The Temporal Dynamics of Learning Center – List of Publications 2010-2018

2018 Publications

TDLC Publications 2018
Annis, J., & Palmeri, T. J. (under review). Modelling memory dynamics in visual expertise. Manuscript under review.
Annis, J., & Palmeri, T.J. (2018). Bayesian statistical approaches to evaluating cognitive models. Wiley Interdisciplinary Reviews in Cognitive Science.
Artoni, F., Delorme, A., Makeig, S. (2018). Applying dimension reduction to EEG data by principal component analysis reduces the quality of its subsequent independent component decomposition. Neuroimage. 2018 Jul 15;175:176-187. doi: 10.1016/j.neuroimage.2018.03.016. Epub 2018 Mar 9.
Bedrosian TA, Quayle C, Novaresi N, Gage FH. (2018). Early life experience drives structural variation of neural genomes in mice. Science, 2018 Mar 23; doi:10.1126/science.aah3378
Behrmann, M. and Geskin, J. (2018). Over time, the right results will emerge. Response to commentaries. Cognitive Neuropychology, 35, 1-2, 101-111.
Boehm, U., Annis, J., Frank, M.J., Hawkins, G.E., Heathcote, A., Kellen, D., Krypotos, A.-M., Lerche, V., Logan, G.D., Palmeri, T.J., Servant, M., Singmann, H., van Ravenzwaaij, D., Starns, J.J., Wiecki, T.V., Voss, A., Matzke, D., Wagenmakers, E.-J. (under revision). Estimating between-trial variability parameters of the drift diffusion model: Expert advice and recommendations. Manuscript under revision.

Bromer, C., Bartol, T.M., Bowden, J.B., Hubbard, D.D., Hanka, D.C., Gonzalez, P.V., Kuwajima, M., Mendenhall, J.M., Parker, P.H., Abraham, W.C., Sejnowski, T.J., and Harris, K.M. (2018). Long-term potentiation expands information content of hippocampal dentate gyrus synapses. (2018) PNAS March 6, 2018. 115 (10) E2410-E2418; published ahead of print February 20, 2018. https://doi.org/10.1073/pnas.1716189115

Chua, K.-W., Chua, Bub, D.N., Masson, M.E.J. & Gauthier, I. (2018). Grasp representations depend on knowledge and attention. Journal of Experimental Psychology: Learning, Memory, and Cognition, 44(2), 268-279. doi: 10.1037/xlm0000453. Epub 2017 Sep 21. DOI: 10.1037/xlm0000453

Cheng, X.J., McCarthy, C., Wang, T.S.L., Palmeri, T.J., & Little, D.R. (2018). Composite faces are not (necessarily) processed coactively: A test using Systems Factorial Technology and logical-rule models. Journal of Experimental Psychology: Learning, Memory, and Cognition. 2018 Jun;44(6):833-862. doi: 10.1037/xlm0000479. Epub 2018 Apr 23.

Chukoskie, L., Westerfield, M., & Townsend, J. (2018). A novel approach to training attention and gaze in ASD: A feasibility and efficacy pilot study. 2017 Wiley Periodicals, Inc.; Develop Neurobiol 78: 546–554, 2018. https://doi.org/10.1002/dneu.22563

Collins, E., Robinson, A., and Behrmann, M. (2018). Distinct neural processes for the perception of familiar and unfamiliar faces along the visual hierarchy revealed by frequency tagging. Neuroimage, 181:120-131. doi: 10.1016/j.neuroimage.2018.06.080. PMID: 29966716.

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Dutilh, G., Annis, J., Brown, S.D., Cassey, P., Evans, N.J., Grasman, R.P.P.P., Hawkins, G.E., Heathcote, A., Holmes, W.R., Krypotos, A.-M., Kupitz, C.-N., Leite, F.P. Lerche, V., Lin, Y.S., Logan, G.D., Palmeri, T.J., Starns, J.J., Trueblood, J.S., van Maanen, L., van Ravenzwaaij, D., Vandekerckhove, J., Visser, I., Voss, A., White, C.N., Wiecki, T.V., Rieskamp, J., & Donkin, C. (2018). The quality of response time data inference: A blinded, collaborative approach to the validity of cognitive models. Psychon Bull Rev. 2018 Feb 15. doi: 10.3758/s13423-017-1417-2. [Epub ahead of print]

Freud, E., Robinson, A. and Behrmann, M. (2018). More than action: The dorsal pathway contributes to the perception of 3D structure. Journal of Cognitive Neuroscience, in press. Posted Online March 21, 2018. https://doi.org/10.1162/jocn_a_01262

Gauthier, I., Chua, K.-W., Richler, J.J. (2018). How holistic processing of faces relates to cognitive control and intelligence. Attention, Perception, & Psychophysics. (2018) 80:1449-1460. https://doi.org/10.3758/s13414-018-1518-7.

Geskin, J. and Behrmann, M. (2018). Congenital prosopagnosia without object agnosia? A literature review (with commentaries). Cognitive Neuropsychology, 35, 1-2, 4-54.

Hawley, K., Huang, J.S., Goodwin, M., Diaz, D. de Sa, V.R., Birnie, K.A., Chambers, CT. Craig, K.D. (2018). Youth and Parent Appraisals of Participation in a Study of Spontaneous and Induced Pediatric Clinical Pain, Ethics & Behavior. Accepted author version posted online: 11 Apr 2018, Published online: 30 Apr 2018.

Kampasi, K., English, D.F., Seymore, S., Stark, E., McKenzie, S., Vöröslakos, M., Buzsáki, G., Wise, K.D., & Yoon, E. (2018). Dual color optogenetic control of neural populations using low-noise, multishank optoelectrodes. Microsystems & Nanoengineering (2018) 4:10 Microsystems & Nanoengineering DOI 10.1038/s41378-018-0009-2.

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Liu, T.T., Nestor, A., Vida, M.D., Pyles, J.A., Patterson, C., Yang, Y., Yang, F.N., Freud, E., Behrmann, M. (2018). Successful Reorganization of Category-Selective Visual Cortex following Occipito-temporal Lobectomy in Childhood. Cell Reports, VOLUME 24, ISSUE 5, P1113-1122.E6, JULY 31, 2018. DOI:https://doi.org/10.1016/j.celrep.2018.06.099.

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Moldakarimov, S., Bazhenov, M., Feldman, D. E. & Sejnowski, T. J. Structured networks support sparse traveling waves in rodent somatosensory cortex. PNAS April 30, 2018. 201710202; published ahead of print April 30, 2018. https://doi.org/10.1073/pnas.1710202115.

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Tybrandt, K., Khodagholy, D., Dielacher, B., Stauffer, F., Renz, A.F., Buzsáki, G., Vörös, J. (2018). High-Density Stretchable Electrode Grids for Chronic Neural Recording. Advanced Materials, 30, 1706520.

Umakantha, A., Purcell, B.A., & Palmeri, T.J. (in preparation). Bridging circuits and behavior: Relating a spiking neural network model and the diffusion model of perceptual decision making (working title). Manuscript in preparation (PsyRev).

Vatterott, D. B., Mozer, M. C., & Vecera, S. P. (2018). Rejecting salient distractors: Generalization from experience. Attention, Perception, and Psychophysics, 80, 485-499. DOI:10.3758/s13414-017-1465-8.

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Vu MT., Adalı T., Ba D., Buzsáki G., Carlson D., Heller K., Liston C., Rudin C., Sohal VS., Widge AS., Mayberg HS., Sapiro G., Dzirasa K. (2018). A Shared Vision for Machine Learning in Neuroscience. J Neurosci. 2018 Feb 14;38(7):1601-1607. doi: 10.1523/JNEUROSCI.0508-17.2018. Epub 2018 Jan 26.

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Winchell, A., Mozer, M. C., Lan, A., Grimaldi, P., & Pashler, H. (2018). Can textbook annotations serve as an early predictor of student learning? Submitted for publication.

2018 Conferences & Presentations

Jin, Y., Mousavi, M., & de Sa, V.R. (2018) Adaptive CSP with subspace alignment for subject-to-subject transfer in motor imagery brain-computer interfaces. Proceedings of the 2018 6th IEEE International Winter Conference on Brain-Computer Interface.

Khajah, M. M., Mozer, M. C., Kelly, S., & Milne, B. (2018). Boosting engagement with educational software using near wins. In C. Rosé et al. (Eds.), Nineteenth International Conference on Artificial Intelligence in Education (pp. 171-175). Springer.

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Panqu Wang, Pengfei Chen, Ye Yuan, Ding Liu, Zehua Huang, Xiaodi Hou, Garrison Cottrell (2018) Understanding convolution for semantic segmentation. In IEEE Winter Conference on Applications of Computer Vision (WACV-18).

Qin, Y., Kamnitsas, K., Ancha, S., Nanavati1, J., Cottrell, G.W. Criminisi, A. and Aditya N. (to appear). Autofocus Layer for Semantic Segmentation. In Proceedings of the International Conference On Medical Image Computing & Computer Assisted Intervention (MICCAI '18).

Susam, B., Akcakaya, M., Nezamfar, H., Diaz, D., de Sa, V.R., Craig, K., Xiaojing, X., Huang, J., Goodwin, M. (2018) Automated Pain Assessment using Electrodermal Activity Data and Machine Learning. In Proceedings of the 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'18).

Wang, P., Chen, P., Yuan, Y., Liu, D., Huang, Z., Hou, X., Cottrell, G. (2018). Understanding convolution for semantic segmentation. In IEEE Winter Conference on Applications of Computer Vision (WACV-18).

Winchell, A., Mozer, M. C., Lan, A., Grimaldi, P., & Pashler, H. (2018). Can textbook annotations serve as an early predictor of student learning? In K. E. Boyer & M. Yudelson (Eds.), Proceedings of the 11th International Conference on Educational Data Mining (pp. 431-437). EDM Society Press.

Xu, X., Craig, K., Diaz, D., Goodwin, M., Akcakaya, M., Susam, B., Huang, J. & de Sa, V.R. (2018) Automated Pain Detection in Facial Videos of Children using Human-Assisted Transfer Learning. In Proceedings of AIH 2018 (Joint Workshop on Artificial Intelligence in Health).

Xu, X., Susam, B. Nezamfar, H., Craig, K., Diaz, D., Huang, J., Goodwin, M., Akcakaya, M. & de Sa, V.R. (2018) Towards Automated Pain Detection in Children using Facial and Electrodermal Activity. In Proceedings of AIH 2018 (Joint Workshop on Artificial Intelligence in Health)

2018 Books/Chapters

Palmeri, T.J., & Gauthier, I. (in press). Object recognition. To appear in D.J. Calkins, V.A. Casagrande, J.D. Schall, & G.F. Woodman (Eds.), The Visual System, Sinauer Associates.

2017 Publications

TDLC Publications 2017
Acsady, L., & Harris, K. D. (2017). Synaptic scaling in sleep. SCIENCE, Science 03 Feb 2017: 355 (6324), 457. doi:10.1126/science.aam7917.
Annis, J., Miller, B.J., & Palmeri, T.J. (2017). Bayesian inference with Stan: A tutorial on adding custom distributions. Behav Res Methods. 2017 Jun;49(3):863-886. doi: 10.3758/s13428-016-0746-9. PMCID: PMC5149118
Annis, J., & Palmeri, T.J. (2017). Bayesian statistical approaches to evaluating cognitive models. (WIRES) 9(2) e1458. Published Online: Nov. 28, 2017. DOI: 10.1002/wcs.1458.
Chukoskie, L., Guo, S., Ho, E., Zheng, Y., Chen, Q., Meng, V., Cao, J., Devgan, N., Wu, S., and Cosman, P.C. (In Press, 2017). Quantifying Gaze Behavior during Real WorldInteractions using Automated Object, Face, and Fixation Detection.
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2014 Conference Presentations

Aminoff, E., Toneva, M., Gupta, A., & Tarr, M. (2014, November). High-dimensional encoding of scenes in the PPA, RSC, and OPA. Poster presented at the annual meeting of the Society for Neuroscience, Washington, D.C.

Aminoff, E. & Tarr, M. (2014, May). Anterior to posterior parahippocampal organization of scene information. Journal of Vision, 14, 1079. Poster presented at the annual meeting of the Vision Science Society, St. Pete, FL.

Avidan, G., Tanzer, M. and Behrmann, M. (2014). Structural and functional impairment of the face processing network in congenital prosopagnosia. Vision Sciences Society, Florida.

Bartlett, M. (2014). Emotion Aware Machines. TEDx presentation at "Transformation Through Us" event held at San Diego State University, Oct. 11, 2014.

Behrmann, M. (2014). Speaker, Big Data and Neurodevelopmental Disorders, World Economic Forum, Tianjian China.

Behrmann, M. (2014). Keynote speaker, Cognitive Neuroscience Society, April, Boston.

Behrmann, M. (2014). Keynote speaker, Lake Ontario Visual Conference (LOVE), Niagara Falls, February.

Benasich, A.A. (2014). CASBS Game Changing Lecture, Stanford University, "Setting up Language: Brain waves, oscillations and precise timing impact early acoustic mapping," Center for Advanced Study in the Behavioral Sciences, Stanford University, February 25.

Chang, L., Robenalt, C., Wade, S., & Deák, G. (2014, April). Maternal speech content at 9 and 12 months: Lexical diversity, discourse types, and infant language outcomes. Jean Piaget Society Meeting, San Francisco, CA.

Choudhury, N., Ortiz-Mantilla, Parascando, J. & Benasich, A.A. (2014). "Theta oscillations during processing of rapid frequency change differ between infants with a family history of Specific Language Impairment and controls". (Program No. 556.19/TT63) Presented at the Society for Neuroscience Meetings in Washington, DC, November 15th-19th, 2014.

Cipollini, B. and Cottrell, G.W. (2014). A developmental approach to long-distance connectivity. Presentation at NCPW14, Lancaster, UK,

Cipollini, B. and Cottrell, G.W. (2014). A Developmental Model of Hemispheric Asymmetry of Spatial Frequencies. Presented in Cognitive Science Society Annual Meeting, Quebec City, Canada.

De Barbaro, K., Johnson, C., & Deák, G. (2014, July). Development of joint attention in naturalistic interactions: The role of the hands. International Conference on Infant Studies Biennial meeting, Berlin, DDR.

De Barbaro, K., Johnson, C., Deák, G., & Forster, D. (2014, April). The emergence of communication within mother-infant sensory-motor coordination. Jean Piaget Society Meeting, San Francisco, CA.

Deák, G.O., Liao, Y., & Makeig, S. (2014, September). Measuring brain activity during social interactions: EEG imaging and motion capture of toddler-parent dyads. Developmental Methodology conference, San Diego, CA.

Deák, G. (2014). Interviewed on Hangout On Air. August 5, 2014.

Dundas, E., Gabay, Y., Plaut, D. C. and Behrmann, M. (2014). Altered hemispheric organization for faces and words in developmental dyslexia. Vision Sciences Society, 2014.

Gage, F. (2014). Keynote Address at the USC Stem Cell Symposium (11/17/14)

Gordon, I., Pierce, M., Bartlett, M. and Tanaka, J.W. (2014). Facemaze: An Intervention for Facial Expression Production in Autism Spectrum Disorder. International Meeting for Autism Research (IMFAR), Atlanta, GA, May 14-17.

Haar, S., Berman, S., Behrmann, M. and Dinstein, I. (2014). Anatomical MRI Abnormalities in Autism? IMFAR, 2014.

Hahamy, A., Behrmann, M. and Malach. R. (2014) Idiosyncratic inter-hemispheric functional connectivity patterns in autism. Human Brain Mapping.

Harris, H., Egan, R., Gupta, A., Minshew, N. J., Bonneh, Y., Heeger, D., Sagi, D. and Behrmann, M. (2014). Visual learning in autism. Vision Sciences Society, 2014.

Kanan, C. (2014). Fine-Grained Object Recognition with Gnostic Fields. In Proceedings of the IEEE Winter Applications of Computer Vision Conference (WACV-2014), Steamboat Springs, CO, March 24-26.

Kanan, C.M., Ray, N.A., Bseiso, D.N.F., Hsiao, J.H. and Cottrell, G.W. (2014). Predicting an observer's task using Multi-Fixation Pattern Analysis. In Proceedings of the Annual Eye Tracking Research & Applications Symposium (ETRA 2014), Safety Harbor, FL, March, 24-26.

Khajah, M., Wing, R. M., Lindsey, R. V., & Mozer, M. C. (2014) Incorporating latent factors into knowledge tracing to predict individual differences in learning. Proceedings of the Seventh International Conference on Educational Data Mining. [Awarded Best Paper of Conference].

Kobelsky, C., Bub, D. N., & Masson, M. E. J. (November, 2014). Time course of evoked action representations. Annual meeting of the Psychonomic Society, Long Beach, CA.

Kumar, R., Masson, M. E. J., & Bub, D. N. (November, 2014). Form follows function: The time course of hand action representations evoked by handled objects. Annual meeting of the Psychonomic Society, Long Beach, CA.

Logan, G.D., Palmeri, T.J., & Schall, J.D. (2014). A gated accumulator model of cognitive control. Presented at the Association for Psychological Science, San Francisco, CA.

Musacchia, G., Choudhury, N., Ortiz-Mantilla, Realpe-Bonilla, T., Lovering, H., Shell, R. & Benasich, A.A. (2014). "Spatial and temporal neural dynamics in infant development with early auditory experience". (Program No. 556.24/TT68) Presented at the Society for Neuroscience Meetings in Washington, DC, November 15th-19th, 2014.

Nestor, A., Liu, T., Patterson, C. and Behrmann, M. (2014). Recovery of high-level visual functions in patients with hemispherectomy. Society for Neurosciences, Washington, November.

Nestor, A., Plaut, D. C. and Behrmann, M. (2014). Facial identity: An investigation of neural encoding and image reconstruction. Vision Sciences Society, 2014.

Ortiz-Mantilla, S. Hämäläinen, J.A. & Benasich, A.A. (2014). "Neural dynamics of perceptual narrowing for phonemes in infants". (Program No. 556.26/TT70) Presented at the Society for Neuroscience Meetings in Washington, DC, November 15th-19th, 2014.

Palmeri, T.J. (2014). Linking sequential sampling models with neurons. Presented at Workshop on Sequential Sampling Models for Cognitive and Perceptual Decision Making, Cognitive Science Society meeting, Quabec City, Quabec, Canada.

Palmeri, T.J., Umakantha, A., & Purcell, B.A. (2014). On making connections between cognitive models and neural data. Presented at the Society for Mathematical Psychology meeting, Quebec City, Quebec, Canada.

Peters, S., Musacchia, G., Ortiz-Mantilla, S., Choudhury, N. & Benasich, A. A. (2014), "Spontaneous brain oscillations in 4- and 7-month old infants", March 2014, Inter-Science of Learning Meeting, Philadelphia, PA.

Peterson, D. A., Sejnowski, T. J. (2014). Toward a computational model of dopamine-modulated STDP at the corticostriatal synapse. Presentation at Gordon Research Conference, Mechanisms of Neural Development, Circuit Assembly, Synaptic Plasticity and Neuropsychiatric Disorders, Hong Kong.

Peterson, D. A., Sejnowski, T. J. (2014). A theoretical model for the pathogenesis of adult onset dystonia due to GNAL mutations. Presentation at Annual Meeting of the Society for Neuroscience, Washington, D.C.

Reilly, J. & Polse, L. (2014). Neuroplasticity: Spoken and Written Discourse after Perinatal Stroke, Talk presented at SIG Writing, Amsterdam, August 2014.

Rosenthal, G. Tanzer, M., Behrmann, M. and Avidan, G. Mapping the Topology of the Face Processing Network in Congenital Prosopagnosia (2014). Society for Neurosciences, Washington, November.

Scherf, S., Behrmann, M., Thomas, C., Avidan, G. and Elbich, D. (2014). Structural properties of white matter circuits necessary for face perception. Vision Sciences Society, Florida.

Sejnowski, T. and Eldar Trio. (2014). Presentation at the Salk Science & Music Series. November 2.

Sejnowski, T., & Oakley, B. (2014). Presented a Coursera "Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects." (Aug. 2014, Oct. 2014).

Shomstein, S., Uyar, F., Greenberg, A. S. and Behrmann, M. (2014). Sensory Processing with Varying Degrees of Attention: Lessons from Parietal Lobe Damage, Society for Neurosciences, Washington, November.

Smith, C.N., Clark, R.E., Squire, L.R. (2014). Hippocampal brain activity and functional connectivity in humans change as material is forgotten across one month. Presentation at the Annual Meeting of the Society for Neuroscience, Washington, DC, November 2014.

Smith, C. N., Jeneson, A., Frascino, J. C., Kirwan, C. B., Hopkins, R. O., & Squire, L. R. (2014). When recognition memory is independent of hippocampal function. International Society for Behavioral Neuroscience Annual Meeting, Amsterdam, June 2014.

Susskind J, Bartlett M, Neiman M, Wazny, M., Tanaka, J., Xu B. (2014). Emotion detection: Through the looking glass. Demo, Vision Science Society.

Toneva, M., Aminoff, E., Gupta, A., & Tarr, M. (2014, May). Towards a model for mid-level feature representation of scenes. Journal of Vision, 14, 363. Poster presented at the annual meeting of the Vision Science Society, St. Pete, FL.

Umakantha, A., Purcell, B.A., & Palmeri, T.J. (2014). Relating a spiking neural network model and the diffusion model of decision making to investigate neural mechanisms of speed-accuracy tradeoffs. Presented at the Society for Neuroscience meeting, Washington, DC.

Umakantha, A., Purcell, B.A., & Palmeri, T.J. (2014). Inferring neural mechanisms from cognitive model parameters: Relations between the diffusion model and a spiking neural network model of perceptual decision making. Presented at the Society for Mathematical Psychology meeting, Quebec City, Quebec, Canada.

Wade, S., Chang, L., Robenalt, C., & Deak, G. (2014, July). Maternal speech content during toy play at 9 and 12 months: Longitudinal stability and prediction of infant language. International Conference on Infant Studies Biennial meeting, Berlin, DDR.

Yang, L., Leung, H., Plank, M., Snider, J. and Poizner, H. (2014). Alpha and beta band power changes predict reaction time and endpoint error during planning reaching movements. 7th International Congress on Image and Signal Processing (CISP 2014), Dalian, China (accepted). 7th International Conference on BioMedical Engineering and Informatics (BMEI 2014). IEEE 978-1-4799-5838.

Yang, Y., Tarr, M. J., & Kass, R. E. (2014). Estimating learning effects: A short-time fourier transform regression model for MEG source localization. In Springer Lecture Notes on Artificial Intelligence: MLINI 2014: Machine learning and interpretation in neuroimaging. (refereed).

2014 Books/Chapters

Aminoff, E. M. & Tarr, M. J. (2014). Perception and Cognition. In H. Miller (ed.), SAGE Encyclopedia of Theory in Psychology. SAGE Publications, Inc. (invited), DOI: http://dx.doi.org/10.4135/9781483346274.n227.

Behrmann, M. and Minshew, N. (2014). Sensory processing in autism. In M. Leboyer and P. Chaste (Eds.) Autism Spectrum Disorders: Phenotypes, mechanisms and treatments. Karger Medical and Scientific Publishers. Basel, Switzerland.

Behrmann, M., Richler, J. J., Avidan, G. and Kimchi, R. (2014) Holistic Face Perception. In J. Wagemans (Ed.) Handbook of Perceptual Organization. Oxford Handbooks Online. 10.1093/oxfordhb/9780199686858.013.010

Chukoskie, L., Snider, J., Mozer, M.C., Krauzlis, R.J., and Sejnowski, T.J. (2014). Chapter 14: Learning where to look for a hidden target. National Research Council. In Light of Evolution, Volume VII: The Human Mental Machinery, Washington, DC: The National Academies Press.

Deák, G.O. (2014). Interrelations of language and cognitive development. Encyclopedia of Language Development, (pp. 284-291). P. Brooks & V. Kampe, Eds. Thousand Oaks, CA: SAGE.

Deák, G.O. (2014). Slow mapping in lexical development. Encyclopedia of Language Development (pp. 544-547). P. Brooks & V. Kampe, Eds. Thousand Oaks, CA: SAGE.

Deák, G.O. (2014). Development of adaptive tool-use in early childhood: Sensory-motor, social, and conceptual factors. In J. Benson (Ed.), Advances in Child Development and Behavior, 46, 149-181.

Nosofsky, R.M. and Palmeri, T.J. (2015). Exemplar-based random walk model. To appear in J.R. Busemeyer, J. Townsend, Z.J. Wang and A. Eidels (Eds.), Mathematical and Computational Models of Cognition, Oxford University Press.

Reilly, J., Bernicot, J., Olive, T., Favart, M., Wulfeck, B. and Appelbaum, A. (in press, 2014). Written narratives from French and English speaking children with Language Impairment. In Arfé, Dockrell, j, Berninger, V. (Eds). Handbook of Writing development and instruction in children with hearing, speech and oral language difficulties. Oxford: Oxford University Press.

Reilly, JS & Polse, L. (2014). Neuroplasticity: Language and Emotional Development in Children with Perinatal Stroke. In Miozzo, M., de Zubicaray & Schiller (Eds.), Handbook of Neurolinguistics, Oxford University Press.

Whitehill, J., Bartlett, M., and Movellan, J.R. (2014). Automatic Facial Expression Recognition. In J. Gratch and S. Marsella, editors, Social Emotions in Nature and Artifact. Oxford University Press, 2014.

2013 Publications

TDLC Publications 2013

Alivisatos, A.P., Chun, M., Church, G.M., Deisseroth, K., Donoghue, J.P., Greenspan R.J., McEuen, P.L., Roukes, M.L., Sejnowski, T.J., Weiss, P.S. and Yuste, R. (2013). The Brain Activity Map, Science. 2013 Mar 15; 339(6125): 1284–1285. Published online 2013 Mar 7. doi: 10.1126/science.1236939.

Avidan, G., Hadj-Bouziane, F., Liu, N., Ungerleider, L., & Behrmann, M. (2013). Selective dissociation between core and extended regions in the face processing network in congenital prosopagnosia. Cereb Cortex. 2014 Jun; 24(6): 1565–1578. Published online 2013 Jan 31. doi: 10.1093/cercor/bht007.

Behrmann, M. and Plaut, D.C. (2013). Distributed circuits, not circumscribed centers, mediate visual recognition. Trends in Cognitive Science. 2013 May;17(5):210-9. doi: 10.1016/j.tics.2013.03.007. ePub 2013 Apr 20.

Broadbent N.J. and Clark R.E. (2013). Remote context fear conditioning remains hippocampus-dependent irrespective of training protocol, training-surgery interval, lesion size, and lesion method. Neurobiology of Learning and Memory. 2013 Nov;106:300-8. doi: 10.1016/j.nlm.2013.08.008. ePub 2013 Aug 27.

Bub, D., Masson, M. & Lin, T. (2013). Features of hand actions contribute to naming graspable objects. Psychological Science, 24(7) 1269-1276, DOI: 10.1177/0956797612472909.

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Chukoskie, L., Snider, J., Mozer, M., Krauzlis, R., Sejnowski, T. (2013). Learning where to look for a hidden target, Proceedings of the National Academy of Sciences USA, 110, 10438–10445, 2013 PMCID:PMC3690606.

Church, B.A., Mercado, E., Wisniewski, M.G. and Liu, E.H. (2013). Temporal dynamics in auditory perceptual learning: Impact of sequencing and incidental learning. Journal of Experimental Psychology: Learning, Memory and Cognition. 2013 Jan;39(1):270-6. doi: 10.1037/a0028647. ePub 2012 May 28.

Clark, R.E. (2013). Recognition memory: an old idea given new life. Current Biology. 2013 Sep 9;23(17):R725-7. doi: 10.1016/j.cub.2013.07.037.

Clark, R.E. (2013). The neurobiology of remote memory in the experimental animal. Neurobiology of Learning and Memory. 2013 Nov;106:292–293. doi: 10.1016/j.nlm.2013.11.001. ePub 2013 Dec 16.

Clarke, A.M., Greczkowski, L., Mast, F.W., Gauthier, I. and Herzog, M. (2013). Deleterious effects of roving on learned tasks. Vision Research. 2014 Jun;99:88-92. doi: 10.1016/j.visres.2013.12.010. ePub 2013 Dec 30. In press.

Clark R.E. and Sutherland R.J. (2013). Neurobiology of Learning and Memory. 2013 Nov;106:292-3. doi: 10.1016/j.nlm.2013.11.001

Cowell, R.A. and Cottrell, G.W. (2013). What evidence supports special processing for faces? A cautionary tale for fMRI interpretation. Journal of Cognitive Neuroscience. 2013 Nov;25(11):1777-93. doi: 10.1162/jocn_a_00448. ePub 2013 Jul 16.

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Dundas, E., Plaut, D. and Behrmann, M. (2013). The joint development of hemispheric lateralization for words and face. Journal of Experimental Psychology: General. 2013;142(2):348-58. doi: 10.1037/a0029503. PMID: 22866684.

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Harris, K.D. and Mrsic-Flogel, T. (2013). Cortical connectivity and sensory coding. Nature. 2013 Nov 7;503(7474):51-8. doi: 10.1038/nature12654.

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learning mechanisms and event representations. Psychological Review. 2013;120(3): 628-666. doi: 10.1037/a0033180.

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Aminoff, E., Kim, J., Kastner, S., & Behrmann, M. (2012, October). Psychological and neural mechanisms underlying congenital topographagnosia. Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.

Aminoff, E., Miller, M., Grafton, S., & Tarr, M. (2012, May). Early visual areas recruited in automatic contextual processing of words. Journal of Vision, 12, 1112. Talk presented at the annual meeting of the Vision Science Society, Naples, FL.

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Behrmann, M., Plaut, D., & Dundas, W. (2012). The Joint Development of Hemispheric Lateralization for Words and Faces. Meeting of the Psychonomic Society, Minneapolis.

Chukoskie, L., Miller, M.J., Kanan, C., Dorai, M., Townsend, J. & Trauner, D.A. (2012). Did you see that change? A study of dyspraxia, eye movement and visual perception in autism, International Meeting for Autism Research 11268.

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Folstein, J.R., Newton, A., Van Gulick, A.B., Palmeri, T.J., & Gauthier, I. (2012). Category learning causes long-term changes to similarity gradients in the ventral stream: A multivoxel pattern analysis at 7T. Paper presented at the 12th Annual Meeting of the Vision Science Society, Naples, FL.

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Li, R. & Cottrell, G.W. (2012) A new angle on the EMPATH model: Spatial frequency orientation in recognition of facial expressions. In N. Miyake, D. Peebles, & R.P. Cooper (Eds.), Proceedings of the 34th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.

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Pyles, J.A. & Tarr, M.J. (2012) Neural mechanisms of dynamic object perception. Nanosymposium talk presented at the Annual Meeting of the Society for Neuroscience, New Orleans, LA, Oct 2012.

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Salamanca, L., Lee, M., Carini, A., Dykstra, K., Whitehill, J., Bartlett, M., & Reilly, J. (2012). Profiling Student-Teacher Eye Gaze Behaviors. Poster presentation, Southern California Cognitive Neuroscience Meeting at San Diego State, March 2, 2012.

Scherf, K. S., Luna, B. & Behrmann, M. (2012). Developmental changes in the functional organization of neural networks supporting face and object processing. Symposium presentation, Society for Neurosciences, New Orleans, LA.

Seibert, D., Leeds, D., Pyles, J.A. & Tarr, M.J. (2012) Exploring computational models of visual object perception. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, FL

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Victoria, L.W., Pyles, J.A. & Tarr, M.J. (2012). The neural representation of visual and semantic object categories. Poster Presentation at the Society for Neuroscience Annual Meeting, New Orleans, LA, Oct 2012.

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Wiles, J., Heath, S., Ball, D., Quinn, L., & Chiba, A. (2012). Rat meets iRat. In Proceedings of the International Conference on Development and Learning and Epigenetic Robotics (ICDL), 2012. IEEE. Conference poster, Nov 2012.

Wisniewski, M.G. (2012). Predicting individual differences in generalization. Poster presented at the 5th Annual Inter-Science of learning Center (iSLC) Student and Post-Doc Conference, San Diego, CA, April 2012.

Wisniewski, M.G. (2012). A case for representational reorganization in learning about sounds on a continuum. Paper presented at the SUNY Buffalo Behavioral and Brain Sciences Symposium, Buffalo, NY, June 2012.

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Wisniewski, M.G., Church, B.A., & Mercado, E. (2012). Auditory learning-related shifts in generalization: A case for distortions of representation. Poster presented at the 11th Annual Auditory Perception, Cognition & Action Meeting, Minneapolis, MN, Nov 2012.

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2011 Conference Presentations

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Brooks, D.L., Dai, J., & Sheinberg, D.L. (2012). Contextual Cueing in Visual Search Through Naturalistic Scenes by Primates: Behavioral and Eye Movement Analysis, Comparative Cognition Society.

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Deak, G. (2011, July). Cognitive flexibility in children: Cue comprehension or inhibitory control? Southwest China University, School of Psychology, Chongqing, China.

Deak, G. (2011, March). Perspectives on embodied, emergent social development in infancy. UCSD/Osaka Joint Meeting on Autonomous Mental Development, San Diego, CA.

de Barbaro, K., Johnson, C.M., Forster, D., & Deak, G.O. (2011, April). Infants' multimodal object exploration in a dyadic context: Longitudinal changes in micro-behavioral patterns. Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Deriso, D., Susskind, J., Tanaka, J., Herrington, J., Schultz, R, & Bartlett, M. (2011). The Emotion Mirror: A Novel Intervention for Facial Expression Production and Perception. Demo, Vision Sciences Society Conference, Naples, FL, May.

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Gordon, D., Bartlett, M., & Tanaka, J. (2011). Face expression production and learning: Studies from both physiological and social perspectives. Talk, IEEE Conference on Automatic Face and Gesture Recognition, workshop on the Psychology of Face and Gesture Recognition.

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Holt, A.E., & Deak, G.O. (2011, April). Predicting educationally relevant flexibility: The role of executive functions in implicit task-switching. Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

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Nestor, A., Plaut, D. & Behrmann, M. (2011). Orthographic form processing - a multivariate investigation of its neural basis. Society for Neurosciences, Washington, DC.

Nestor, A., Plaut, D. & Behrmann, M. (2011). An investigation of the neural basis of face individuation through spatiotemporal pattern analysis. Vision Sciences Society, Naples, Florida, May.

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Plank, M., Hillyard, S., Huang, C., Alzano, D., Gepshtein, S., & Poizner, H. (2011). Eye-Hand Coordination and EEG Microstates Associated with Rapid Pointing under Risk and Uncertainty. (2011). Cognitive Neuroscience Society Annual Meeting, San Francisco, April, 2011.

Plank, M., Hillyard, S., Huang, H., Snider, J., Gepshtein, S., & Poizner, H. (2011). EEG correlates of spatially directed eye and hand movements during rapid reaching under risk and uncertainty. Program Number 82.24, 2011 Neuroscience Meeting Planner. Washington, D.C: Society for Neuroscience, Washington, D.C. 2011. Online.

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Ross, D.A., Deroche, M., & Palmeri, T.J. (2011). Exemplar-based and norm-based accounts of face adaptation. Paper presented at the 52nd annual meeting of the Psychonomic Society, Seattle, WA.

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Smith, C.N., Clark, R.E., & Squire, L.R. (2011). Brain activity in humans in medial temporal lobe and neocortex as a function of the age of memory (1 hour to 1 month). Presentation at the Society for Neuroscience Meeting, Washington, DC.

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Van Gulick, A. & Gauthier, I. (2011). Category learning for a (perceptual) purpose. Talk given at Object Perception, Attention, and Memory Meeting, Seattle, WA.

Vettel, J.M., Lau, T., Bird, C., McDowell, K., Tarr, M.J., & Curran, T. (2011, November). Network dynamics of multisensory integration of real-world environmental events. Talk given to the Annual Society for Neuroscience Conference, Washington, DC.

Woloszyn, L. & Sheinberg, D.L. (2011). Effects of long-term visual experience on single neuron responses in the inferior temporal cortex, Society for Neuroscience Abstracts.

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Sheinberg, D. & Tarr, M.J. (2009). Objects of expertise. In I. Gauthier, M.J. Tarr, & D. Bub (Eds.), Perceptual expertise: Bridging brain and behavior. New York, NY: Oxford University Press.

Wilder, M., Jones, M., & Mozer, M.C. (2010). Sequential effects reflect parallel learning of multiple environmental regularities. In Y. Bengio, D. Schuurmans, J. Lafferty, C.K.I. Williams, & A. Culotta (Eds.), Advances in Neural Information Processing Systems 22 (pp. 2053-2061). La Jolla, CA: NIPS Foundation.

Zitzer-Comfort, C., Reilly, J.S. Korenberg, J.R., Bellugi, U. (2010). We are social -- therefore we are: The interplay of mind, culture and genetics in Williams syndrome. In CM Worthman, P Plotsky, D Schechter, & C Cummings (Eds.) Formative experiences: The interaction of caregiving, culture, and developmental psychobiology. Cambridge University Press.

2009 - 2010 Conference Presentations

Alvarez, B.S., Ortiz-Mantilla, S.C., Choudhury, N., Diclemente, F. & Benasich, A.A. (2009). Differences in the MMN-P3a-LDN cortical responses using auditory discrimination to non-speech signals in early and late Spanish-English bilingual adults. 39th Annual Meeting, Society for Neuroscience Abstracts, Chicago, IL, Vol. 33, Program No. 779.24.

Amarasingham, A. & Buzsaki, G. (2009). Model-free analysis of functional connectivity in a multinneuronal population, 57th Annual Session of the International Statistical Institute, Durban, South Africa, August.

Avidan, G., Thomas, C., & Behrmann, M. (2009). An integrative approach towards understanding of the neural basis of congenital prosopagnosia. Society for Neurosciences, Washington, October.

Bartlett, M.S. (2009). Information maximization in face processing. Invited talk. Society for Autonomous Neurodynamics, La Jolla, CA, July 27-29.

Behrmann, M. (2009). Invited Keynote Address, OPAM (Object recognition, perception and memory) conference. Boston, October.

Behrmann, M. (2009). National Chung Cheng University. 14th Workshop on Attention and Perception, Chiayi, Taiwan. Keynote speaker.

Behrmann, M. (2009). Lets face it. Society for Experimental Psychologists, Boulder, Colorado.

Buzsaki, G. (2009). INMED Passation de Direction (Y. Ben-Ari to A. Represa), INMED-Inserm 901, Marseille, France. September 14, 2009. Keynote Speaker.

Buzsaki, G. (2009). 6th Joint ECNS-ISNIP Conference, Atlanta, GA. September 9-12, 2009. Plenary Speaker.

Buzsaki, G. (2009). International Society for Neurofeedback and Research, Indianapolis, IN. September 5, 2009. Plenary Speaker.

Buzsaki, G., (2009). Dynamic Coordination in the Brain: From Neurons to Mind. Frankfurt am Main, Germany. August 16–21, 2009. Speaker

Buzsaki, G. (2009). Origins and functions of the local field potential. The Swartz Initiative in Theoretical Neuroscience, Yale University, September 21, 2009. Speaker.

Buzsaki, G. (2009). 28th International Epilepsy Congress Budapest, Hungary. June 28-July 4, 2009. Invited symposium speaker.

Buzsaki, G. (2009). 9th World Congress of Biological Psychiatry. Paris, France. June 28-July 2, 2009. Invited symposium speaker.

Buzsaki, G. (2009). Cortical interneurons in health and disease – EMBO Workshop. Costa d'en Blanes, Mallorca, Spain. June 21 - 25 June, 2009. Invited Speaker

Buzsaki, G., Dendrites: Molecules, Structure & Function. (2009). Gordon Research Conferences. Lucca (Barga), Italy (Greg J. Stuart & Anirvan Ghosh, org). May 18-21. Invited Speaker.

Busaki, G., (2009). Research Frontiers in Neuroscience: Brainstorming Tinnitus. Cernobbio, Italy, May 11-13. Invited Speaker.

Cheung, O., Richler, J.J., Phillips, S., & Gauthier, I. (2009). Does temporal integration of face parts reflect holistic processing? Annual Meeting of the Vision Sciences Society, Naples, FL, May.

Curran, T, (2009). Human learning and memory: Perspectives from event-related brain potentials (ERPs). Invited presentation to the First Sino-German Fall School of the International Research Training Group (IRTG) Adaptive Minds: Neural and Environmental Constraints on Learning and Memory, Beijing, China.

Curran, T, (2009). The ERP Correlates of Perceptual Expertise. Invited presentation to the Temporal Dynamics of Learning Center Boot Camp, San Diego, CA.

Deak, G. (2009). Understanding the emergence of typical attention-sharing behaviors in infancy. Invited talk, Children's Hospital Grand Rounds, San Diego, CA, November..

Deak, G.O. (2009). Learning social cues that support social learning. Invited talk, DELTA Center Pre-conference, Cognitive Development Society Biennial Meeting, San Antonio, TX, October.

Deak, G.O. (2009). Emergence of joint attention: A theory is close at hand. Invited talk, University of Texas at Austin, Psychology Department, October.

Deak, G.O. (2009). Are children fast word-learners? Invited talk, University of Texas at Austin, Psychology Department, October.

Diba, K., Mizuseki, K., Sullivan, D., Royer, S., & Buzsaki, G. (2009). Interneurons bind to and segregate cell assemblies in hippocampal networks of behaving rats. Soc. Neurosci. Abs. 192.14.

Dipietro, L., Poizner, H., van Erp, E., & Poizner, H. (2009). EEG correlates of submovements in human wrist movements. Program Number 663.6. Abstract Viewer/Itinerary Planner. Washington, D.C: Society for Neuroscience.

Folstein, J.R., Gauthier, I., Green, J.L., & Palmeri, T.J. (2009). An effect of mere exposure on visual category learning. Paper presented at the 9th Annual meeting of the Vision Science Society, Naples, FL.

Fujisawa, S. & Buzsaki, G. (2009). A novel (4 Hz) oscillation of prefrontal and hippocampal neurons in the waking rat. #192.12 Neuroscience Meeting. Chicago, IL: Society for Neuroscience.

Geisler, C. (2009). Co-organizer and Speaker, Workshop on Cortical Oscillations at the CNS Conference in Berlin, July 22.-23.

Geisler, C. (2009). Poster. Delayed coupling of oscillating hippocampal place cell assemblies generates slower oscillating population activity at theta frequency, Frontiers in Applied and Computational Mathematics, June 1-2. NJIT, Newark, NJ.

Geisler, C. & Buzsaki, G. (2009). Poster. Delayed coupling of oscillating hippocampal place cell assemblies generates slower oscillating population activity at theta frequency. Society for Neuroscience Meeting, Chicago, IL (192.7).

Geisler, C.M., Mizuseki, K., Pastalkova, E., Diba, K., Royer, S. & Buzsaki, G. (2009). Delayed coupling of oscillating hippocampal place cell assemblies generates slower oscillating population activity at theta frequency. Soc. Neurosci. Abs. 192.7.

Gramann, K., Bigdely-Shamlo, N., Vankov, A., & Makeig, S. (2009). Mobile brain/body imaging (MoBI) of active cognition. Fifth Bernstein Conference on Computational Neuroscience, Frankfurt, Germany.

Gramann, K., Gwin, J.T., Ferris, D.P., & Makeig, S. (2010). Cognition on the Run. The 3rd International Congress on Gait & Mental Function, Washington D.C.

Gwin, J.T., Gramann, K., Ferris, D.P., & Makeig, S. (2010). Electrocortical brain activity is coupled to gait cycle phase during treadmill walking. The 3rd International Congress on Gait & Mental Function, Washington D.C.

Hayward, W., Zhao, M., Cheung, O., Rhodes, G., & Gauthier, I. (2009). Dissociating contributions of configural and component information to the own-race advantage in face recognition. Annual Meeting of the Vision Sciences Society, Naples, FL, May.

Jones, M., Curran, T., Mozer, M., & Wilder, M.H. (2009). Sequential effects reflect learning of temporal structure. Paper presented at the 50th Annual Meeting of the Psychonomic Society (Boston, MA).

Kharitonova, M., Curran, T., Munakata, Y., Kitajo, K., & Yamaguchi, Y. (2009). Theta oscillations reflect individual differences in working memory capacity. Poster presented at the Society for Neuroscience meeting, Chicago, IL.

Kinka, D., Bukach, C., & Gauthier, I. (2009). Are label associations necessary for the acquisition of expertise? Annual Meeting of the Vision Sciences Society, Naples, FL, May.

Lai, V.T & Curran, T. (2009). Comparison Processes and Conceptual Mappings in Metaphor Comprehension: Evidence from ERPs. Poster presented at the 15th Annual Conference on Architectures and Mechanisms for Language Processing, Barcelona, Spain.

Lai, V.T. & Curran, T. (2009). Conceptual mappings as comparison in metaphor comprehension. Poster presented at the Neurobiology of Language Conference. Chicago, IL.

Lai, P., Lazo, D., & Reilly, J. (2010). Expressivity through Musical Expression in Individuals with Williams Syndrome. San Diego State University: Student Research Symposium, March 5.

Lee, D., Henriques, D.Y.P., Li, X., Helms-Tillery, S., Song, D.D., & Poizner, H. (2009). Reaching to kinesthetically defined targets in Parkinson's disease: Effects of deep brain stimulation therapy. Washington, D.C: Society for Neuroscience.

Lee, D. Henriques, D., Corcos, D.M., & Poizner, H. (2009). Patterns of eye-hand coupling in reaching to remembered 3D targets. Neural Control of Movement Annual Meeting, Kona, Hawaii, April.

Liu, E. H., Church, B. A., Orduna, I., & Mercado, E. (2010). Behavioral and electrophysiological effects of progressive training on auditory discrimination. Paper presented at the Temporal Dynamics of Learning Center All Hands Meeting, January.

Liu, E. H., Church, B. A., Orduna, I., & Mercado, E., III (January, 2010). Behavioral and electrophysiological effects of progressive training on auditory discrimination. Poster presented at the TDLC All-Hands Meeting, San Diego, CA.

Liu, E. H., Church, B. A., Orduna, I., & Mercado, E. (2009). Generalization of auditory discrimination following limited training: Is progressivity important? Paper presented at the 50th Annual Meeting of the Psychonomics Society, Boston, Massachusetts, November.

Liu, E. H., Church, B. A., Orduna, I., & Mercado, E., III (November, 2009). Generalization of Auditory Discrimination Following Limited Training: Is Progressivity Important? Poster presented at the 50th Annual Meeting of the Psychonomics Society, Boston, MA.

Lucos, J.R., Lee, D., Poizner, H., & Santello, M. (2009). Patients with Parkinson's disease fail to appropriately use sensorimotor memories during multi-digit grasping. Neural Control of Movement Annual Meeting, Kona, Hawaii, April.

Mack, M.L. & Palmeri, T.J. (2009). Are detection and categorization tightly coupled? Paper presented at the 50th annual meeting of the Psychonomic Society, Boston, MA.

Meza, R. L. Phan, L. Felizardo, J., Littlewort, Bartlett, M, Movellan, J., & J. Reilly. (2009). The Paradox of Facial Expression in Children. Poster presented at the Annual Biomedical Research Conference for Minority Students, Phoenix, AZ. November, 2009.

Meza, R. L. Phan, L. Felizardo, J., Littlewort, Bartlett, M, Movellan, J., & J. Reilly. (2010). Why so many faces? Children's Spontaneous and Voluntary Facial Expressions. Poster presented at the San Diego State University Student Research Symposium, San Diego, CA. March, 2010. Awarded the Provost's Prize.

Mizuseki, K., Sirota, A., Pastalkova, E. & Buzsaki, G. (2009). Theta oscillations provide temporal windows for local circuit computation in the entorhinal-hippocampal loop. Soc. Neurosci. Abs. 192.16.

Mizuseki, K. (2009). The 32nd Annual Meeting of the Japan Neuroscience Society. September 16-18, 2009, Nagoya, Japan. Oral presentation: Theta oscillations provide temporal windows for local circuit computation in the entorhinal-hippocampal loop.

Movellan, J.R. Eckhardt, M. Virnes, M., Rodriguez, A. (2009) Sociable Robot Improves Toddler Vocabulary Skills. Proceedings of the International Conference on Human Robot Interaction,

Nishimura, M., Doyle, J. & Behrmann, M. (2009). Probing the face-space of individuals with prosopagnosia. Vision Sciences meeting, Naples, FL, May.

Nyhus, E., Curran, T. (2009). Recollection revealed by its absence: Midazolam-induced amnesia reduces memory for details and the ERP correlate of recollection. Paper presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco.

Ozen, S., Sirota, A.M., Anastassiau, C., Belluscio, M., Koch, C. & Buzsaki, G. (2009). Entrainment of cortical activity by applied electrical fields. NSF Science of Learning Centers Annual Meeting.

Ozen, S., Sirota, A.M.., Anastassiau, C., Belluscio, M., Koch, C. & Buzsaki, G. (2009). Entrainment of cortical activity by applied electrical fields. Society for Neuroscience Meeting, Chicago, IL (192.8).

Palmeri, T.J. (2009). Neurally-constrained model of perceptual decision making. Paper presented at the Copenhagen Colloquium, Center for Visual Cognition, University of Copenhagen.

Palmeri, T.J., Purcell, B.A., Schall, J.D., Logan, G.D., Heitz, R.P., & Cohen, J.Y. (2009). Neural basis of stochastic accumulator models of perceptual decision making. Paper presented at the 2009 Annual Interdisciplinary Conference, Jackson Hole, WY.

Pastalkova, E. (2009). HHMI Janelia Farm Research Center. Invited Seminar. Neuronal mechanisms of the hippocampus-dependent memory.

Pastalkova, E. (2009). Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania. Invited seminar. Hippocampus-dependent memories.

Pastalkova, E. (2009). Minisymposium (Oscillations and Brain Function: Setting the Neuronal Tempo in Health and Disease). Symposium Speaker. Neuronal mechanisms of the hippocampus-dependent memory. Society for Neuroscience Annual Meeting, Chicago, IL

Patel, J., Royer, S. & Buzsaki, G. (2009) 3-D topography of oscillatory patterns in the hippocampus of the behaving rat. Soc. for Neurosci. Abs. 192.18.

Peterson, D.A., Lotz, D., Ahn, A., Halgren, E., Makeig, S., Sejnowski, T., & Poizner, H. (2009). Fronto-central EEG dissociates learning and decision making-based expected value: EEG correlates of submovements in human wrist movements. Program Number 675.2. Abstract Viewer/Itinerary Planner. Washington, D.C: Society for Neuroscience.

Peterson, D.A., Sejnowski, T.J., & Poizner, H. (2009). Can reinforcement learning provide a unifying framework for the etiology of dystonia: Multidisciplinary Symposium on Reinforcement Learning, Montreal, Canada, June.

Phan, L., Felizardo, J., Bartlett, M., Littlewort-Ford, G., Meza, R. & J. Reilly. (2009). Behavioral Indices of cognitive processing. Paper presented at MutiModality 2009. Toulouse, France, July.

Phan, L. Patel, S., Meza, R., Littlewort, G., Bartlett, M., Movellan, J.& Reilly, S. (March, 2010). Behavioral indices of cognitive grappling in problem solving. Poster presented at the 3rd Annual San Diego State University Student Research Symposium. San Diego, California.

Purcell, B.A., Heitz, R.P., Cohen, J.Y., Schall, J.D., Logan, G.D., & Palmeri, T.J. (2009). Using neurophysiology to explore discrete versus continuous flow models of perceptual decision making. Paper presented at the 2009 meeting of the Society for Mathematical Psychology, Amsterdam.

Purcell, B.A., Cohen, J.Y., Heitz, R.P., Schall, J.D., Logan, G.D., & Palmeri, T.J. (2009). Developing a neuromimetic accumulator model of perceptual decisions. Paper presented at the 9th Annual meeting of the Vision Science Society, Naples, FL.

Reilly, J. (2009). Language and the many faces of emotion. Invited Plenary Talk. MultiModality Toulouse, France, 2009.

Richler, J.J., Mack, M.L., Gauthier, I., & Palmeri, T.J. (2009). What makes face recognition holistic: Insights (or not) from models and MSDA. Paper presented at the 2009 meeting of the Society for Mathematical Psychology, Amsterdam.

Richler, J.J., Mack, M.L., Gauthier, I., & Palmeri, T.J. (2009). What makes face recognition holistic: Insights from models. Paper presented at the Thirty-First Annual Meeting of the Cognitive Science Society, Amsterdam, The Netherlands.

Royer, S., Zemelman, B., Losonczy, A., Magee, J. & Buzsaki, G. (2010) Perturbation of hippocampal place cell dynamics by halorhodopsin-assisted silencing of PV interneurons. Cosyne Meeting. (Poster).

Sirota, A. (2009). Invited talk at SIAM Conference on Applications of Dynamical systems, May.

Sirota, A. (2009). Invited talk at Janelia Workshop, Technical Challenges in Extracellular Electrophysiology, June.

Sirota, A. (2009). Invited talk at Lorentz Center, Leiden University Workshop on Brain Waves, June.

Sirota, A. (2009). Invited talk at Cognitive Neuroscience Society, Berlin Cortical Oscillations Workshop, July.

Sirota, A, Montgomery, S., Mizuseki, K. & Buzsaki, G. (2009). Diversity and theta phase coordination of gamma oscillators in entorhino-hippocampal system during exploration and REM sleep. Society for Neuroscience Meeting, Chicago, IL (192.5).

Sirota, A., Montgomery, S., Mizuseki, K. & Buzsaki, G. (2009). Diversity and theta phase coordination of gamma oscillators in entorhinal-hippocampal system during exploration and REM sleep in rats. Soc. Neurosci. Absr. 192.6.

Snyder, H., Hutchison, N., Nyhus, E., Curran, T., & Munakata, Y. (2009). So many options: The roles of neural inhibition and abstract representations in selection. Poster presented at the annual meeting of the Cognitive Science Society, Amsterdam, Netherlands.

Tanaka, J., Bartlett, M., Movellan, j., Littlewort, G., & Lee-Cultura, S. (accepted). Face-Face-Revolution: A game in real-time facial expression recognition. Demo, Vision Sciences Society Conference, Naples, FL, May 2010.

Toellner, T., Mueller, H.J., Poizner, H., & Gramann, K. (2009). Electroencephalographic measurement of manual pointing in visually guided compound search. Annual Meeting of the Society for Psychophysiological Research, Berlin, Germany. Psychophysiology, 46, S118-S119.

Torres, E., Heilman, K.M., & Poizner, H. (2009). Complementary roles of the left posterior parietal lobe and basal ganglia in reference frame usage. Computational and Systems Neuroscience 2009 (COSYNE09), Snowbird, Utah, March.

Velu P., Hammon, P., Mullen, T., & de Sa, V. (2009). Dissociating visual response and motor preparation in reach prediction from EEG. Program No. 360.8. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience. Online.

Vettel, J.M., Nestor, A., Bird, C.W., Heller, L.M., Curran T., & Tarr, M. J. (2009). Investigating the Interplay of Time & Semantics during Multimodal Integration. Poster presented at the 10th International Multimodal Research Forum, New York, NY.

Wang, Y., Toellner, T., Gramann, K., & Makeig, S. (2009). Theta oscillations in the medial frontal cortex during response preparation. Society for Neuroscience Annual Meeting, Chicago, USA.

Williams, N.R. & Gauthier, I. (2009). Expertise CAN explain why face perception is sensitive to spatial frequency content! Annual Meeting of the Vision Sciences Society, Naples, FL, May.

Wisniewski, M., Gramann, K., Mercado, E., & Makeig, S. (2010). Changes in EEG dynamics during perceptual learning. Paper presented at the Temporal Dynamics of Learning Center All Hands Meeting, January.

Wisniewski, M., Church, B. A., & Mercado, E. (2009). Auditory peak shift: The impact of experience. Paper presented at the 50th Annual Meeting of the Psychonomics Society, Boston, MA, November.

Wong, A.C.-N., Palmeri, T.J., Rogers, B.P., Gore, J.C., & Gauthier, I. (2009). Experience can determine category selectivity in the visual system. Paper presented at the 9th Annual meeting of the Vision Sciences Society, Naples, FL, May.

Wong, Y.K., Folstein, J.R., & Gauthier, I. (2009). Comparing perceptual learning and perceptual expertise with matched stimuli. Annual Meeting of the Vision Sciences Society, Naples, FL, May.

Before 2009 Publications

Aimone, J. B., J. Wiles, et al. (2006). Potential role for adult neurogenesis in the encoding of time in new memories. Nat Neurosci 9(6): 723-727.

Barrington, L., Marks, T. K., Hui-wen Hsiao, J., & Cottrell, G. W. (2008). "NIMBLE: A kernel density model of saccade-based visual memory." Journal of Vision 8(14): 1-14.

Benasich, A. A., Z. Gou, et al. (2008). "Early cognitive and language skills are linked to resting frontal gamma power across the first 3 years." Behav Brain Res 195(2): 215-222.

Benasich, A. A., Gou, Z., Choudhury, N., Harris, K.D. (2008). Early cognitive and language skills are linked to resting frontal gamma power across the first 3 years. Behav Brain Res. 195(2): 215-222.

Butko, N., & Movellan, J. (2008). I-POMDP: An infomax model of eye movement. 2008 IEEE International Conference on Development and Learning (ICDL).

Carpenter, S. K., Pashler, H., Cepeda, N. J., & Alvarez, D. (2007). Applying the principles of testing and spacing to classroom learning. 29th Annual Cognitive Science Society, Nashville, TN.

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. Psychological Bulletin 132: 354-380.

Chukoskie, L., Schwartz, O., Albright, T.D., Sejnowski, T.J., (2007). Spatial patterns of fixation: bottom-up effects. Society for Neuroscience Abstracts.

Cockburn, J., Bartlett, M., Tanaka, J., Movellan, J., Pierce, M., and Schultz, R. (2008). SmileMaze: A Tutoring System in Real-Time Facial Expression Perception and Production for Children with Autism Spectrum Disorder. Proc. Intl Conf. on Automatic Face and Gesture Recognition, Workshop on Facial and Bodily Expressions for Control and Adaptation of Games.

D'Lauro, C., Tanaka, J. W., & Curran, T. (2008). The preferred level of face categorization depends on discriminability. Psychonomic Bulletin & Review 15: 623-629.

D'Lauro, C., Scott, L.S., Sheinberg, D, Tanaka, J.W., & Curran, T. (2008). Spaced learning promotes robust perceptual expertise. Poster presented at Society for Neuroscience Conference, Washington, DC.

Drew, P. J. F., D.E. (2007). Representation of Moving Wavefronts of Whisker Deflection in Rat Somatosensory Cortex. J Neurophysiol 98: 1566-1580.

Hammond, P. S., Makeig, S., Poizner, H., Todorov, E., de Sa, V. (2008). Extracting trajectories and target endpoints from human EEG during a reaching task. IEEE Signal Processing 25: 69-77.

Han, F., N. Caporale, et al. (2008). Reverberation of recent visual experience in spontaneous cortical waves. Neuron 60(2): 321-327.

Jacob, V., Brasier, D.J., Erchova, I., Feldman, D., Shulz, D.E. (2007). Spike timing-dependent synaptic depression in the in vivo barrel cortex of the rat. J Neurosci. 27(6): 1271-1284.

McCleery, J. P., Zhang,L.,Ge, L., Wang, Z., Christiansen, E.M., Lee,K. and Cottrell, G.W. (2008). The roles of visual expertise and visual input in the face inversion effect: Behavioral and neurocomputational evidence. Vision Research 48: 703-715.

Minces, V. H., Datlow, M., Alfonso, S., Chiba, A.A. (2008). Sensory Learning and the cholinergic input to the sensory cortices. Twelfth International Conference on Cognitive and Neural Systems (ICCNS), Boston, MA.

Movellan, J. R. (2010) "Warning: The author of this document may have no mental states. Read at your own risk." Interaction Studies.

Movellan, J. R., F. T. F, et al. (2007). The RUBI Project: A Progress Report. Proceedings of the 2nd ACM/IEEE international conference on human-robot interaction.

Palmeri, T. J., & Tarr, M. (2008). Visual object perception and long-term memory. Visual Memory. S. L. A. Hollingworth, Oxford University Press.: 163-207.

Pashler, H., Rohrer, D., Cepeda, N., & Carpenter, S. (2007). "Enhancing learning and retarding forgetting: Choices and consequences." Psychonomic Bulletin & Review 14: 187-193.

Pastalkova, E., V. Itskov, et al. (2008). Internally generated cell assembly sequences in the rat hippocampus. Science 321(5894): 1322-1327.

Pastalkova, E., Itskov, V., Amarasingham, A. and Buzsaki, G. (2008). Internally generated cell assembly sequences in the rat hippocampus. Science 321(5894): 1322-1327.

Paz, R., E. P. Bauer, et al. (2008). Theta synchronizes the activity of medial prefrontal neurons during learning. Learn Mem 15(7): 524-531.

Robinson, A. E., & de Sa, V.R. (2008). Brief presentations reveal the temporal dynamics of brightness induction and Whites illusion. . Vision Research 48(22): 2370-2381.

Ruvolo, P. and J. R. M. and (2008). "Automatic Cry Detection in Early Childhood Education Settings." Proceedings of the International Conference on Development and Learning.

Ruvolo, P. and I. a. M. J. R. Fasel (2008). Auditory Mood Detection for Social and Educational Robots. IEEE International Conference on Robotics and Automation.

Ruvolo, P., J. Whitehill, M. Virnes, and J. R. Movellan. (2008). Building a more effective teaching robot using apprenticeship learning. International Conference on Development and Learning.

Ruvolo, P., J. Whitehill, et al. (2008). Building a More Effective Teaching Robot Using Apprenticeship Learning. International Conference on Development and Learning.

Ruvolo, P. Fasel, I.R., & Movellan, J.R. (2008). Optimization on a budget: A reinforcement learning approach. Advances in Neural Information Processing Systems.

Scherf, K. S., Behrmann, M., Humphreys, K & Luna, B. (2007). Visual Category-selectivity for faces, places and objects emerges along different developmental trajectories. Dev. Sci. 10(4): 15-30.

Scott, L. S., Tanaka, J. W., Sheinberg, D. L., & Curran, T. (2008). "The role of category learning in the acquisition and retention of perceptual expertise: A behavioral and neurophysiological study." Brain Research 1210: 204-215.

Shan, H., Zhang, Lingyun and Garrison W. Cottrell (2007). Recursive ICA." In Advances in Neural Information Processing Systems 20.

Shrager, Y., C. B. Kirwan, et al. (2008). Neural basis of the cognitive map: path integration does not require hippocampus or entorhinal cortex. Proc Natl Acad Sci U S A 105(33): 12034-12038.

Simpkins, A., and Todorov, E. (2008). Optimal trade-off between exploration and exploitation. American Control Conference.

Tallal, P. and N. Gaab (2006). "Dynamic auditory processing, musical experience and language development." Trends Neurosci 29(7): 382-390.

Tanaka, F., A. Cicourel, et al. (2007). Socialization between toddlers and robots at an early childhood education center. Proceedings of the National Academy of Sciences: -17958.

Tanaka, F., J. R. Movellan, et al. (2006). Daily HRI Evaluation at a Classroom Environment: Reports from Dance Interaction Experiments. Proceedings of the 2006 Conference on Human-Robot Interaction (HRI 06).

Tong, M. H., Joyce, C.A., and Cottrell, G.W. (2008). Why is the fusiform face area recruited for novel categories of expertise? A neurocomputational investigation. Brain Research 1202: 14-24.

Trottier, L. G. d. S., V.R. (2007). A multimodal paradigm for investigating the perisaccadic temporal inversion effect in vision. 29th Annual Meeting of the Cognitive Science Society.

Whitehill, J., M. S. Bartlett, and J. R. Movellan. (2008). Automatic facial expression recognition for intelligent tutoring systems. . Computer Vision and Pattern Recognition (CVPR) Workshop on CVPR for Human Communicative Behavior Analysis.

Whitehill, J. and J. Movellan (2008). A Discriminative Approach to Frame-by-Frame Head Pose Tracking. Proceedings of the International Conference on Face and Gesture Recognition.

Wu, T., Bartlett, M.S., and Movellan, J. (2010). Facial expression recognition using gabor motion energy filters. IEEE CVPR workshop on Computer Vision and Pattern Recognition for Human Communicative Behavior Analysis. DOI: 10.1109/CVPRW.2010.5543267

Zhang, L., Tong, Matthew H., Marks, Tim K., Shan, Honghao, and Cottrell, Garrison W. (2008). SUN: A Bayesian Framework for Saliency Using Natural Statistics. Journal of Vision, 8(7): 32, 31-20.