity. Poster presentation at *International Conference on Interdisciplinary Advances in Statistical Learning*, Bilbao, Spain.
- Emberson, L. L.**, Boldin, A., Riccio, J., Guillet, R. & Aslin, R. N. (2017). Deficits in the Use of Statistical Learning for Prediction in Infants Born Prematurely. Oral presentation at *International Conference on Interdisciplinary Advances in Statistical Learning*, Bilbao, Spain.
- Zhang, F., Jaffe-Dax, S., Wilson, R. C. & **Emberson, L. L.** (2017). Prediction and statistical learning in infants and adults: A pupillometry study. *International Conference on Interdisciplinary Advances in Statistical Learning*, Bilbao, Spain.
- Zhang, F., & **Emberson, L. L.** (2017). Examining the online mechanisms of visual statistical learning using pupillometry. *International Conference on Interdisciplinary Advances in Statistical Learning*, Bilbao, Spain.
- Reuter, T., **Emberson, L. L.**, Romberg, A., & Lew-Williams, C. (2017). Individual Differences in Nonverbal Prediction and Vocabulary in Infancy. Poster Presentation at the *Society for Research in Child Development*: Austin, Texas.
- Zhang, Y., Wilson, R. & **Emberson, L. L.** (2017). Prediction in Young Infants: A Pupillometry Study. Poster Presentation at the *Society for Research in Child Development*: Austin, Texas.
- Mazzei, C., Loncar, N. & **Emberson, L. L.** (2017). The Blowfish Effect: Do Children use Exemplar Typicality to Determine the Intended Taxonomic Level? Poster Presentation at the *Society for Research in Child Development*: Austin, Texas.
- Emberson, L. L.**, Riccio, J. E., Richards, J. E., Guillet, R. & Aslin, R. N. (2016). Deficits in Top-Down, Sensory Prediction in Infants At-Risk Due to Premature Birth. Oral Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Emberson, L. L.** Zinszer, B. D., Raizaza, R. D. S., & Aslin, R. N. (2016). Decoding the Infant Mind: Multichannel Pattern Analysis (MCPA) using fNIRS. Poster Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Emberson, L. L.**, Crosswhite, S. L., Goodwin, J. R., Berger, A. J., & Aslin, R. N. (2016). Isolating the Effects of Surface Vasculature in Infant Neuroimaging Using Short-Distance Optical Channels: A Combination of Local and Global Effects. Poster Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Zhang, Y., Aslin, R. N. & **Emberson, L. L.** (2016). Investigating Auditory Prediction in Young Infants using fNIRS. Poster Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Boldin, A., & **Emberson, L. L.** (2016). Role of Frontal Cortex in Infant Top-Down Sensory Prediction. Poster Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Zinszer, B., Bayet, L., **Emberson, L. L.**, & Aslin, R. N. (2016). Decoding Semantic Representations from fNIRS Signals. Poster Presentation at the *Society for functional Near Infrared Spectroscopy*: Paris, France.
- Emberson, L. L.**, & Kersey, A. (2016). Tracing Trajectories of Audio-visual Learning in the Infant Brain. Poster Presentation at the *FLUX Congress*: St. Louis, Missouri.
- Emberson, L. L.**, Riccio, J. E., Richards, J. E., Guillet, R. & Aslin, R. N. (2016). Comparing How Statistical Learning Supports Perceptual Expectations in Infants at Low and High Risk for Developmental Delays. Oral Presentation at the *International Congress for Infant Studies*: New Orleans: LA.
- Emberson, L. L.**, Richards, J. E., & Aslin, R. N. (2016). Top-Down Modulation in the Occipital Cortex As a Result of Audio-Visual Statistical Information of 6-month-old Human Infants. Poster Presentation at the *International Society for Developmental Neuroscience*: Juan-des-Pins, France
- Emberson, L. L.**, Riccio, J. E., Richards, J. E., Guillet, R., & Aslin, R. N. (2016). Comparing How Statistical Learning Supports Perceptual Expectations in Infants at Low and High Risk for Developmental Delays. Oral Presentation at the *International Conferences of Infant Studies*: New Orleans, LA.
- Zinszer, B. D., **Emberson, L. L.**, Raizada, R. D. S., & Aslin, R. N. (2016). Decoding the Infant Mind: Multichannel Pattern Analysis (MCPA) using fNIRS. Poster Presentation at the 23rd Annual Meeting of the *Cognitive Neuroscience Society*: New York, NY.

- Emberson, L. L.**, Misyak, J. B., Schwade, J. A., Christiansen, M. C. & Goldstein, M. H. (2015). How Abstract is Statistical Learning? Comparing Learning Across Visual and Auditory Perceptual Modalities in Infancy. Oral Presentation at the *Interdisciplinary Advanced in Statistical Learning*: San Sebastian, Spain.
- Emberson, L. L.**, Richards, J. E. & Aslin, R. N (2015). Revealing Neural Changes in Infant Occipital Cortex After Cross-Modal Statistical Learning: An fNIRS Study of 6-month-olds. Poster Presentation at the *Interdisciplinary Advanced in Statistical Learning*: San Sebastian, Spain.
- Emberson, L. L.** & Aslin, R. N (2015). How Does Statistical Information Change Infant Perceptual Systems? Symposium Presentation at the *Biennial Meeting of the Society for Research in Child Development*: Philadelphia, PA.
- Emberson, L. L.**, Richards, J. E., & Aslin, R. N (2014). The Infant Occipital Cortex Responds to a Predictive Cross-Modal Stimulus: An fNIRS Study of 6-month-olds. Oral Presentation at the *Biennial Meeting of the fNIRS Society*: Montreal, Canada.
- Emberson, L. L.**, Palmeri, H., Cannon, G., Richards, J. E., & Aslin, R. N. (2014). Repetition Suppression Differences Across Perceptual Systems in 6-month-olds: Evidence of Earlier Development of Auditory RS using fNIRS. Poster presentation at the *Repetition Suppression Summer School*: Jena, Germany.
- Emberson, L. L.** & Aslin, R. N (2013). Occipital Cortex Responses to an Unexpected Absence of Visual Information: Evidence for Statistically-Mediated Changes in Sensory Cortex in 6-Month-Old Humans. Talk at the *International Society for Developmental Psychobiology*: San Diego, CA.
- Emberson, L. L.**, Reeder, P. A., Aslin, R. N., & Bavelier, D. (2013). What's Feedback Got To Do With It? Examining Learning Rate and Generalization in Cross-scene Statistical Learning With and Without Feedback. Poster presentation at the *Vision Sciences Society Annual Meeting*: Naples, Florida.
- Emberson, L. L.**, Palmeri, H., Cannon, G. & Aslin, R. N. (2013). Investigating Sensory Cortex Selectivity in 6-month-olds using FNIRS and Repetition Suppression. Paper presentation at the *Biennial Meeting of the Society for Research in Child Development*: Seattle, WA
- Emberson, L. L.**, Palmeri, H., Cannon, G. & Aslin, R. N. (2013). Differences in Repetition Suppression across Sensory Systems in 6-month-olds: Using NIRS to Compare Infant and Adult Neural Function. Poster at the *20th Annual Meeting of the Cognitive Neuroscience Society*: San Francisco, CA
- Emberson, L. L.**, Karuza, E. A., Turk-Browne, N. B. & Aslin, R. N. (2013). What's Next? Implicit Anticipation during Statistical Learning Interferes with Task Performance. Poster at the Annual Meeting of the *Lake Ontario Visionary Establishment*: Niagara Falls, Ontario, Canada.
- Emberson, L. L.**, Palmeri, H. & Aslin, R. N. (2012). Building from Basics: fNIRS recordings from 6-month olds investigate sensory cortex selectivity and response suppression. Oral presentation at the *International fNIRS Conference*, London, England.
- Emberson, L. L.**, Aslin, R. N. Goodwin, J. Palmeri, H. & Berger, A. J. (2012). Retinotopic mapping in infant visual cortex using near-infrared spectroscopy (NIRS). Invited talk at the *96th Meeting of the Optical Society of America, Frontiers in Optics*, Rochester, NY.
- Emberson, L. L.**, Misyak, J. B., Schwade, J.A., Christiansen, M.H., & Goldstein, M. H. (2012). How Amodal is Statistical Learning? Comparing Learning across Auditory and Visual Modalities in Infancy. Poster at the *XVII Biennial Conference on Infant Studies*, Minneapolis, MN.
- Ward, L. M., Kirschner, A. **Emberson, L.** & Kitajo, K. (2011). Endogenous Neural Noise and Reaction Time. Poster Presentation at *27th Meeting of the Interactional Society for Psychophysics (Fechner Day)*, Herzliya, Israel.
- Emberson, L. L.**, Kahn, J., Haas, S. & Amso, D. (2011) Learning Systems Support Object Perception Across Variable Environmental Exposure: Evidence from a Combined fMRI/Eye Tracking Methods Approach. Slides Presentation at *28th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.
- Misyak, J. B., **Emberson, L. L.**, Schwade, J.A., Christiansen, M.H., & Goldstein, M. H. (2011). Comparing Infants Learning of Statistical Regularities in Auditory and Visual Sequences with Complex, Familiar Stimuli. Poster presentation at the *International Association for the Study of Child Language*, Montreal, QC. **[Winner of Best Student Poster]**
- Emberson, L. L.**, & Rubinstein, D. (2010). Learning from Environmental Regularities is Grounded in Specific Objects not Abstract Categories. Paper at the *Proceedings for the 32nd Annual Conference of the Cognitive Science Society*, Portland, OR.
- Emberson, L. L.** & Amso, D. (2010). Perceptual Learning of Complex Objects: Mechanisms of integration across multiple views of a novel object in cluttered scenes. Poster presentation at the *27th Annual Meeting of Cognitive*

*Neuroscience Science Society*, Montreal, QC, Canada.

- Emberson, L. L.**, & Zevin, J. D. (2009). Beyond the statistics: Questioning the arbitrariness of the "words" in statistical learning paradigms. Member Poster at *31st Annual Meeting of the Cognitive Science Society*, Amsterdam, the Netherlands.
- Emberson, L. L.**, Liu, R., & Zevin, J. D. (2009). Statistics All the Way Down: How is Statistical Learning Accomplished Using Novel, Complex Sound Categories? Poster at *31st Annual Meeting of the Cognitive Science Society*, Amsterdam, the Netherlands.
- Emberson, L. L.**, Kitajo, K., MacLean, S. E. & Ward, L. M. (2009). Intermediate Levels of Uncoordinated Gamma-Band Activity Facilitate Behavioral Responses To Simple Visual Stimuli. Poster presentation at the *26th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.
- Farmer, T.A. & **Emberson, L.L.** (2009). Paying Attention to Attention in Language Learning and Development. Symposium at *Annual Meeting of the Society of Research Child Development*, Denver, Colorado.
- Misyak, J. M., **Emberson, L.L.**, Schwade, J.A., Christiansen, M.H., & Goldstein, M. H. (2009). Face-to-Face, Word-for-Word: Comparing Statistical Learning for Familiar Stimuli Across Modalities. Poster at *Annual Meeting of the Society of Research Child Development*, Denver, Colorado.
- Emberson, L. L.**, Lupyan, G., Webb, A., Goldstein, M. H., & Spivey, M. J. (2008). Why Cell Phones are Irritating: Different types of speech yield different attentional demands. Poster presentation at the *49th Annual Meeting of the Psychonomics Society*, Chicago, IL.
- Emberson, L. L.**, Weiss, R. J., Barbosa, A. V., Vatikiotis-Bateson, E., & Spivey, M. J. (2008). Crossed hands curve saccades: Multisensory dynamics in saccade trajectories. Poster at *9th International Multisensory Research Forum*, Hamburg, Germany.
- Emberson, L. L.**, Conway, C. M., & Christiansen, M. H. (2008). Timing is everything: Modality modulates effects of attention in implicit statistical learning. Poster at *9th International Multisensory Research Forum*, Hamburg, Germany.
- Emberson, L. L.**, Weiss, R. J., Barbosa, A. V., Vatikiotis-Bateson, E., & Spivey, M. J. (2008). Crossed hands curve saccades: Multisensory dynamics in saccade trajectories. Paper at *30th Annual Meeting of the Cognitive Science Society*, Washington, DC.
- Emberson, L. L.**, Misyak, J. M., Schwade, J. A., Christiansen, M. H., & Goldstein, M. H. (2008). Face-to-face: Visual Statistical Learning with Complex Natural Stimuli. Poster at *XVIth Biennial International Conference on Infant Studies*, Vancouver, BC.
- Emberson, L. L.**, Conway, C. M., & Christiansen, M. H. (2007). Timing is everything: The effects of attention and modality in statistical learning. Poster at *48th Annual Meeting of the Psychonomics Society*, Long Beach, CA.
- Emberson, L. L.**, Kitajo, K. & Ward, L. M. (2007). Somewhat noisy brains see better: Prestimulus dynamics and perceptual performance. Poster at the *Annual Meeting of the Cognitive Neuroscience Society*, New York, NY.
- Emberson, L. L.**, Kitajo, L. & Ward, L. M. (2007) Endogenous neural noise and stochastic resonance. Paper presentation at the *IEEE Conference of Noise and Fluctuations in Biological, Biophysical, & Biomedical Systems*, Florence, IT.