

Aaron Seitz
Professor
University of California Riverside

CURRICULUM VITAE

Contact Information

Aaron Seitz
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Education

1998 - 2003 Ph.D. in Cognitive and Neural Systems, Boston University.
Topic: Self organizing models of cortical development.
Advisor: Prof. Stephen Grossberg

1995-1997 Post-baccalaureate work in Cognitive Psychology,
University of Washington, Seattle, WA.
Research with: Prof. Elizabeth Loftus, Jeanette Norris

1991-1994 B.A. in Mathematics, Reed College, Portland, OR.

Current Position

2022-present	Professor	Northeastern University
2019-present	Professor Step VIII	University of California - Riverside
2014-present	Director	Brain Game Center For Mental Fitness and Wellbeing

Past Positions

2018-2022	Director	UCR Aging Initiative
2016-2017	Interim-Director	UCR Center for Advanced Neuroimaging
2014-2019	Professor	University of California - Riverside
2012-2014	Associate Professor	University of California - Riverside
2008-2012	Assitant Professor	University of California - Riverside
2006-2010	Faculty	CELEST
2005-2008	Research Assitant Professor	Boston University
2005-2008	Visiting Scientist	Martinos Center, Mass General Hospital
2002-2005	Research Fellow	Harvard Medical School
2004-2005	Research Fellow	Boston University
2004	Visiting Researcher	ATR Comp. Neurosci. Labs, Japan
1998-2002	Research Assistant	Boston University
1996-1997	Research Assistant	University of Washington
1992-1994	Software Engineer	WRQ (Seattle, WA)

Affiliated Departments

Psychiatry, Neuroscience, Biomedical Engineering, Biomedical Sciences, Computer Science

University Service

Director of UCR Aging Initiative, Director of UCR Brain Game Center, Interim Director of Center for Advanced Neuroimaging, Department of Psychology Executive Committee, University Honors Program Faculty Fellow, Center for Advanced Neuroimaging Executive Committee, Faculty Technology Partnership Advisory Committee, Research Ethics Advisory Board, UCR VR Working Group, Chair of Psychology Grant Mentoring Committee, Psychology Graduate Admissions Committee, Neuroscience Graduate Admissions Committee, Psychology Department's Advisor for Technology Transfer and Funding, Aging Subject Pool and the Clinical Subject Pools committees, regular member on numerous faculty and staff search committees including Vice Chancellor for Research and Economic Development, Head Librarian, CHASS Dean, Faculty Clusters for 20+ candidates in Neuroscience, STEM Education, Aging, and Human Imaging, etc.

Reviewer

Journals

Acta Psychologica, Behavioral Neuroscience, Attention, AP&P, Cognition, Cognitive Neurodynamics, Cerebral Cortex, Current Biology, Ergonomics, JASA, Journal of Cognitive Neuroscience, Journal of Neuroscience, Journal of Neurophysiology, Journal of Experimental Psychology, Journal of Vision, Neural Networks, Neuron, PLoS One, PLoS Computational Biology, PNAS, Psychological Science, Perception & Psychophysics, Springer Books, Systems, Man and Cybernetics, TopiCS, Vision Research, etc

Grants

NSF/PAC College of Reviewers, NSF Panel service, NIH – Central Visual Processing (CVP), Cognition and Perception (CP), NIH Human Complex Mental Function (HCMF), NSF - Cognitive Neuroscience, AAAS, Netherlands Institute for Scientific Research, Research Foundation Flanders, Complexity, NASA, etc

Other

Vision Sciences Society Annual Conference, Review Committee

Editorial Positions

Reviewing Editor – Frontiers in Integrative Neuroscience

Reviewing Editor – Frontiers in Perception Science

Reviewing Editor – Journal of Cognitive Enhancement

Funded Grants External

Current

National Institute of Health NIMH R01 MH111742 (2016-2022; \$ 1,929,278) – Understanding *Mediating and Moderating Factors that Determine Transfer of Working Memory Training*, (MPIs **Seitz** and Jaeggi)

National Institute of Health NIDCD 1 R01 DC015051 (2016-2022; \$2,284,139) – *Efficient diagnostic tools to evaluate central auditory dysfunction*, (MPIs Gallun, **Seitz** and Eddins)

National Institute of Health NIA 1 R56 AG063952-01 (2019-2022; \$794,789) – *Examining the Potential for Placebo Effects in Cognitive Training*, (MPIs Green, **Seitz** and Jaeggi)

National Science Foundation RI-1911197 (2019-2022; \$499,999) – *RI: Small: Understanding Subtle Non-Social Facial Expressivity to Boost Learning and Computer Interaction*, (MPIs Bhanu and **Seitz**)

National Institute of Health NEI R01 EY031226-01 (2020-2025; \$ 3,872,021) – *Mediators and Moderators of Perceptual Learning*, (MPIs **Seitz** and Green)

EF + Math Program (<https://www.efmathprogram.org>) – (2020-2024; \$1,418,023) - *Developing low-cost mobile app technology to assess ability and fluctuations in executive functions and math learning*, (MPIs Jaeggi, Pahor, **Seitz**, Ramani, Goffney, Barbour)

National Institute of Health NIDCD 1 R01 DC018166-01A1 (2020-2025; \$ 3,829,677) – *Enhanced environments for psychophysical evaluation and training*, (MPIs Gallun, **Seitz** and Stecker)

National Institute of Health NEI R01 EY031589-01 A1 (2020-2025; \$3,465,456) – *Characterization of multiple factors in training and plasticity in central vision loss*, (MPIs Visscher, **Seitz**, Turke-Brown)

National Institute of Health 1R21AG069428-01A1 (2020-2022; \$428,687) – *Understanding Individual Differences in Working Memory Training and Transfer in Older Adults at Risk of Alzheimer's Disease and Related Dementias*, (MPIs **Seitz** & Jaeggi)

National Institute of Health NIA R01 NS108638-01 (2021-2026; \$3,277,821) – *How LC Integrity in Older Adults Mediates Perceptual and Memory Processes*, (MPIs Hu and **Seitz**)

National Institute of Health NIA U19 AG066567-01A1 (2021-2026; \$ 1,607,212) – *Adult Changes in Thought (ACT) Research Program*, (MPIs Larson, Crane, LaCroix; coPI **Seitz**)

National Institute of Health NIMH R61/R33 MH115119 (2018-2024; \$ 3,891,133) – *Visual Remediation in Schizophrenia*, (MPIs Silverstein and Butler, coPI **Seitz**)

National Institute of Health NIA R61/R33 AG066567-01A1 (2021-2026; \$ 2,605,355) – *Following the Sound of Music - Comparing the Effects of Music vs. Non-Music Based Interventions on Auditory and Cognitive Processing in Older Adults*, (MPIs Jaeggi & **Seitz**)

National Institute of Health NIA R21/R33 AG074497-01 (2021-2026; \$ 2,780,066) – *Building a shared infrastructure for cognitive assessment in the service of cognitive training research*, (MPIs Jaeggi & **Seitz**)

National Institute of Health NEI R21 EY033623-01A1 (2021-2023; \$413,729) – *New methods to quantify and train eye movement strategies in macular degeneration*, (MPIs Maniglia, Visscher & **Seitz**)

National Institute of Health NEI R21 EY033623-01A1 (2021-2023; \$475,531) – *Using Population Contrast Sensitivity Function Data to Develop Tunable Test Procedures*, (MPIs Barbour, Frank & **Seitz**)

National Institute of Health NIDDKD **1R01DK130851** (2021-2026; \$2,989,453) – *Evaluating environmental control (AVOID) and inhibitory control (RESIST) strategies to improve weight management outcomes*, (PI Salvy; coPI **Seitz**)

National Institute of Health NIA R01 AG063952-01A1 (2021-2026; \$ 3,912,847) – *Examining the Potential for Placebo Effects in Cognitive Training* (MPIs Green, Jaeggi & **Seitz**)

National Institute of Health NIA 1R01AG077725 (2022-2027; \$3,648,125) – *Mediators and Moderators of Auditory Training*, (MPIs **Seitz** and Gallun)

Completed

National Institute of Health NICHD R03 HD94234 (2018-2021; \$ 150,000) – Brain training for central auditory dysfunction after traumatic brain injury, (MPIs **Seitz** and Gallun)

European Commission Horizon 2020 (2013-2019; \$392,000) - Adaptation, learning and training for spatial hearing in complex environments (PI Kopco, coPI **Seitz**)

National Science Foundation BCS-1057625 (2015-2018; \$749,999) – SL-CN: Engaging Learning Network (ELN), (PI Shinn-Cunningham, coPI **Seitz**)

National Institute of Health NEI 1R01EY023582 (2013-2019; \$1,777,418) – Integrating Perceptual Learning Approaches into Effective Therapies for Low Vision, (PI **Seitz**)

National Science Foundation BCS-1057625 (2011-2014; \$238,675) – Collaborative Research: Multisensory Perceptual Learning (MPI Shams & **Seitz**)

Marie Curie (2010 – 2013, EUR 151,200) – Learn 2 Hear & See (MPIs Kopco, Series, Shinn-Cunningham, **Seitz**)

National Institute Health NEI (2004-2007; \$847,875) -The Mechanisms of Perceptual Learning, (PI Watanabe, coPI **Seitz**)

National Institute Health NEI (R21 2006-2008; \$440,000) – Effects of Reward on Visual Processing and Plasticity, (PI Watanabe, coPI **Seitz**)

Nation Science Foundation (2006-2009; \$500,000) – Neural Basis and Mechanisms of Task-Irrelevant Perceptual Learning, (PI Watanabe, coPI **Seitz**)

Human Frontier Science group grant (2004-2007; \$480, 000) (MPI Watanabe, Schultz, Vogels, Sakagami; coPI **Seitz**)

Funded Grants Internal

UCR Senate COR Fellowship (2017-18) – Aaron Seitz, “Brain training for central auditory dysfunction after traumatic brain injury”, \$7,000

UCR Seed Grant (2015-18) - Aaron Seitz and Victor Zordan, “The University of California Riverside Brain Game Center for Mental Fitness and Wellbeing”, \$600,000

UCR Seed Grant (2013-14) - Aaron Seitz and Victor Zordan, “The University of California Riverside Brain Game Center for Mental Fitness and Wellbeing”, \$70,000

UCR Seed Grant (Summer 2013) - Aaron Seitz and Victor Zordan, “Video Game for Memory Improvement”, \$15,924

UCR Senate COR Fellowship (2012-14) – Aaron Seitz, “Development of Perceptual Learning Approaches for Low Vision Populations”, \$7,500

Chancellor's Strategic Investment Funds (2011-12) – Aaron Seitz, \$27,000

Chancellor's Strategic Investment Funds (2011-13) – Christian Chiarello and Aaron Seitz, Seed money of UC Riverside Human Imaging Center, \$94,000

UCR Academic Senate - Regents Faculty Fellowship (2009-10) – Aaron Seitz, “Effect of Caffeine and Nicotine on the Consolidation of Learning and Memory”, \$9,500

Professional Societies

American Association for Advancement of Science, American Psychological Society, International Neural Network Society, Society for Neuroscience, Sigma Xi, Vision Sciences Society

Published Software Applications (Apple App Store) – Research tools created through the UCR Brain Game Center are released on a regular basis so that other groups can use these in their research for collaboration, replication, or purposed to their own research. All these Apps are designed for psychophysical precision and save highly detailed data logs so as to facilitate research. There are a growing number of cooperating research labs that are using these tools.

1. **Portable Automated Rapid Testing (PART):** a program designed to assess auditory processing abilities across a wide range of tasks (funded by 1R01DC015051). This ambulatory auditory testing tool is currently being used with a number of cooperating sites.
2. **Recollect the Game:** a software tool to train and assess outcomes of different approaches to working memory training (funded by R01MH111742). This program includes a set of Validated assessments (paper pending) of inhibitory control, working memory and fluid intelligence as well as the ability to control a wide variety of parameters of working memory training. Currently being used with a number of cooperating sites.
3. **Recall the Game:** a software tool used to test a number of variants of working memory training. Currently being used with a number of cooperating sites.
4. **Remember Bee:** a software tool for working memory training targeted at older adults. Currently being used with a number of cooperating sites.
5. **Spatial Release:** a novel hearing assessment designed to address symptoms of auditory dysfunction related to hearing in noisy environments; in particular understanding a talker in an environment populated by other talkers (based on Gallun et al, Frontiers in Neuroscience, 2013). Currently being used with a number of cooperating sites.
6. **Listen – Auditory Training:** funded by R03HD94234, this program is being used for auditory rehabilitation in individuals with central auditory processing deficits.

7. **ULTIMEYES** – this program was created through a UCR Start-up company and is being used by a number of baseball teams, individuals with low vision, and in research studies (including R61/R33 MH115119 and 1R01EY023582).
8. **Poly Rules!** – this is an inhibitory control training program that is currently be tested in its ability to address impulse control issues related to adhering to diet in cancer survivors.
9. **UCMRT** – a new 10-minute matrix reasoning task (see Pahor, Jaeggi, Seitz, 2018)
10. **Finding Memo** – a new game to test working memory that estimates memory capacity by challenging people with tasks where they choose how much they want to memorize at once.
11. **PLFest** - a program that makes visual perceptual learning studies accessible cross platform, including on mobile platforms. The program allows for a wide variety of assessments and training programs to be set-up and administered to participants.
12. **MAT_EF** - a program to assess executive functions related to a project with the EF+Math foundation that is targeted to improving math outcomes for Black and Latinx school children.
13. **BGC Science** – this program enables a wide variety of auditory, visual and cognitive assessments to be easily administered to people’s own devices where individualized protocols are downloaded on a per participant basis and data is uploaded to a HIPPA compliant server.

Published Articles

1. Pahor, A., Seitz, & Jaeggi (2022). transfer to an unrelated N-back task mediates the effect of N-back working memory training on matrix reasoning. *Nature Human Behaviour*, doi.org/10.1038/s41562-022-01384-w
2. Parong, Seitz, Jaeggi, Green (2022) "Expectation Effects in Working Memory Training, *PNAS*, in press
3. Lelo de Larrea-Mancera, Stavropoulos, Carrillo, Cheung, He, Eddins, Molis, Gallun, Seitz (2022), "Remote auditory assessment using Portable Automated Rapid Testing (PART) and participant-owned devices.", *JASA*, in press
4. Truong, Buschkuehl, Smith-Peirce, Carrillo, Seitz, Jaeggi (2022), "Change-Detection Training and Its Effects on Visual Processing Skills", *Scientific Reports*, in press
5. Caceres, Yu, Capaldi, Diniz, Raynor, Foster, Seitz, Salvy (2022), "Evaluating environmental control and inhibitory control strategies to improve weight management outcomes during a widely available weight loss program", *Contemporary Clinical Trials*, doi.org/10.1016/j.cct.2022.106844
6. Caceres, Yu, Capaldi, Lauzon, Tuckerman, Carrillo, Philipp, Seitz, Raynor, Cardele, Foster, Salvy (2022), Supplementing a widely available weight loss program with gamified inhibitory control training: A randomized pilot study, *Obesity Science & Practice*, doi.org/10.1002/osp4.617

7. Gallun, Coco, Koerner, Lelo de Larrea-Mancera, Molis, Eddins, Seitz (2022), Relating suprathreshold auditory processing abilities to speech understanding in competition, *Brain Sciences*, DOI: 10.3390/brainsci12060695
8. Collins, Pina, Carrillo , Ghil , Smith-Peirce , Gomez , Okolo, Chen, Pahor, Jaeggi, Seitz (2022) "Video-Based Remote Administration of Cognitive Assessments and Interventions: A Comparison with In-Lab Administration" *Journal of Cognitive Enhancement*, <https://doi.org/10.1007/s41465-022-00240-z>
9. Pahor, Jaeggi, Seitz (2021) "UCancellation: A New Mobile Measure of Selective Attention and Concentration" *Behavior Research Methods*, <https://doi.org/10.3758/s13428-021-01765-5>
10. Hladek, Seitz, Kopco (2021) "Auditory-visual interactions in egocentric distance perception: Ventriloquism effect and aftereffect" *JASA* , DOI: 10.1121/10.0007066
11. Maniglia, Visscher, Seitz (2021) "Perspective on vision science-informed interventions for central vision loss" *Frontiers in Neuroscience*, doi: 10.3389/fnins.2021.734970
12. Lelo de Larrea-Mancera, Philipp, Stavropoulos, Carrillo, Cheung, Koerner, Molis, Gallun & Seitz (2021) "Training with an auditory perceptual learning game transfers to speech in competition " *Journal of Cognitive Enhancement*, DOI: 10.1007/s41465-021-00224-5
13. Palandrani, Hoover, Stavropoulos, Seitz, Isarangura, Gallun, Eddins (2021) "Temporal integration of monaural and dichotic frequency modulation" *JASA* , doi.org/10.1121/10.0005729
14. Stavropoulos, Isarangura, Hoover, Eddins, Seitz, Gallun (2021) "Exponential spectro-temporal modulation generation" *JASA* , 149, 1434
15. Seitz (2020) "Perceptual Learning; Changes Across the Lifespan" *Current Biology*, doi.org/10.1016/j.cub.2020.08.097
16. Pahor, Collins, Smith, Moon, Stavropoulos, Silva, Peng, Jaeggi, Seitz (2020) "Multisensory Facilitation of Working Memory Training " *Journal of Cognitive Enhancement*, Sep;5(3):386-395, doi: 10.1007/s41465-020-00196-y
17. Seitz (2020) "Perceptual Learning; How does the visual circuit change through experience?", *Current Biology*, doi.org/10.1016/j.cub.2020.08.097
18. Maniglia, Visscher, and Seitz (2020) "We don't all look the same; detailed examination of peripheral looking strategies after simulated central vision loss" *Journal of Vision*, Dec 2;20(13):5. doi: 10.1167/jov.20.13.5.
19. Jaeggi, Pahor, Seitz (2020) "Does Brain Training Actually Work? " *Scientific American*, <https://www.scientificamerican.com/article/does-brain-training-actually-work/>
20. Kumar, Bhanu, Casey, Cheung, Seitz (2020) "Depth Videos for the Classification of Micro-Expressions " *ICPR 2020*,

21. Shalchy, Pergher, Pahor, Van Hulle, Seitz (2020) "N-Back related ERPs depend on stimulus type, task structure, pre- processing and lab factors " *Frontiers in Human Neuroscience*, doi.org/10.3389/fnhum.2020.549966
22. Lelo de Larrea-Mancera, Stavropoulos, Hoover, Eddins, Gallun, Seitz (2020), "Portable Automated Rapid Testing (PART) for auditory research: Validation in a normal hearing population", *JASA*, 48, 1831 (2020); <https://doi.org/10.1121/10.0002108>
23. Hládek, Seitz, Kopčo (2020) "Audio-visual interactions in egocentric distance perception: Ventriloquism effect and aftereffect" *BioRxiv*, <https://doi.org/10.1101/2020.08.22.262444>
24. Palandrani, Hoover, Stavropoulos, Seitz, Isarangura, Gallun, Eddins (2020), Temporal integration of monaural and dichotic frequency modulation, *PsyArXiv*, 10.31234/osf.io/269gp
25. Murray, Lelo de Larrea-Mancera, Glicksohn, Shams, Seitz (2020) "Revealing Multisensory Benefit with Diffusion Modeling" *Journal of Mathematical Psychology*, DOI:10.1016/j.jmp.2020.102449
26. Sandeep, Shelton, Pahor, Jaeggi and Seitz (2020) "Application of Machine Learning Models for Tracking Participant Skills in Cognitive Training" *Frontiers in Psychology-Cognitive Science*, Vol 11, A1532
27. Seitz (2020) "Perceptual Expertise: How is it achieved?" *Current Biology*, Vol: 30, Issue: 15, Page: R875-R878
28. Maniglia, Visscher, and Seitz (2020) "A method to characterize compensatory oculomotor strategies following simulated central vision loss" *Journal of Vision*, doi.org/10.1167/jov.20.9.15
29. Jacques and Seitz (2020) "Moderating Effects of Visual Attention and Action Video Game Play on Perceptual Learning with the Texture Discrimination Task" *Vision Research*, 171, 64–72.
30. Silverstein, Seitz, Ahmed, Thompson, Zemon, Gara, Butler (2020) "Development and Evaluation of a Visual Remediation Intervention for People with Schizophrenia " *Journal of Psychiatry and Brain Science*, DOI: 10.20900/jpbs.20200017
31. Le Dantec and Seitz (2020) "Dissociating Electrophysiological Correlates of Contextual and Perceptual Learning in a Visual Search Task" *Journal of Vision*, doi.org/10.1167/jov.20.6.7
32. Lee, Maniglia, Velez, Demer, Seitz, & Pineles, (2020) "Short-term perceptual learning game does not improve patching-resistant amblyopia in older children" *Journal of Pediatric Ophthalmology & Strabismus*, DOI: 10.3928/01913913-20200306-01
33. Lelo de Larrea-Mancera, Stavropoulos, Hoover, Eddins, Gallun, **Seitz** (2019), " Portable Automated Rapid Testing (PART) for auditory research: Validation in a normal hearing population", *bioRxiv* 2020.01.08.899088; doi: <https://doi.org/10.1101/2020.01.08.899088>
34. Isarangura, Palandrani, Stavropoulos, **Seitz**, Hoover, Gallun, and Eddins (2019) "Methods for expressing spectral modulation depth and the effects of modulator shape on spectral modulation

detection thresholds" *Proceedings of Meetings on Acoustics* 36:1,
<https://doi.org/10.1121/2.0001032>

35. Yaghoubi, K. C., Alizadeh Shalchy, M., Hussain, S., Chen, X., Bennet, I. J., Mather, M., Hu, X., **Seitz**, A. R. & Peters, M. A. K. Computational fMRI Reveals Separable Representations Of Stimulus and Choice In Auditory Cortex: A Tool for Studying the Locus Coeruleus Circuit. *Proceedings Conference on Cognitive Computational Neuroscience* (2019).
36. Hussain, S., Alizadeh Shalchy, M., Yaghoubi, K., Langley, J., Chen, X., Bennett, I. J., Huang, R., Clewett, D., Nielson, S. E., Velasco, R., Kennedy, B., Han, S., Hu, K., **Seitz**, A. R., Zhang, N., Mather, M., Hu, X. & Peters, M. A. K. Locus Coeruleus Engagement Drives Network Connectivity Dynamics. *Proceedings Conference on Cognitive Computational Neuroscience* (2019).
37. Yetton, Revord, Margolis, Lyubomirsky, **Seitz** (2019), "Cognitive and Physiological Measures in Well-Being Science: Limitations and Lessons", *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2019.01630>
38. Valton, Karvelis, Richards, **Seitz**, Lawrie, Series (2019), "Acquisition of visual priors and induced hallucinations in chronic schizophrenia", *Brain*, Volume 142, Issue 8, August 2019, Pages 2523–2537, <https://doi.org/10.1093/brain/awz171>; also on BioRxiv, doi: <https://doi.org/10.1101/498568>
39. Pergher, Shalchy, Pahor, Van Hulle, Jaeggi, **Seitz** (2019), "Divergent research methods limit understanding of working memory training", *Journal of Cognitive Enhancement*, <https://doi.org/10.1007/s41465-019-00134-7>
40. Waris, Jaeggi, **Seitz**, Lehtonen, Soveri, Lukasik, Söderström, Hoffing, Laine (2019), "Video gaming and working memory: a large-scale cross-sectional correlative study", *Computers in Human Behavior*, Volume 97, August 2019, Pages 94-103
41. Vlahou, **Seitz**, & Kopco (2019), "Nonnative Implicit Phonetic Training in Multiple Reverberant Environments", *Attention, Perception, & Psychophysics*, Volume 81, Issue 4, pp 935–947
42. Green, Bavelier, Kramer, Vinogradov, Ansorge, Ball, Bingel, Chein, Colzato, Edwards, Facoetti, Gazzaley, Gathercole, Ghisletta, Gori, Granic, Hillman, Hommel, Jaeggi, Kanske, Karbach, Kingstone, Kliegel, Klingberg, Kahn, Levi, Mayer, McLaughlin, McNamara, Morris, Nahum, Newcombe, Panizzutti, Prakash, Rizzo, Schubert, **Seitz**, Short, Singh, Slotta, Strobach, Thomas, Tipton, Tong, Vlach, Wetherell, Wexler, & Witt (2018), "Improving Methodological Standards in Behavioral Interventions for Cognitive Enhancement", *Journal of Cognitive Enhancement*, Volume 3, Issue 1, pp 2–29
43. Pahor, Jaeggi, **Seitz** (2018), "Validation of a Matrix Reasoning Task for Mobile Devices diseases", *Behavior Research Methods*, <https://doi.org/10.3758/s13428-018-1152-2>
44. Maniglia & **Seitz** (2018), "A new look at visual system plasticity", *Trends in Cognitive Psychology*, Volume 23, Issue 2, February 2019, Pages 82-83

45. Thurman, Maniglia, Davey, Biles, Visscher, **Seitz** (2018), "Multi-line Adaptive Perimetry (MAP): A new procedure for quantifying visual field integrity for rapid assessment of macular diseases", *Translational Vision Science and Technology*, 16;7(5):28. doi: 10.1167/tvst.7.5.28. eCollection 2018 Sep.
46. Wenliang & **Seitz** (2018), "Deep neural networks for modeling visual perceptual learning", *Journal of Neuroscience*, 23 May 2018, 1620-17
47. Karvelis, **Seitz**, Lawrie, Series (2018), "Autistic traits, but not schizotypy, predict increased weighting of sensory information in Bayesian visual integration", *eLife*, 7, e3411
48. Gallun, **Seitz**, Eddins, Molis, Stavropoulos, Jakien, Kampel, Diedesch, Hoover, Bell, Souza, Sherman, Calandruccio, Xue, Tarleb, Sebena, Srinivasan (2018), "Development and validation of Portable Automated Rapid Testing (PART) measures for auditory research", *Proceedings of Meetings on Acoustics*, 33, 050002 <https://doi.org/10.1121/2.0000878>
49. **Seitz**, A. 2018. "Tricking our brains to learn and remember.", *Psychological Science Agenda*, Sept. 2018
50. Maniglia, Thurman, Davey, & **Seitz** (2018), "Effect of Varying Levels of Glare on Contrast Sensitivity Measurements of Young Healthy Individuals Under Photopic and Mesopic Vision ", *Frontiers in Psychology*, 2018; 9: 899.
51. Narender, Salazar, McDevitt, **Seitz** (2018), Does Napping Boost Benefits of Brain-Training for Working Memory?, *UCR Undergraduate Research Journal*, p.75-82, 1,1
52. Sotiropoulos, **Seitz** & Series (2018), "Performance-monitoring integrated reweighting model of perceptual learning", *Vision Research*, Apr 24. pii: S0042-6989(18)30039-7.
53. Pahor, Jaeggi & **Seitz** (2018), "Brain Training", eLS, John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0028037
54. Pazzani, Feghahati, Shelton & **Seitz** (2018), "Explaining Contrasting Categories", *Workshop on Explainable Smart Systems (ExSS) at Intelligent User Interfaces*
55. Cohen Hoffing, Karvelis, Ruppel, Series & **Seitz** (2018), "The Influence of Feedback on Task-Switching Performance: A Drift Diffusion Modeling Account ", *Frontiers in Integrative Neuroscience*, 12(1)
56. Maniglia & **Seitz** (2018), "Towards a whole brain model of Perceptual Learning ", *Current Opinion in Behavioral Sciences*, 20, 47-55
57. **Seitz** (2017), "A new framework of design and continuous evaluation to improve brain training", *Journal of Cognitive Enhancement*, 2 (1), 78-87
58. **Seitz** (2017), "Primer: Perceptual Learning", *Current Biology*, 27 (13), R631-R636
59. Mohammed, Flores, Deveau, Cohen Hoffing, Phung, Parlett, Sheehan, Lee, Au, Buschkuehl, Zordan, Jaeggi, & **Seitz** (2017), "The Benefits and Challenges of Implementing Motivational

Features to Boost Cognitive Training Outcome", *Journal of Cognitive Enhancement*, 1(4), pp 491–507

60. Protopapas, Mitsi, Koustoumbardis, Tsitsopoulou, Leventi, **Seitz** (2017), "Incidental orthographic learning during a color detection task", *Cognition*, 166, 251-271
61. Waris, Soveri, Ahti, Hoffing, Ventus, Jaeggi, **Seitz**, Laine (2017), "A Latent Factor Analysis of Working Memory Measures Using Large-Scale Data", *Frontiers in Psychology*, 8, 1062
62. **Seitz** (2017), "Generalizable Learning: Practice Makes Perfect — But at What?", *Current Biology*, 27 (6), R225-R227
63. Thurman, Davey, McCray, Paronian and **Seitz** (2016), "Predicting Individual Contrast Sensitivity Functions from Acuity and Letter CS Measurements", *Journal of Vision*, 16 (15), 15-15
64. Zhou, Nanez, Zimmerman, Holloway, **Seitz** (2016), "Two Visual Training Paradigms Associated with Enhanced Critical Flicker Fusion Threshold", *Frontiers in Psychology*, 7, 1597
65. Bays, Turk-Browne and **Seitz** (2016), "Dissociable behavioral outcomes of visual statistical learning", *Visual Cognition*, 23 (9-10), 1072-1097
66. Butler, P.D., Thompson, J.L., **Seitz**, A.R., Deveau, J., & Silverstein, S.M. (2017). Visual perceptual remediation for schizophrenia: Rationale, method, and three case studies. *Psychiatric Rehabilitation Journal*, 40, 43-52.
67. Green and **Seitz** (2015), "The Impacts of Video Games on Cognition (and How the Government Can Guide the Industry) ", *Policy Insights from the Behavioral and Brain Sciences*, 2 (1), 101-110
68. Gori, **Seitz**, Ronconi, Franceschini, and Facoetti (2015), "Multiple causal links between magnocellular-dorsal pathway deficit and developmental dyslexia", *Cerebral Cortex*, 26 (11), 4356-4369
69. Talluri, Hung, Seitz, and Series (2015), "Confidence-based integrated reweighting model of task-difficulty explains location-based specificity in perceptual learning", *Journal of Vision*, 15 (10), 17-17
70. Bays, Visscher, Le Dantec and **Seitz** (2015). "Alpha-Band EEG Activity in Perceptual Learning", *Journal of Vision*, 15 (10), 7-7
71. Barakat, **Seitz** and Shams (2015). "Visual Rhythm Perception Improves Through Auditory, But Not Visual, Training", *Current Biology*, Vol. 25, Issue 2, R60-R61
72. Deveau, Jaeggi, Zordan, Phung, and **Seitz** (2015). "How to build better memory training games", *Frontiers in Systems Neuroscience*, doi: 10.3389/fnsys.2014.00243
73. Gekas, **Seitz**, and Series (2015). "Expectations developed over multiple timescales facilitate visual search performance", *Journal of Vision*, 15(9):10. doi: 10.1167/15.9.10.

74. Kim, **Seitz**, Watanabe (2015). "Visual perceptual learning by operant conditioning training follows rules of contingency", *Visual Cognition*, 2015 Jan-Feb;23(1-2):147-160.
75. Hoffing and **Seitz** (2014). "Pupillometry as a glimpse into the neurochemical basis of human memory encoding", *Journal of Cognitive Neuroscience*, Vol. 27, No. 4: 765-774
76. Hung and **Seitz** (2014). "Prolonged Training at Threshold Promotes Robust Retinotopic Specificity in Perceptual Learning", *Journal of Neuroscience*, 34(25): 8423-8431
77. Leclercq, Hoffing, **Seitz** (2014). "Uncertainty in fast-task-irrelevant perceptual learning boosts learning of images in women but not men." *Journal of Vision*, 14(12):26, 1-12
78. Deveau and **Seitz** (2014). "Applying Perceptual Learning to achieve practical changes in vision.", *Frontiers in Psychology*, 5:1166. doi: 10.3389/fpsyg.2014.01166
79. Sotiropoulos, **Seitz**, Series (2014). "Contrast dependency and prior expectations in human speed perception", *Vision Research*, Vol 97, 16-23
80. Deveau, Lovcik, and **Seitz** (2014). "Applications of Perceptual Learning to Ophthalmology", *Ophthalmology - Current Clinical and Research Updates*, DOI: 10.5772/58364
81. Deveau, Lovcik, and **Seitz** (2014). "The therapeutic benefits of perceptual learning", *Current Trends in Neurology*, Vol 7, 39-49.
82. Yarrow, Razak, **Seitz**, and Series (2014). "Detecting and Quantifying Topography in Neural Maps", *PLoS ONE*, DOI: 10.1371/journal.pone.0087178
83. Deveau, Ozer and **Seitz** (2014). "Improved Vision and On Field Performance in Baseball through Perceptual Learning", *Current Biology*, 24(4), R146-7
84. Leclercq, Le Dantec, and **Seitz** (2014). "Encoding of episodic information through fast Task-Irrelevant Perceptual Learning", *Vision Research*, Jun;99:5-11.
85. Deveau, Lovcik, and **Seitz** (2014). "Broad-based visual benefits from training with an integrated perceptual-learning video game", *Vision Research*, Jun;99:134-40.
86. Holloway, Nanez and **Seitz** (2013). "Word-decoding as a function of temporal processing in the visual system", *PLoS ONE*, <https://doi.org/10.1371/journal.pone.0084010>.
87. Barakat, **Seitz**, and Shams (2013). "The effect of statistical learning on internal stimulus representations: Predictable items are enhanced even when not predicted", *Cognition*, Vol. 129: p.205-2011
88. Series and **Seitz** (2013). "Learning what to expect (in visual perception)", *Frontiers in Human Neuroscience*, doi: 10.3389/fnhum.2013.00668.
89. Hládek, Le Dantec, Kopčo, and **Seitz** (2013). "Ventriloquism effect and aftereffect in the distance dimension", *Proceedings of Meetings on Acoustics*, 19, 050042:1-6.

90. Welch and **Seitz** (2013). "Processing Irrelevant Location Information: Practice and Transfer Effects in a Simon task", *PLoS ONE*, <https://doi.org/10.1371/journal.pone.0064993>.
91. Jackson, Cook, **Seitz** (2013). "Context is quick, knowledge is slow: rapid time-course of contextual modulations in the horizontal-vertical illusion", *Perception and Motor Skills*, Apr;116(2):491-503.
92. Gekas, Chalk, **Seitz** and Seriès (2013), "Complexity and specificity of experimentally induced expectations in motion perception", *Journal of Vision*, Vol.13, 8. doi:10.1167/13.4.8
93. **Seitz** (2013). "Cognitive Neuroscience: Targeting Neuroplasticity with Neural Decoding and Biofeedback", *Current Biology*, Volume 23, Issue 5, 4 March 2013, Pages R210-R212
94. Leclercq and **Seitz** (2012). "The impact of orienting attention in fast task-irrelevant perceptual learning", *Attention, Perception, & Psychophysics*, May, 74(4), 658-60.
95. Le Dantec and **Seitz** (2012). "High Resolution, High Capacity, Spatial Specificity in Perceptual Learning", *Frontiers in Psychology*, July 3(222), 1-7.
96. Leclercq and **Seitz** (2012). "Enhancement from targets and suppression from cues in fast task-irrelevant perceptual learning", *Acta Psychologica*, Sept. 141(1), 31-8.
97. Leclercq and **Seitz** (2012). "Fast-TIPL Occurs for Salient Images Without a Memorization Requirement in Men but not in Women", *PLoS ONE*, Apr. 7(4):e36228. Epub 2012.
98. Le Dantec, Melton, and **Seitz** (2012). "A triple dissociation between learning of target, distractors and spatial contexts", *Journal of Vision*, Feb 3;12(2).
99. Kaufman, Green, **Seitz**, and Burgess (2012). "Using a Self-Organizing Map (SOM) and the Hyperspace Analog to Language (HAL) model to identify patterns of syntax and structure in the songs of humpback whales", *International Journal of Comparative Psychology*, 25, 237-275.
100. Vlahou, Protopapas, **Seitz** (2012). "Implicit Training of Nonnative Speech Stimuli", *Journal of Experimental Psychology: General*, May;141(2):363-81.
101. Sotiropoulos, **Seitz**, Series (2011). "Changing expectations about speed alters perceived motion directions", *Current Biology*, Volume 21, Issue 21, R883-R884.
102. **Seitz** (2011). "Perceptual Learning; Stimulus Specific Learning From Low-level Visual Plasticity?", *Current Biology*, Volume 21, Issue 19, R814-R815
103. Shams, Wozny, Kim, **Seitz** (2011). "Influences of multisensory experience on subsequent unisensory processing", *Frontiers in Perception Science*, 2:264.
104. Yotsumoto, **Seitz**, Shimojo, Sakagami, Watanabe, Sasaki (2011). "Performance dip in motor response induced by task-irrelevant weaker coherent visual motion signals", *Cerebral Cortex*, Aug, 22 (8), 1887-93.

105. Batson, Beer, **Seitz**, Watanabe (2011). "Spatial Shifts of Audio-visual Interactions by Perceptual Learning Are Specific to the Trained Orientation and Eyes", *Seeing and Perceiving*, 24(6):579-94.
106. Hung and **Seitz** (2011). "Retrograde Interference in Perceptual Learning of a Peripheral Hyperacuity Task", *PLoS ONE* 6(9): e24556.
107. Leclercq and **Seitz** (2011). "Fast task-irrelevant perceptual learning is disrupted by sudden onset of central task elements", *Vision Research*, May 15;61:70-6.
108. Grady, Marie-Pierre, **Seitz** (2011). "Segmentation from a box", *ICCV. 2011*.
109. Sotiropoulos, **Seitz**, Series (2011). "Perceptual learning in visual hyperacuity: A reweighting model", *Vision Research*, Volume 51, Issue 6, 25 March 2011, Pages 585-599.
110. **Seitz** (2011). "Task-Irrelevant Perceptual Learning", *Encyclopedia of the Sciences of Learning*, in press.
111. Dobres and **Seitz** (2010). "Perceptual Learning of Oriented Gratings as Revealed by Classification Images", *Journal of Vision*, Vol. 10, No. 13, DOI: 10.1167/10.13.8.
112. **Seitz** (2010). "Sensory Learning: Rapid Extraction of Meaning from Noise", *Current Biology*, Volume 20, Issue 15, R643-R644
113. Chalk¹, **Seitz**¹, Series (2010). "Rapidly learned stimulus expectations alter perception of motion", *Journal of Vision*, 10(8), 2.
114. **Seitz**¹, Protopapas¹, Tsushima¹, Vlahou, Gori, Grossberg, Watanabe (2010). "Unattended exposure to components of speech sounds yields same benefits as explicit auditory training", *Cognition*, 115(3), 435-443
115. Pilly, Grossberg, **Seitz** (2009). "Low-level sensory plasticity during task-irrelevant perceptual learning: Evidence from conventional and double training procedures", *Vision Research* 50(4), 424-432.
116. **Seitz** and Watanabe (2009). "The Phenomenon of Task-Irrelevant Perceptual Learning", *Vision Research*, Vol 49 (21), Oct. 2009, Pages 2604-2610
117. Choi, **Seitz**, Watanabe (2009). "When Attention Interrupts Learning: Inhibitory Effects of Attention on TIPL", *Vision Research*, *Vision Research*, Vol 49 (21), Oct. 2009, Pages 2604-2610
118. Franko, **Seitz**, Vogels (2009). "Dissociable neural effects of long term stimulus-reward pairing in macaque visual cortex", *Journal of Cognitive Neuroscience*, July 2010, Vol. 22, No. 7, Pages 1425-1439.
119. Kim, **Seitz**, Feenstra, Shams (2009). "Testing Assumptions of Statistical Learning: Is it Long-term and Implicit?", *Neuroscience Letters*, 461(2), 11 Sept. 2009, Pages 145-149

120. Pilly and **Seitz** (2009). "What a difference a parameter makes: a psychophysical comparison of random dot motion algorithms", *Vision Research*, Vol 49, Issue 13, July 2009, Pages 1599-1612
121. **Seitz**¹, Kim¹, Watanabe (2009). "Rewards Evoke Learning of Unconsciously Processed Visual Stimuli in Adult Humans", *Neuron*, March, 12; 61, 700-7
122. **Seitz** and Watanabe (2008). "Is Task-Irrelevant Learning really Task-Irrelevant?", *PLoS ONE*, 3(11): e3792. doi:10.1371/journal.pone.0003792
123. Shams and **Seitz** (2008). "Benefits of multisensory learning", *Trends in Cognitive Science*, Nov (Vol 12(11)) 411-417
124. **Seitz**, Pilly, Pack (2008). "Interactions between contrast and spatial displacement in visual motion processing", *Current Biology*, Oct 14;18(19):R904-6
125. Tsushima¹, **Seitz**¹ and Watanabe (2008). "Task-irrelevant learning occurs only when the irrelevant feature is weak", *Current Biology*, Jun (Vol 18 (12)) R516-7
126. Kim¹, **Seitz**¹, and Shams (2008). "Benefits of Stimulus Congruency for Multisensory Facilitation of Visual Learning", *PLoS ONE*, 3(1): e1532. doi:10.1371/journal.pone.0001532
127. Nishina¹, **Seitz**¹, Kawato, Watanabe (2007). "Effect of spatial distance to the task stimulus on task-irrelevant perceptual learning of static Gabors", *Journal of Vision*, 7(13):2, 1-10
128. **Seitz**, Kim, Van Wassenhove, and Shams (2007). "Simultaneous and Independent Acquisition of Multisensory and Unisensory Associations" *Perception*, 36, 1445 - 1453.
129. **Seitz** and Dinse (2007), "A Common Framework for Perceptual Learning", *Current Opinion of Neurobiology*, April (17(2)) 148-153
130. **Seitz** (2007), Book review of "Visual Masking Time Slices Through Conscious and Unconscious Vision", *Neural Networks* by Bruno Breitmeyer and Haluk Ogmen, doi:10.1016/j.neunet.2007.05.002
131. **Seitz**, Nanez, Holloway, and Watanabe (2006). "Perceptual learning of motion leads to faster flicker perception", *PLoS ONE* 1(1): e28. doi:10.1371/journal.pone.0000028
132. **Seitz**, Nanez, Holloway, Tsushima, and Watanabe (2006). "Two cases requiring external reinforcement in perceptual learning", *Journal of Vision*, 6(9), 966-973
133. **Seitz**¹, Kim¹, Shams, (2006). Sound Facilitates Visual Learning, *Current Biology*, Jul (Vol 16 (14)) 1422-1427
134. Lee¹, **Seitz**¹, and Assad (2006), "Activity of Tonicly Active Neurons in the Monkey Putamen during Initiation and Withholding of Movement", *J. Neurophys*, Jan (Vol 95) 2391-2403

135. **Seitz**¹, Yamagishi¹, Werner¹, Goda, Kawato, Watanabe (2005). "Task specific disruption of perceptual learning", *PNAS*, Oct 3; 10.1073/pnas.0505765102
136. **Seitz**, Lefebvre, Watanabe, and Jolicoeur (2005). "The requirement of high-level processing in subliminal learning", *Current Biology*, Sep (Vol 15(18) R753-755).
137. **Seitz** and Watanabe (2005). "A unified model of perceptual learning", *Trends in Cognitive Science*, Jul (Vol 9(7) 329-334).
138. **Seitz**, Nanez, Holloway, Koyama, and Watanabe (2005), "Seeing what isn't there; the costs of perceptual learning", *PNAS*, Jun 21;102(25):9080-5
139. **Seitz**, Nanez, Holloway, and Watanabe (2005). "The effects of experience on Critical Flicker Fusion Thresholds", *Hum Psychopharmacol Clin Exp*, 20: 55-60.
140. **Seitz** and Watanabe (2003). "Is subliminal learning really passive?" *Nature*, Mar 6 (Vol 422(6927): 36).
141. *Grossberg and **Seitz** (2003). "Laminar Development of Receptive Fields, Maps, and Columns in Visual Cortex: The Coordinating Role of the Subplate." *Cerebral Cortex*, Aug (Vol (8): 852-863).
142. Mazzoni, Loftus, **Seitz**, and Lynn, (1999). "Changing beliefs and memories through dream Interpretation." *Applied Cognitive Psychology*, Apr (Vol 13(2): 125-144).

¹ Co-First Authors *Authorship is in Alphabetical order

Symposia Talks

- "Leveraging Mobile Technologies to enhance Cognitive Measurement and Training to achieve Real World Learning Outcomes", UC-NTU Symposium, 2019
- "Perceptual learning and video games: New ways to learn", Fall Vision Meeting, 2019
- "AI and the Brain: A KIBM Symposium", Kavli Institute for Brain and Mind, UC San Diego, 2019
- "Regulation of Brain Training", Banbury, Cold Spring Harbor, Direct to Consumer Neuroscience, 2018
- Panel, "Navigating the Challenges of University Technology Commercialization: A New Perspective", United States Association for Small Business and Entrepreneurship, 2018
- "The Promise of Brain Training Games", Games for Change, 2017
- "Brain Training, Fact Fiction or in Between", Games for Change, 2017
- "Conversation Roundtable on Using Technology- and non-Technology Based Interventions in Underserved Communities and Families", Society for Research in Child Development Biannual Conference, 2017
- "Mining for Gold: How to Work Around Traditional Research Funding Using Crowdfunding", Anxiety and Depression Association of America Annual Conference, 2017

“Different Visions Labs vs Practice”, VSP; Sports Vision Consortium, 2017

“How to Promote Transfer of Learning in Brain Training”, Society for Brain Mapping & Therapeutics, 2017

“The Promise of Brain Training Games”, US-UK Serious Games for Health Workshop 2016

“ Visual perceptual learning for athletes”, ESCoNS, 2015

“ Moving beyond a binary view of specificity in perceptual learning”, VSS 2015

“Perceptual Learning; specificity, transfer and how learning is a distributed process”, The Second Workshop and Lecture Series on Cognitive neuroscience of auditory and cross-modal perception, Košice, Slovakia, 2015

“Brain Training; How to train cognition to yield transfer to real world contexts”, The Second Workshop and Lecture Series on Cognitive neuroscience of auditory and cross-modal perception, Košice, Slovakia, 2015

“Applying neuroscience to produce broad-based benefits to vision”, International Eye Committee, 2014

“Applying neuroscience to produce broad-based benefits to vision”, Sabermetrics, Scouting and the Science of Baseball, 2014

“A New World of Brain Fitness”, World Summit on Innovation and Entrepreneurship, 2014

“The promise of brain training games as an approach to stave off cognitive decline in aging”, Annual German Conference of Psychology, 2014

“How attention and reinforcement guide perceptual learning.” APCV, 2013

“How attention and reinforcement guide perceptual learning.” Learning to Attend and Attending to Learn, 2013

“How Experience Shapes Perception; Environmental Statistics, Attention and Reinforcement”, Sensory processing: how the past affects the present, Paris, 2013

“Psychophysics: How attention and reinforcement guide perceptual learning.” International Graduate School of Neuroscience, Ruhr University Bochum, 2013

“Mechanisms of Human Perceptual Learning.” Brain Awareness Day, UCR, 2013

“When science meets gaming; a novel visual therapy.” ESCONS, 2013

“Task-Irrelevant Auditory Learning”, ESCOP, 2011.

“Disruption and Transfer of Perceptual Learning for Visual Hyperacuity”, VSS, 2011.

“Overcoming the Difficulties of Perceptual Learning”, VSS, 2006.

“How We Can Learn to See What Isn't There”, Implicit Processing in Visual Perception, Decision Making and Learning, APA, 2005.

“Rethinking the roles of attention in perceptual learning”, Windows into the dynamic brain *A mini-Symposium*, Department of Biomedical Engineering, Boston University, 2005.

Invited Talks

University of California, Irvine, 2019

Yale, 2018

Washington University, 2018

University of Minnesota, 2018

Boston University, 2018

USC School of Management, 2018

University Clinic Tübingen, 2017

University of Leuven, School of Medicine, 2017

Donders Research Institute, 2017

Ecole Normale Supérieure, 2017

Cambridge University, Psychology, 2017

Central European University, 2017

Army Research Labs, 2017

Vienna Acoustics Research Institute, 2017

Stanford University, 2017

Starkey Research, 2017

UCLA, Psychology, 2017

Geisinger Health, 2017

Loma Linda Hospital, 2017

Safarik University, Kosice, 2016

Oxford, Psychology, 2016

Ecole Normale Supérieure, 2016

University of Paris, Psychology, 2016

University of Oslo, Psychology, 2016

UC Davis, Mind Institute, 2016

UCSF, School of Medicine, 2016

Posit Scienc, 2016

Central European University, Department of Psychology, 2015

University of Montreal, Department of Psychology, 2015

University of Alabama, Birmingham, Department of Neurobiology, 2015

Italian Institute of Technology, Department of Psychology, 2014

SUNY, Department of Optometry, 2014

NYU, Department of Psychology, 2014

Peking University, Department of Psychology, 2014

Wuhan Sports University, 2014

Beckman Center, Nation Academy of Sciences, 2014

University of Washington, Department of Psychology, 2014

OHSU, Department of Audiology, 2014

Claremont, Department of Psychology 2014

University of Southern California, Department of Neuroscience, 2013

University of California, Los Angeles, Department of Psychology, 2013
University of California, Berkeley, Oxyopia Lecture 2013
University of California, Irvine, Department of Cognitive Science, 2013
Peking University, Department of Psychology, 2013
University of Leuven, Belgium 2013
Riverside STEM Academy, 2013
Western School of Optometry, 2012
University of California, Riverside, Program in Video Bioinformatics, 2012
University of California, Irvine, Department of Cognitive Science, 2011
University of California, San Diego, Department of Psychology 2011
University of California, Riverside, Department of Psychology 2011
Ruhr University Bochum, Institut für Neuroinformatik, 2010
University of Birmingham, School of Psychology, 2009
Newcastle University, Institute of Neuroscience, 2009
Ecole Polytechnique Federale Lausanne, Switzerland 2009
Ruhr University Bochum, International Graduate School of Neuroscience, 2009
University of Edinburgh, DTC Workshop Series, 2009
University of California, Santa Barbara, Department of Psychology 2009
University of California, Berkeley, Oxyopia Lecture 2009
University of California, Riverside, Neuroscience Seminar 2008
University of California San Diego, Department of Cognitive Sciences 2008
University of California Riverside, Department of Psychology 2008
University of Leuven, Belgium 2008
Massachusetts Institute of Technology, Department Brain and Cognitive Sciences 2007
University of Rochester, CVS Boynton Colloquium Series Presentation 2007
Ohio State University, Department of Psychology, 2007
University of California, Los Angeles, Department of Psychology, 2007
Tamagawa University, Japan 2006
University of California, Los Angeles, Department of Psychology, 2006
University of California, Los Angeles, Department of Psychology, 2005
Martinos Center, Massachusetts General Hospital, 2005
Cambridge University, England UK 2005
Advanced Telecommunications Research Institute International, Japan 2005
Denso Corporation, Japan, 2005
Boston University, Department of Psychology 2002

Conference Presentations

1. Maniglia, Visscher, Seitz, “Understanding peripheral looking strategies related to simulated preferred retinal loci”, ECVF 2019
2. Maniglia, Visscher, Seitz. “Oculomotor strategy classification in simulated central vision loss, VSS 2019
3. Leclercq and Seitz, Emotion Effect on Task Irrelevant Learning, ESCOP 2019
4. Valton, Karvelis, Richards, Seitz, Lawrie, Seriès, “Acquisition of visual priors and induced hallucinations in chronic schizophrenia”, BAP 2019
5. Bui, Gomez, Maniglia, Seitz, Davey, “Reliability of Testing Methodology Aimed to Measure

Visual Acuity and Contrast Sensitivity”, ARVO 2019

6. Thompson, Cherneski, Menon, Lebeaut, Seitz, Butler, & Silverstein, “Evaluation of a Visual Remediation Intervention for Schizophrenia: A Pilot Study”, SIRS, 2019
7. Lee, Maniglia, Velez, Demer, Pineles, Seitz, "Effect of an Integrated Perceptual Learning Game on Visual Functions of Children with Amblyopia", AAPOS 2019
8. Gallun, Seitz, Stavropoulos, Eddins, Hoover, Jakien, Gordon, "Development and validation of a portable platform for auditory testing, ASA 2018
9. Seitz (2018), What is Perceptual Learning?, International Workshop on Perceptual Learning
10. Maniglia and Seitz (2018), Training peripheral vision after (real and simulated) central vision loss, International Workshop on Perceptual Learning
11. Maniglia, Biles, Visscher, Seitz (2018), Coordinated Attentional Training promotes generalization of learning in healthy and MD subjects, VSS
12. Chen, Langley, Seitz, Hu (2018), Video C3D features learned by deep network correlate with functional MRI signal variation associated with the video, ISMRM
13. Chen, Huang, Seitz, Hu, Mather (2018), "Handgrip squeeze increases locus coeruleus activity", OHBM
14. Hussain, Langley, Seitz, Peters, Hu (2018), Resting State Locus Coeruleus Functional Connectivity Profiles with Various Brain Networks, UCR Bioengineering Conference
15. Jacques and Seitz (2018), Using Eye Tracking to Develop Classification Images for Perceptual Learning, VSS
16. Saenz and Seitz (2018), Developmental Dyslexia: A holistic approach towards diagnosing and rehabilitating, UCR Undergraduate Research Symposium
17. Yao and Seitz (2018), Applications of Video Game Design to Working Memory Training, UCR Undergraduate Research Symposium
18. Bui and Seitz (2018), Testing the Efficacy of Lutein and Zeaxanthin on Training of Vision and Cognitive Function, UCR Undergraduate Research Symposium
19. Gallun, Seitz, Vallier, Lewis (2018), Designing rehabilitative experiences for virtual, mixed, and augmented reality environments, ASA18
20. Gallun, Seitz, Eddins et al (2018), Portable Automated Rapid Testing (PART) measures for auditory research, ASA18
21. Seitz (2018), Deriving lessons from Perceptual Learning to promote transfer in Working Memory training, UCI Conference on Learning and Memory
22. Pahor, Stavropoulos, Casey, Jaeggi, Seitz (2018), Effects of Gamification on Working Memory Training Outcomes, LaP2018
23. Gallun, F.J, Seitz, A., Stavropoulos, T., Eddins, D., Hoover, E., Gordon, S., Molis, M., Jakien, K., Diedesch, A. (2017). Development and validation of a portable platform for auditory testing. *174th Meeting of the Acoustical Society of America*, New Orleans, LA
24. Gallun, F. J., Jakien, K., Srinivasan, N., Seitz, A., Kampel, S., & Stansell, M. (2017). Normative data for assessing performance on a rapid, automated test of speech-on-speech masking and spatial

release from masking. *173rd Meeting of the Acoustical Society of America*, Boston, MA.

25. Sandeep, Shelton, Seitz (2017). User Performance Predictions in Cognitive Training. SoCal Machine Learning Symposium. USC. Conference/Meeting Date: 10/06/2017.
26. Sandeep, Shelton, Seitz (2017). User Performance Predictions in Cognitive Training. Workshop on Women in Machine Learning
27. Mohammed, Flores, Deveau et al., (2017), The Benefits and Challenges of Implementing Motivational Features to Boost Cognitive Training Outcome, Psychonomics Society
28. Lelo de Larrea-Mancera and Seitz (2017), Dissociable Outcomes of Tactile Perceptual Learning for Simple vs Complex Stimuli, Psychonomics Society
29. Cohen-Hoffing and Seitz (2017), The Influence of Feedback on Task Switching Training: A Drift Diffusion Modeling Account, Psychonomics Society
30. Seitz, (2017), Training effective use of peripheral vision in Macular Degeneration, Annual Interdisciplinary Conference
31. Diep, Healy, Ng, Seitz, Davey (2017), Effect of glare on contrast sensitivity function, Association for Research in Vision and Ophthalmology Annual Conference
32. Healy, Ng, Diep, Seitz, Davey (2017), Comparison of contrast sensitivity in photopic and mesopic conditions Association for Research in Vision and Ophthalmology Annual Conference
33. Hladek, Seitz, Kopco (2017), Adaptation in distance perception induced by audio-visual stimuli with spatial disparity Acoustical Society of America Annual Conference
34. Seitz (2017), How to Achieve, and Measure, Transfer in Brain Training, Extended Learning Network, Annual Conference
35. Protopapas, Mitsi, Koustoumbardis, Tsitsopoulou, Leventi, Seitz (2017), Incidental orthographic learning during a color detection task, SSSR
36. Demmin, D., Rochè, M., Davis, Q., Seitz, A., Menon, A., & Silverstein, S. (2017). Abnormal retinal functioning in schizophrenia and its relationship to performance on low- and mid-level visual processing tasks. *Journal of Vision*, 17, 663. doi:10.1167/17.10.663.
37. Demmin, D., Roché, M., Davis, Q., Seitz, A., Menon, A., & Silverstein, S. (2017, May). Abnormal retinal functioning in schizophrenia and its relationship to performance on low- and mid-level visual processing tasks. Poster presented at the meeting of the Vision Sciences Society, St. Petersburg, FL.
38. Maniglia, Deloss, Biles, Visscher, Seitz (2017), Beyond classic Perceptual learning: Coordinated attentional training to boost learning and generalization, VSS
39. Jacques and Seitz (2017), Moderating Effects of Visual Attention and Action Video Game Play on Perceptual Learning, VSS
40. Shima, Visscher, Griffis, Seitz, Yotsumoto (2017), Transcranial electric stimulation (tES) to early visual areas alters large-scale functional connectivity, VSS
41. Demmin, Roche, Davis, Seitz, Silverstain (2017), Abnormal Retinal Functioning in Schizophrenia and its Relationship to Performance on Low- and Mid-Level Visual Processing Tasks, VSS
42. Gallun, F.J., Gordon, S.Y., Stavropoulos, T., Seitz, A., Hoover, E.C., Eddins, D.E. (2017)

“Evaluating the Apple iPad as a Platform for Psychoacoustic Research” Games for Change Festival, New York, NY

43. Mohammed, Flores, Deveau, Cohen Hoffing, Phung, Parlett, Sheehan, Lee, Au, Buschkuehl, Zordan, Jaeggi, & Seitz, A. (2017). *The benefits and challenges of implementing motivational features to boost cognitive training outcome*. Games for Change Festival, New York, NY
44. Hládek, L., Seitz, A., & Kopčo, N. (2017) “Adaptation in distance perception induced by audio-visual stimuli with spatial disparity” (abstract; poster) (ASA meeting 2017, Boston).
45. Gallun, F.J. and Seitz, A. (2016) “Developing games to improve auditory processing abilities” *Invited Seminar*, P.J. Šafárik University, Košice, Slovakia (simultaneously webcast to Vienna, Austria and Boston, MA, USA)
46. Papesh, M., Gallun, F., Seitz, A. (2016). “Auditory Training Game”. Sensation Perception Learning And Training Conference, Boston University, Boston, MA.
47. Hládek, L., Seitz, & Kopčo, N. (2016). “Modeling the Integration of Audio-Visual Distance Information” presented at the 39th MidWinter meeting of the Association for Research in Otolaryngology, 20 – 24 February, San Diego, CA. (abstract,poster)
48. Vlahou, Seitz, Kopčo (2015), Nonnative Phonetic Category Training in Varying Acoustic Environments, ASA
49. Deveau, Phung, Flores, Cohen-Hoffing, Davis, Zordan, Seitz (2015), Applying Video Game Design and Principles of Perceptual Learning to Working Memory Training in Older Adults, ESCoNS
50. Phung, Deveau, Jaeggi, Buschkuehl, Au, Seitz, Zordan (2015), Applying Game Design in Cognitive Training for Working Memory, ESCoNS
51. Hladek, Seitz, Kopco (2015), Learning of Intensity and Reverberation Cues for Auditory Distance Perception in Rooms, NeuroHAM
52. Davey, McRay, Thurman, and Seitz (2015), Sensitivity of various tests of contrast sensitivity to detecting visual impairment, AAO
53. Seitz (2015), Better Batting through Perceptual Learning, AIC
54. Thurman, Davey, and Seitz (2015), Correcting for measurement bias in contrast sensitivity testing, AAO
55. Thurman, Davey, and Seitz (2015), Improving computerized tests for detecting visual field deficits in AMD, AAO
56. Gori, Seitz, Ronconi, Franceschini, Facchetti (2015), The causal link between magnocellular-dorsal path- way functioning and dyslexia, VSS

57. Hongjing, Seitz, Thurman (2015), Visual Tuning for Perceptual Animacy and its Influence on Multiple Object Tracking, VSS
58. Bays and Seitz (2015), Classifying EEG patterns of visual statistical learning Brett Bays, VSS
59. Sotiropoulos, Seitz, Seriès (2015), A reward-driven reweighting model of perceptual learning, VSS
60. McCray, Paronian, Seitz and Davey “Clinical assessment of Landolt C CSF test of the M&S Smart System contrast sensitivity testing device.” Invest Ophthalmol Vis Sci, 2015; 55: E-Abstract 3902
61. Babakhan, Parfenova, Ha, Maeda, Thurman, Seitz, Davey “Repeatability of measurements obtained using the quick CSF method” Invest Ophthalmol Vis Sci, 2015; 55: E-Abstract 3901
62. Davey, Maeda, Seitz “Assessment of Evans low contrast sensitivity in measuring log contrast sensitivity.” Invest Ophthalmol Vis Sci, 2015; 55: E-Abstract 3903
63. Deveau, Ozer, and Seitz (2014). "Better Batting Through Perceptual Learning", Vision Science Society Annual Conference
64. Hoffing and Seitz (2014). "Investigating Neurochemical Involvement in Task-Irrelevant Perceptual Learning using Pupillometry", Vision Science Society Annual Conference
65. Bays, Visscher, Le Dantec and Seitz (2014). "Alpha-band EEG activity as a signature of automaticity in perceptual learning", Vision Science Society Annual Conference
66. Saygi, Dinse, Seitz (2014), Crossmodal perceptual learning in the tactile system after visual training, FENS
67. Shams, Wozny, Kim, Seitz (2014), Multisensory experience shapes unisensory processing, IMRF
68. Vhalou, Seitz, Kopco (2014), “Adaptation to Room Reverberation in Nonnative Phonetic Training”, ARO
69. Hladek, Le Dantec, Seitz, Kopco, (2014) “Visual calibration of auditory distance perception”, ARO
70. Nikos Gekas, Aaron R. Seitz, Peggy Seriès (2014), “Rapidly learned spatial expectations interact with repetition priming and long-term structural priors to facilitate performance in a visual search task”, Cosyne
71. Seitz (2014), Specificity and Generality of Perceptual Learning, 4th International Workshop on Perceptual Learning, Switzerland
72. Barakat, Seitz and Shams (2013), Visual rhythm perception is facilitated by multisensory (but not unisensory) training, SFN
73. Bays, Bula, LeDantec and Seitz (2013), BDNF val66met polymorphism is associated with differential learning in a statistical learning paradigm, SFN

74. Hladek, Le Dantec, Kopco, and Seitz (2013), "Ventriloquism effect and aftereffect in the distance dimension", ASA
75. Hladek, Tomonova, Seitz and Kopco (2013), "Rapid recalibration of auditory distance perception in reverberant environments", ARO
76. Welch and Seitz (2014), "Practice and Transfer Effects: Implications for development of computer-based training." ADEA
77. Hung and Seitz (2013), "Spatial Specificity in a 3-dot Hyperacuity Task after Double Training", VSS
78. Deveua, Lovcik, and Seitz (2013), "Visual Improvements Through the Perceptual Learning Based Training Program ULTIMEYES™", VSS
79. Bays, Turk-Browne, and Seitz (2013), "Dissociating Behavioral Outcomes of Visuo-temporal Statistical Learning", VSS
80. Yarrow, Razak, Seitz, Series (2013), "Detecting and quantifying topographic order in neural maps" COSYNE
81. Deveau, Lovcik, Seitz (2013), "Visual Improvements Through the Perceptual Learning Based Training Program UltimEyes", ESCONs 2.0
82. Seitz (2012), "Two Stories of Fast-Implicit Learning", 3rd International Workshop on Perceptual Learning
83. Seitz (2012), "The Phenomenon of Task-Irrelevant Perceptual Learning", CVS Symposium on Computational Foundations of Perception and Action
84. Seitz and Leclercq (2012), "Fast Task-Irrelevant Learning: How different types of attention and task-relevance impact memorization of rapidly presented images", VSS
85. Barakat, Seitz, and Shams (2012), "There is more to statistical learning than associative learning; Predictable items are enhanced even when not predicted", VSS
86. Gekas, Seitz, and Series (2012), "Investigating the specificity of experimentally induced expectations in motion perception", VSS
87. Sotiropoulos, Seitz and Series (2012), "How plastic is the "slow speeds prior" Cosyne
88. LeDantec and Seitz (2011), "Orientation and location specificities in the co-development of perceptual learning and contextual learning", ECVF
89. LeDantec and Seitz (2011), "Perceptual and contextual learning of a visual search", VSS
90. Kopčo, Silvera, Tskhay, Tomoriová, and Seitz (2011), "Learning of reverberation cues for auditory distance perception in rooms", ASA
91. Klein, Carney, Levi, Yu, Seitz (2011), "Modelfest for Perceptual Learning", VSS
92. Kim, Berard, Seitz, Watanabe (2011), "The role of contiguity and contingency in visual perceptual learning", VSS
93. Seitz, "Task-Irrelevant Auditory Learning" (2011), 2nd International Workshop on Perceptual Learning
94. LeDantec and Seitz (2010), "Perceptual and contextual learning of a visual search", SFN

95. LeDantec and Seitz (2010), "The co-development of Perceptual Learning and Contextual Learning in a visual search task", ECVF
96. Seitz, Chalk, Series (2010), "Rapidly learned expectations alter perception of motion", VSS
97. Kim, Seitz, Watanabe (2010), "Different properties between reward-driven exposure-based and erward-driven task involved perceptual learning", VSS
98. Náñez, Reyes, Fabian, Ojeda, Dominguez, Berber, Gil-Faddis, Ucelo, Davis, and Seitz (2010), "Effects of Trial Number and Time Differences on Visual Perceptual Learning", WPA
99. Razak and Seitz (2010). "A cortical population code for sound locations", ARO
100. Khafi and Seitz (2010), "The Effects of Caffeine And Nicotine On Learning", UCR Undergraduate Research Symposium
101. Sotiropoulos, Seitz, Series (2009)," Perceptual learning in visual hyperacuity: a reweighting model", BCCN
102. Chalk, Seitz, Series (2009), "Feature-based attention biases perception of motion direction" BCCN
103. Pilly, Seitz and Grossberg (2009). Contrast polarity-specific learning of motion in the absence of attention. Proceedings of the 13th International Conference on Cognitive and Neural Systems (ICCNS), Boston MA, May.
104. Seitz, Pilly and Pack, C.C. (2009). Can lowering the contrast of a moving stimulus improve the perception of its motion direction? Proceedings of the 13th International Conference on Cognitive and Neural Systems (ICCNS), Boston MA, May.
105. Dobres and Seitz (2009) "Perceptual Learning of Noisy Oriented Gratings as Revealed by Classification Images" VSS
106. Pilly, Seitz and Grossberg (2009). "Where in the motion pathway does task-irrelevant perceptual learning occur?" VSS
107. Seitz, Pilly and Pack (2009) "Reducing contrast improves direction estimation at low speeds", VSS
108. Vlahou, Seitz, Protopapas (2009), Implicit learning of non-native speech stimuli, ASA
109. Tsushima, Seitz, and Watanabe (2008). The role of attention in perceptual learning. NIN, Amsterdam, Netherlands
110. Seitz (2008). The role of reward in perceptual learning, First Annual Workshop in Perceptual Learning, Beijing China.
111. Wozny, Seitz, & Shams (2008) Learning associations between simple visual and auditory features, VSS
112. Kim, Seitz, & Watanabe (2008) Reward contingency on perceptual learning does not follow rules of classical conditioning, VSS
113. Tsushima, Seitz, & Watanabe (2008) Task-irrelevant perceptual learning occurs only when the irrelevant feature is weak, VSS
114. Kim, Seitz, & Shams (2008) Neural mechanisms of multisensory perceptual learning, VSS

115. Seitz, Kim, Watanabe, (2007), "Reward driven, ocular specific, learning of orientation in the absence of awareness", SFN
116. Franko, Seitz, Vogels, (2007), "Effect of stimulus-reinforcement pairing on the local field potentials for suprathreshold, ipsilateral stimuli in macaque visual cortex"
117. Kim, Seitz, Shams, (2007), "Congruent sound facilitates visual perceptual learning", SFN
118. Bartfield, Jourdani, Yorio, Zanutto, Seitz, (2007), "Reward driven learning of associative-rules in the absence of awareness", SFN
119. Kim, Seitz, Watanabe, (2007), "Effect of Reward on Perceptual Learning", VSS
120. Batson, Beer, Seitz, Watanabe, (2007), "Specificity of Crossmodal Links in Exogenous Covert Orienting", VSS
121. Kim, Seitz, Shams (2007), "Visual Perceptual Learning Enhanced with Congruent Sound", VSS
122. Nishina, Seitz, Kawato, Watanabe (2007), "Subliminal visual feature is learned better when spatially closer to attended task", VSS
123. Franko, Seitz, and Vogels (2006), "Effect of stimulus-reinforcement pairing on the local field potentials in macaque visual cortex" SFN
124. Seitz (2006), "Reinforcement and Blinks in Perceptual Learning" ASIC
125. Holloway, Tsushima, Nanez, Watanabe, Seitz (2006), "Two Cases of a Requirement of External Reinforcement in Perceptual Learning", VSS
126. Kim, Seitz and Shams (2006), "Multisensory perceptual learning", VSS
127. Nández Sr., Holloway, Donahoe, & Seitz (2006), "Flicker Fusion as a Correlate of Word Decoding Ability", VSS
128. Shams, Wassenhove, Seitz (2006), "Audio-Visual Statistical Learning", VSS
129. Nishina, Seitz, Kawato, Watanabe (2006), "The spatio-temporal window of task-irrelevant perceptual learning", VSS
130. Seitz, Nández Sr., Holloway, and Watanabe (2006), "Perception learning of motion leads to faster-flicker perception", VSS
131. Yotsumoto, Seitz, Sasaki, Shimojo, Yamamoto, Kogure, Sakagami and Watanabe (2006), "Greater response conflict from weaker visual signals", VSS
132. Nishina, Seitz, Kawato, Watanabe (2005). "The spatial spread of task-irrelevant perceptual learning", SFN.
133. Holloway, Nanez, Seitz and Watanabe (2005). "The Relationship between Flicker Fusion and Subliminally Induced Neural Plasticity", OSA.
134. Holloway, Seitz, Nanez and Watanabe (2005). "Dorsal Stream Perceptual Learning is Highly Related to Critical Flicker Fusion Thresholds", OSA.
135. Holloway, Seitz, Nández. Watanabe (2005). "A Subliminal Experience can alter Critical Flicker Fusion", APS.
136. Seitz, Nanez, Holloway, Koyama, Watanabe (2005). "Seeing what isn't there; the costs of perceptual learning", VSS.

137. Lefebvre, Seitz, Watanabe, Jolicoeur (2005). "Learning Blinks During the Attentional Blink", VSS
138. Nanez, Seitz, Holloway, Koyama, Watanabe (2005). "Subliminal Perceptual Learning of Motion Results in Improvements of Critical Flicker Fusion Thresholds", VSS.
139. Yamagishi, Seitz, Werner, Kawato, Watanabe (2005). "Task specific disruption of perceptual learning", VSS.
140. Holloway, Seitz, Nanez, Engles, Watanabe (2004). "Critical Flicker Fusion Threshold as a Function of Subliminal Neural Plasticity", NAN.
141. Seitz, Nanez, Sasaki, Engles, Holloway, and Watanabe (2003). "Learning spillover to invisible dots?", ECVF.
142. Seitz and Watanabe (2003). How can subliminal perceptual learning be active? *Journal of Vision*, 3(9), 177a.
143. Seitz and Grossberg (2002). "A Neural Model of How the Cortical Subplate Coordinates the Laminar Development of Orientation and Ocular Dominance Maps." *ICCNIS*.
144. Seitz and Grossberg (2002). "How Do Laminar Circuits Develop? The Role of the Cortical Subplate in the Development and Laminar Coordination of Orientation and Ocular Dominance Maps in V1." *Journal of Vision*, 2(7), 100a.
145. Seitz and Grossberg (2001). "Coordination of Laminar Development in V1 by the Cortical Subplate." *Society for Neuroscience Abstracts*, 31, 619.12

Doctoral Dissertation

Seitz, A.R. (2002), "A Neural Model of How the Cortical Subplate Coordinates the Laminar Development of Orientation and Ocular Dominance Maps".

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