

Aaron Seitz  
Professor  
University of California Riverside

## CURRICULUM VITAE

### Contact Information

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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

2014-present Professor University of California - Riverside  
2014-present Director UCR Brain Game Center For Mental Fitness and Wellbeing

### Past Positions

2016-2017	Interim-Director	UCR Human Imaging Center
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

Psychology, Neuroscience, Biomedical Engineering, Biomedical Sciences, Computer Science

### 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

### Grants

NSF/PAC College of Reviewers, NSF Big Ideas, NIH – Central Visual Processing (CVP), Cognition and Perception (CP), NSF - Cognitive Neuroscience, AAAS, Netherlands Institute for Scientific Research, Research Foundation Flanders, Complexity

### Other

Vision Sciences Society Annual Conference, Review Committee, UCR Research Ethics Advisory Board

### **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 R61/R33 MH115119 (2018-2023; \$ 3,89,133) – Visual Remediation in Schizophrenia, (PI Buttler, coPI Seitz)

National Institute of Health R01MH111742 (2016-2021; \$ 1,929,278) – Understanding Mediating and Moderating Factors that Determine Transfer of Working Memory Training, (PI Seitz)

National Institute of Health R03HD94234 (2016-2021; \$ 150,000) – Brain training for central auditory dysfunction after traumatic brain injury, (PI Gallun, coPI Seitz)

National Institute of Health 1R01DC015051 (2016-2021; \$2,284,139) – Efficient diagnostic tools to evaluate central auditory dysfunction, (PI Gallun, 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 1R01EY023582 (2013-2018; \$1,777,418) – Integrating Perceptual Learning Approaches into Effective Therapies for Low Vision, (PI Seitz)

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

#### **Past**

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

Marie Curie (2010 – 2013, EUR 151,200) – Learn 2 Hear & See

PIs: Norbert Kopco, Peggy Series, Barbara Shinn-Cunningham, Aaron Seitz

National Institute Health (2004-2007; \$847,875) -The Mechanisms of Perceptual Learning

PI: Takeo Watanabe (Boston University); Co-PI: Aaron Seitz

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

PI: Takeo Watanabe (Boston University); Co-PI: Aaron Seitz

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

PI: Takeo Watanabe (Boston University); Co-PI: Aaron Seitz

Human Frontier Science group grant (2004-2007; \$480, 000) (PI – Watanabe)

Co-PIs: Wolfram Schultz (University of Cambridge), Rufin Vogels (University of Leuven), Masamichi Sakagami (Tamagawa University)

### **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).

### Peer Reviewed Journal Articles

1. Wenliang & **Seitz** (2018), "Deep neural networks for modeling visual perceptual learning", *Journal of Neuroscience*, in press
2. Karvelis, **Seitz**, Lawrie, Series (2018), "Autistic traits, but not schizotypy, predict increased weighting of sensory information in Bayesian visual integration", *eLife*, in press
3. 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*, in press
4. Narender, Salazar, McDevitt, **Seitz** (2018), Does Napping Boost Benefits of Brain-Training for Working Memory?, *UCR Undergraduate Research Journal*, p.75-82, 1,1
5. Sotiropoulos, **Seitz** & Series (2018), "Performance-monitoring integrated reweighting model of perceptual learning", *Vision Research*, in press
6. Pahor, Jaeggi & **Seitz** (2018), "Brain Training", *eLS*, in press

7. Pazzani, Feghahati, Shelton & **Seitz** (2018), "Explaining Contrasting Categories", Workshop on Explainable Smart Systems (ExSS) at Intelligent User Interfaces
8. Cohen Hoffing, Karvelis, Ruppachter, Series & **Seitz** (2017), "The Influence of Feedback on Task-Switching Performance: A Drift Diffusion Modeling Account ", *Frontiers in Integrative Neuroscience*, in press
9. Sotiropoulos, **Seitz** & Series (2017), "Performance-monitoring integrated reweighting model of perceptual learnin", *Vision Research*, in press
10. Maniglia & **Seitz** (2017), "Towards a whole brain model of Perceptual Learning ", *Current Opinion in Behavioral Sciences*, in press
11. **Seitz** (2017), "A new framework of design and continuous evaluation to improve brain training", *Journal of Cognitive Enhancement*, in press
12. **Seitz** (2017), "Primer: Perceptual Learning", *Current Biology*, in press
13. 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*, in press
14. Protopapas, Mitsi, Koustoumbardis, Tsitsopoulou, Leventi, **Seitz** (2017), "Incidental orthographic learning during a color detection task", *Cognition*, in press
15. Waris, Soveri, Ahti, Hoffing, Ventus, Jaeggi, **Seitz**, Laine (2017), "A Latent Factor Analysis of Working Memory Measures Using Large-Scale Data", *Frontiers in Psychology*, in press
16. **Seitz** (2017), "Generalizable Learning: Practice Makes Perfect — But at What?", *Current Biology*, in press
17. Thurman, Davey, McCray, Paronian and **Seitz** (2016), "Predicting Individual Contrast Sensitivity Functions from Acuity and Letter CS Measurements", *Journal of Vision*, in press
18. Zhou, Nanez, Zimmerman, Holloway, **Seitz** (2016), "Two Visual Training Paradigms Associated with Enhanced Critical Flicker Fusion Threshold", *Frontiers in Psychology*, in press
19. Bays, Turk-Browne and **Seitz** (2016), "Dissociable behavioral outcomes of visual statistical learning", *Visual Cognition*, in press
20. 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.
21. 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*, in press.
22. Gori, **Seitz**, Ronconi, Franceschini, and Facoetti (2015), "Multiple causal links between

- magnocellular-dorsal pathway deficit and developmental dyslexia", *Cerebral Cortex* , in press.
23. Talluri, Hung, Seitz, and Series (2015), "Confidence-based integrated reweighting model of task-difficulty explains location-based specificity in perceptual learning", *Journal of Vision*, in press
  24. Bays, Visscher, Le Dantec and **Seitz** (2015). "Alpha-Band EEG Activity in Perceptual Learning", *Journal of Vision*, in press
  25. Barakat, **Seitz** and Shams (2015). "Visual Rhythm Perception Improves Through Auditory, But Not Visual, Training", *Current Biology*, Vol. 25, Issue 2, R60-R61
  26. Deveau, Jaeggi, Zordan, Phung, and **Seitz** (2015). "How to build better memory training games", *Frontiers in Systems Neuroscience*, doi: 10.3389/fnsys.2014.00243
  27. 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.
  28. 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.
  29. 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
  30. Hung and **Seitz** (2014). "Prolonged Training at Threshold Promotes Robust Retinotopic Specificity in Perceptual Learning", *Journal of Neuroscience*, 34(25): 8423-8431
  31. 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
  32. Deveau and **Seitz** (2014). "Applying Perceptual Learning to achieve practical changes in vision.", *Frontiers in Psychology*, 5:1166. doi: 10.3389/fpsyg.2014.01166
  33. Sotiropoulos, **Seitz**, Series (2014). "Contrast dependency and prior expectations in human speed perception", *Vision Research*, Vol 97, 16-23
  34. Deveau, Lovcik, and **Seitz** (2014). "Applications of Perceptual Learning to Ophthalmology", *Ophthalmology - Current Clinical and Research Updates*
  35. Deveau, Lovcik, and **Seitz** (2014). "The therapeutic benefits of perceptual learning", *Current Trends in Neurology*, Vol 7, 39-49.
  36. Yarrow, Razak, **Seitz**, and Series (2014). "Detecting and Quantifying Topography in Neural Maps", *PLoS ONE*, DOI: 10.1371/journal.pone.0087178
  37. Deveau, Ozer and **Seitz** (2014). "Improved Vision and On Field Performance in Baseball through Perceptual Learning", *Current Biology*, 24(4), R146-7
  38. Leclercq, Le Dantec, and **Seitz** (2014). "Encoding of episodic information through fast Task-

- Irrelevant Perceptual Learning", *Vision Research*, Jun;99:5-11.
39. Deveau, Lovcik, and **Seitz** (2014). "Broad-based visual benefits from training with an integrated perceptual-learning video game", *Vision Research*, Jun;99:134-40.
  40. Holloway, Nanez and **Seitz** (2013). "Word-decoding as a function of temporal processing in the visual system", *PLoS ONE*, in press.
  41. 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
  42. Series and **Seitz** (2013). "Learning what to expect (in visual perception)", *Frontiers in Human Neuroscience*, doi: 10.3389/fnhum.2013.00668.
  43. Hládek, Le Dantec, Kopčo, and **Seitz** (2013). "Ventriloquism effect and aftereffect in the distance dimension", *Proceedings of Meetings on Acoustics*, 19, 050042:1-6.
  44. Welch and **Seitz** (2013). "Processing Irrelevant Location Information: Practice and Transfer Effects in a Simon task", *PLoS ONE*, in press.
  45. 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*, in press.
  46. Gekas, Chalk, **Seitz** and Seriès (2013), "Complexity and specificity of experimentally induced expectations in motion perception", *Journal of Vision*, in press
  47. **Seitz** (2013). "Cognitive Neuroscience: Targeting Neuroplasticity with Neural Decoding and Biofeedback", *Current Biology*, in press
  48. Leclercq and **Seitz** (2012). "The impact of orienting attention in fast task-irrelevant perceptual learning", *Attention, Perception, & Psychophysics*, May, 74(4), 658-60.
  49. Le Dantec and **Seitz** (2012). "High Resolution, High Capacity, Spatial Specificity in Perceptual Learning", *Frontiers in Psychology*, July 3(222), 1-7.
  50. Leclercq and **Seitz** (2012). "Enhancement from targets and suppression from cues in fast task-irrelevant perceptual learning", *Acta Psychologica*, Sept. 141(1), 31-8.
  51. 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.
  52. Le Dantec, Melton, and **Seitz** (2012). "A triple dissociation between learning of target, distractors and spatial contexts", *Journal of Vision*, Feb 3;12(2).
  53. 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.

54. Vlahou, Protopapas, **Seitz** (2012). "Implicit Training of Nonnative Speech Stimuli", *Journal of Experimental Psychology: General*, May;141(2):363-81.
55. Sotiropoulos, **Seitz**, Series (2011). "Changing expectations about speed alters perceived motion directions", *Current Biology*, Volume 21, Issue 21, R883-R884.
56. **Seitz** (2011). "Perceptual Learning; Stimulus Specific Learning From Low-level Visual Plasticity?", *Current Biology*, Volume 21, Issue 19, R814-R815
57. Shams, Wozny, Kim, **Seitz** (2011). "Influences of multisensory experience on subsequent unisensory processing", *Frontiers in Perception Science*, 2:264.
58. 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.
59. 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.
60. Hung and **Seitz** (2011). "Retrograde Interference in Perceptual Learning of a Peripheral Hyperacuity Task", *PLoS ONE* 6(9): e24556.
61. 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.
62. Grady, Marie-Pierre, **Seitz** (2011). "Segmentation from a box", *ICCV. 2011*.
63. Sotiropoulos, **Seitz**, Series (2011). "Perceptual learning in visual hyperacuity: A reweighting model", *Vision Research*, Volume 51, Issue 6, 25 March 2011, Pages 585-599.
64. **Seitz** (2011). "Task-Irrelevant Perceptual Learning", *Encyclopedia of the Sciences of Learning*, in press.
65. 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.
66. **Seitz** (2010). "Sensory Learning: Rapid Extraction of Meaning from Noise", *Current Biology*, Volume 20, Issue 15, R643-R644
67. Chalk<sup>1</sup>, **Seitz**<sup>1</sup>, Series (2010). "Rapidly learned stimulus expectations alter perception of motion", *Journal of Vision*, 10(8), 2.
68. **Seitz**<sup>1</sup>, Protopapas<sup>1</sup>, Tsushima<sup>1</sup>, Vlahou, Gori, Grossberg, Watanabe (2010). "Unattended exposure to components of speech sounds yields same benefits as explicit auditory training", *Cognition*, 115(3), 435-443



69. 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.
70. **Seitz** and Watanabe (2009). "The Phenomenon of Task-Irrelevant Perceptual Learning", *Vision Research*, Vol 49 (21), Oct. 2009, Pages 2604-2610
71. 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
72. 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.
73. 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
74. 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
75. **Seitz**<sup>1</sup>, Kim<sup>1</sup>, Watanabe (2009). "Rewards Evoke Learning of Unconsciously Processed Visual Stimuli in Adult Humans", *Neuron*, March, 12; 61, 700-7
76. **Seitz** and Watanabe (2008). "Is Task-Irrelevant Learning really Task-Irrelevant?", *PLoS ONE*, 3(11): e3792. doi:10.1371/journal.pone.0003792
77. Shams and **Seitz** (2008). "Benefits of multisensory learning", *Trends in Cognitive Science*, Nov (Vol 12(11) 411-417
78. **Seitz**, Pilly, Pack (2008). "Interactions between contrast and spatial displacement in visual motion processing", *Current Biology*, Oct 14;18(19):R904-6
79. Tsushima<sup>1</sup>, **Seitz**<sup>1</sup> and Watanabe (2008). "Task-irrelevant learning occurs only when the irrelevant feature is weak", *Current Biology*, Jun (Vol 18 (12) R516-7)
80. Kim<sup>1</sup>, **Seitz**<sup>1</sup>, and Shams (2008). "Benefits of Stimulus Congruency for Multisensory Facilitation of Visual Learning", *PLoS ONE*, 3(1): e1532. doi:10.1371/journal.pone.0001532
81. Nishina<sup>1</sup>, **Seitz**<sup>1</sup>, 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
82. **Seitz**, Kim, Van Wassenhove, and Shams (2007). "Simultaneous and Independent Acquisition of Multisensory and Unisensory Associations" *Perception*, 36, 1445 - 1453.
83. **Seitz** and Dinse (2007), "A Common Framework for Perceptual Learning", *Current Opinion of Neurobiology*, April (17(2) 148-153)

84. **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
85. **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
86. **Seitz**, Nanez, Holloway, Tsushima, and Watanabe (2006). "Two cases requiring external reinforcement in perceptual learning", *Journal of Vision*, 6(9), 966-973
87. **Seitz**<sup>1</sup>, Kim<sup>1</sup>, Shams, (2006). Sound Facilitates Visual Learning, *Current Biology*, Jul (Vol 16 (14) 1422-1427)
88. Lee<sup>1</sup>, **Seitz**<sup>1</sup>, 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)
89. **Seitz**<sup>1</sup>, Yamagishi<sup>1</sup>, Werner<sup>1</sup>, Goda, Kawato, Watanabe (2005). "Task specific disruption of perceptual learning", *PNAS*, Oct 3; 10.1073/pnas.0505765102
90. **Seitz**, Lefebvre, Watanabe, and Jolicoeur (2005). "The requirement of high-level processing in subliminal learning", *Current Biology*, Sep (Vol 15(18) R753-755).
91. **Seitz** and Watanabe (2005). "A unified model of task-irrelevant and task-relevant perceptual learning", *Trends in Cognitive Science*, Jul (Vol 9(7) 329-334).
92. **Seitz**, Nanez, Holloway, Koyama, and Watanabe (2005), "Seeing what isn't there; the costs of perceptual learning", *PNAS*, Jun 21;102(25):9080-5
93. **Seitz**, Nanez, Holloway, and Watanabe (2005). "The effects of experience on Critical Flicker Fusion Thresholds", *Hum Psychopharmacol Clin Exp*, 20: 55-60.
94. **Seitz** and Watanabe (2003). "Is subliminal learning really passive?" *Nature*, Mar 6 (Vol 422(6927): 36).
95. \*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).
96. Mazzoni, Loftus, **Seitz**, and Lynn, (1999). "Changing beliefs and memories through dream Interpretation." *Applied Cognitive Psychology*, Apr (Vol 13(2): 125-144).

<sup>1</sup> Co-First Authors \*Authorship is in Alphabetical order

### Symposia Talks

"Regulation of Brain Training", Banbury, Cold Spring Harbor, Direct to Consumer Neuroscience, 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 Minnesota, 2018

Boston University, 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. Seitz (2018), “What is Perceptual Learning”, International Workshop on Perceptual Learning
2. Maniglia and Seitz (2018), “Training peripheral vision after (real and simulated) central vision loss”, International Workshop on Perceptual Learning
3. Maniglia, Biles, Visscher, Seitz (2018), “Coordinated Attentional Training promotes generalization of learning in healthy and MD subjects”, VSS

4. Jacques and Seitz (2018), "Using Eye Tracking to Develop Classification Images for Perceptual Learning", VSS
5. Saenz and Seitz (2018), "Developmental Dyslexia: A holistic approach towards diagnosing and rehabilitating", UCR Undergraduate Research Symposium
6. Yao and Seitz (2018), "Applications of Video Game Design to Working Memory Training", UCR Undergraduate Research Symposium
7. Bui and Seitz (2018), "Testing the Efficacy of Lutein and Zeaxanthin on Training of Vision and Cognitive Function", UCR Undergraduate Research Symposium
8. Gallun, Seitz, Vallier, Lewis (2018), "Designing rehabilitative experiences for virtual, mixed, and augmented reality environments", ASA18
9. Gallun, Seitz, Eddins et al (2018), "Portable Automated Rapid Testing (PART) measures for auditory research", ASA18
10. Seitz (2018), "Deriving lessons from Perceptual Learning to promote transfer in Working Memory training", UCI Conference on Learning and Memory
11. Pahor, Stravropoulos, Casey, Jaeggi, Seitz (2018), "Effects of Gamification on Working Memory Training Outcomes", LaP2018
12. 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
13. Gallun, F. J., Jakien, K., Srinivasan, N., Seitz, A., Kempel, 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.
14. Sandeep, Shelton, Seitz (2017). "User Performance Predictions in Cognitive Training." SoCal Machine Learning Symposium. USC. Conference/Meeting Date: 10/06/2017.
15. Sandeep, Shelton, Seitz (2017). "User Performance Predictions in Cognitive Training." "Workshop on Women in Machine Learning
16. Mohammed, Flores, Deveau et al., (2017), "The Benefits and Challenges of Implementing Motivational Features to Boost Cognitive Training Outcome", Psychonomics Society
17. Lelo de Larrea-Mancera and Seitz (2017), "Dissociable Outcomes of Tactile Perceptual Learning for Simple vs Complex Stimuli", Psychonomics Society
18. Cohen-Hoffing and Seitz (2017), "The Influence of Feedback on Task Switching Training: A Drift Diffusion Modeling Account", Psychonomics Society
19. Seitz, (2017), "Training effective use of peripheral vision in Macular Degeneration", Annual Interdisciplinary Conference
20. Diep, Healy, Ng, Seitz, Davey (2017), "Effect of glare on contrast sensitivity function", Association for Research in Vision and Ophthalmology Annual Conference
21. Healy, Ng, Diep, Seitz, Davey (2017), "Comparison of contrast sensitivity in photopic and mesopic conditions", Association for Research in Vision and Ophthalmology Annual Conference
22. Hladek, Seitz, Kopco (2017), "Adaptation in distance perception induced by audio-visual stimuli with spatial disparity", Acoustical Society of America Annual Conference
23. Seitz (2017), "How to Achieve, and Measure, Transfer in Brain Training", Extended Learning Network, Annual Conference
24. Protopapas, Mitsi, Koustoumbardis, Tsitsopoulou, Leventi, Seitz (2017), "Incidental orthographic learning during a color detection task", SSSR

25. 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.
26. 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.
27. Deloss, Biles, Visscher, Seitz (2017), "Beyond classic Perceptual learning: Coordinated attentional training to boost learning and generalization". Maniglia, VSS
28. Jacques and Seitz (2017), "Moderating Effects of Visual Attention and Action Video Game Play on Perceptual Learning", VSS
29. Shima, Visscher, Griffis, Seitz, Yotsumoto (2017), "Transcranial electric stimulation (tES) to early visual areas alters large-scale functional connectivity", VSS
30. 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
31. 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
32. 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).
33. 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)
34. Papesch, M., Gallun, F., Seitz, A. (2016). "Auditory Training Game". Sensation Perception Learning And Training Conference, Boston University, Boston, MA.
35. 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)
36. Vlahou, Seitz, Kopčo (2015), Nonnative Phonetic Category Training in Varying Acoustic Environments, ASA
37. 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
38. Phung, Deveau, Jaeggi, Buschkuhl, Au, Seitz, Zordan (2015), Applying Game Design in Cognitive Training for Working Memory, ESCoNS
39. Hladek, Seitz, Kopco (2015), Learning of Intensity and Reverberation Cues for Auditory Distance Perception in Rooms, NeuroHAM
40. Davey, McRay, Thurman, and Seitz (2015), Sensitivity of various tests of contrast sensitivity to detecting visual impairment, AAO
41. Seitz (2015), Better Batting through Perceptual Learning, AIC
42. Thurman, Davey, and Seitz (2015), Correcting for measurement bias in contrast sensitivity testing, AAO
43. Thurman, Davey, and Seitz (2015), Improving computerized tests for detecting visual field deficits in AMD, AAO
44. Gori, Seitz, Ronconi, Franceschini, Facoetti (2015), The causal link between magnocellular-dorsal path- way functioning and dyslexia, VSS

45. Hongjing, Seitz, Thurman (2015), Visual Tuning for Perceptual Animacy and its Influence on Multiple Object Tracking, VSS
46. Bays and Seitz (2015), Classifying EEG patterns of visual statistical learning Brett Bays, VSS
47. Sotiropoulos, Seitz, Seriès (2015), A reward-driven reweighting model of perceptual learning, VSS
48. 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
49. 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
50. Davey, Maeda, Seitz “Assessment of Evans low contrast sensitivity in measuring log contrast sensitivity.” Invest Ophthalmol Vis Sci, 2015; 55: E-Abstract 3903
51. Deveau, Ozer, and Seitz (2014). "Better Batting Through Perceptual Learning", Vision Science Society Annual Conference
52. Hoffing and Seitz (2014). "Investigating Neurochemical Involvement in Task-Irrelevant Perceptual Learning using Pupillometry", Vision Science Society Annual Conference
53. Bays, Visscher, Le Dantec and Seitz (2014). "Alpha-band EEG activity as a signature of automaticity in perceptual learning", Vision Science Society Annual Conference
54. Saygi, Dinse, Seitz (2014), Crossmodal perceptual learning in the tactile system after visual training, FENS
55. Shams, Wozny, Kim, Seitz (2014), Multisensory experience shapes unisensory processing, IMRF
56. Vhalou, Seitz, Kopco (2014), “Adaptation to Room Reverberation in Nonnative Phonetic Training”, ARO
57. Hladek, Le Dantec, Seitz, Kopco, (2014) “Visual calibration of auditory distance perception”, ARO
58. 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
59. Seitz (2014), “Specificity and Generality of Perceptual Learning”, 4rth International Workshop on Perceptual Learning, Switzerland
60. Barakat, Seitz and Shams (2013), “Visual rhythm perception is facilitated by multisensory (but not unisensory) training”, SFN
61. Bays, Bula, LeDantec and Seitz (2013), “BDNF val66met polymorphism is associated with differential learning in a statistical learning paradigm”, SFN
62. Hladek, Le Dantec, Kopco, and Seitz (2013), “Ventriloquism effect and aftereffect in the distance dimension”, ASA
63. Hladek, Tomonova, Seitz and Kopco (2013), “Rapid recalibration of auditory distance perception in reverberant environments”, ARO
64. Welch and Seitz (2014), “Practice and Transfer Effects: Implications for development of computer-based training.” ADEA
65. Hung and Seitz (2013), “Spatial Specificity in a 3-dot Hyperacuity Task after Double Training”, VSS
66. Deveua, Lovcik, and Seitz (2013), “Visual Improvements Through the Perceptual Learning Based Training Program ULTIMEYESTM”, VSS



67. Bays, Turk-Browne, and Seitz (2013), “Dissociating Behavioral Outcomes of Visuo-temporal Statistical Learning”, VSS
68. Yarrow, Razak, Seitz, Series (2013), “Detecting and quantifying topographic order in neural maps” COSYNE
69. Deveau, Lovcik, Seitz (2013), “Visual Improvements Through the Perceptual Learning Based Training Program UltimEyes”, ESCONs 2.0
70. Seitz (2012), “Two Stories of Fast-Implicit Learning”, 3rd International Workshop on Perceptual Learning
71. Seitz (2012), “The Phenomenon of Task-Irrelevant Perceptual Learning”, CVS Symposium on Computational Foundations of Perception and Action
72. Seitz and Leclercq (2012), “Fast Task-Irrelevant Learning: How different types of attention and task-relevance impact memorization of rapidly presented images”, VSS
73. Barakat, Seitz, and Shams (2012), “There is more to statistical learning than associative learning; Predictable items are enhanced even when not predicted”, VSS
74. Gekas, Seitz, and Series (2012), “Investigating the specificity of experimentally induced expectations in motion perception”, VSS
75. Sotiropoulos, Seitz and Series (2012), “How plastic is the "slow speeds prior" Cosyne
76. LeDantec and Seitz (2011), “Orientation and location specificities in the co-development of perceptual learning and contextual learning”, ECVF
77. LeDantec and Seitz (2011), “Perceptual and contextual learning of a visual search”, VSS
78. Kopčo, Silvera, Tskhay, Tomoriová, and Seitz (2011), “Learning of reverberation cues for auditory distance perception in rooms”, ASA
79. Klein, Carney, Levi, Yu, Seitz (2011), “Modelfest for Perceptual Learning”, VSS
80. Kim, Berard, Seitz, Watanabe (2011), “The role of contiguity and contingency in visual perceptual learning”, VSS
81. Seitz, “Task-Irrelevant Auditory Learning” (2011), 2nd International Workshop on Perceptual Learning
82. LeDantec and Seitz (2010), “Perceptual and contextual learning of a visual search”, SFN
83. LeDantec and Seitz (2010), “The co-development of Perceptual Learning and Contextual Learning in a visual search task”, ECVF
84. Seitz, Chalk, Series (2010), “Rapidly learned expectations alter perception of motion”, VSS
85. Kim, Seitz, Watanabe (2010), “Different properties between reward-driven exposure-based and erward-driven task involved perceptual learning”, VSS
86. Nández, Reyes, Fabian, Ojeda, Dominguez, Berber, Gil-Faddis, Ucelo, Davis, and Seitz (2010), “Effects of Trial Number and Time Differences on Visual Perceptual Learning”, WPA
87. Razak and Seitz (2010). “A cortical population code for sound locations”, ARO
88. Khafi and Seitz (2010), “The Effects of Caffeine And Nicotine On Learning”, UCR Undergraduate Research Symposium
89. Sotiropoulos, Seitz, Series (2009),” Perceptual learning in visual hyperacuity: a reweighting model”, BCCN
90. Chalk, Seitz, Series (2009), “Feature-based attention biases perception of motion direction” BCCN
91. 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.

92. 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.
93. Dobres and Seitz (2009) "Perceptual Learning of Noisy Oriented Gratings as Revealed by Classification Images" VSS
94. Pilly, Seitz and Grossberg (2009). "Where in the motion pathway does task-irrelevant perceptual learning occur?" VSS
95. Seitz, Pilly and Pack (2009) "Reducing contrast improves direction estimation at low speeds", VSS
96. Vlahou, Seitz, Protopapas (2009), "Implicit learning of non-native speech stimuli", ASA
97. Tsushima, Seitz, and Watanabe (2008). "The role of attention in perceptual learning". NIN, Amsterdam, Netherlands
98. Seitz (2008). "The role of reward in perceptual learning", First Annual Workshop in Perceptual Learning, Beijing China.
99. Wozny, Seitz, & Shams (2008) "Learning associations between simple visual and auditory features", VSS
100. Kim, Seitz, & Watanabe (2008) "Reward contingency on perceptual learning does not follow rules of classical conditioning", VSS
101. Tsushima, Seitz, & Watanabe (2008) "Task-irrelevant perceptual learning occurs only when the irrelevant feature is weak", VSS
102. Kim, Seitz, & Shams (2008), "Neural mechanisms of multisensory perceptual learning", VSS
103. Seitz, Kim, Watanabe, (2007), "Reward driven, ocular specific, learning of orientation in the absence of awareness", SFN
104. Franko, Seitz, Vogels, (2007), "Effect of stimulus-reinforcement pairing on the local field potentials for suprathreshold, ipsilateral stimuli in macaque visual cortex"
105. Kim, Seitz, Shams, (2007), "Congruent sound facilitates visual perceptual learning", SFN
106. Bartfield, Jourdain, Yorio, Zanutto, Seitz, (2007), "Reward driven learning of associative-rules in the absence of awareness", SFN
107. Kim, Seitz, Watanabe, (2007), "Effect of Reward on Perceptual Learning", VSS
108. Batson, Beer, Seitz, Watanabe, (2007), "Specificity of Crossmodal Links in Exogenous Covert Orienting", VSS
109. Kim, Seitz, Shams (2007), "Visual Perceptual Learning Enhanced with Congruent Sound", VSS
110. Nishina, Seitz, Kawato, Watanabe (2007), "Subliminal visual feature is learned better when spatially closer to attended task", VSS
111. Franko, Seitz, and Vogels (2006), "Effect of stimulus-reinforcement pairing on the local field potentials in macaque visual cortex" SFN
112. Seitz (2006), "Reinforcement and Blinks in Perceptual Learning" ASIC
113. Holloway, Tsushima, Nanez, Watanabe, Seitz (2006), "Two Cases of a Requirement of External Reinforcement in Perceptual Learning", VSS
114. Kim, Seitz and Shams (2006), "Multisensory perceptual learning", VSS
115. Náñez Sr., Holloway, Donahoe, & Seitz (2006), "Flicker Fusion as a Correlate of Word Decoding Ability", VSS
116. Shams, Wassenhove, Seitz (2006), "Audio-Visual Statistical Learning", VSS
117. Nishina, Seitz, Kawato, Watanabe (2006), "The spatio-temporal window of task-irrelevant perceptual learning", VSS

118. Seitz, Náñez Sr., Holloway, and Watanabe (2006), "Perception learning of motion leads to faster-flicker perception", VSS
119. Yotsumoto, Seitz, Sasaki, Shimojo, Yamamoto, Kogure, Sakagami and Watanabe (2006), "Greater response conflict from weaker visual signals", VSS
120. Nishina, Seitz, Kawato, Watanabe (2005). "The spatial spread of task-irrelevant perceptual learning", SFN.
121. Holloway, Nanez, Seitz and Watanabe (2005). "The Relationship between Flicker Fusion and Subliminally Induced Neural Plasticity", OSA.
122. Holloway, Seitz, Nanez and Watanabe (2005). "Dorsal Stream Perceptual Learning is Highly Related to Critical Flicker Fusion Thresholds", OSA.
123. Holloway, Seitz, Náñez. Watanabe (2005). "A Subliminal Experience can alter Critical Flicker Fusion", APS.
124. Seitz, Nanez, Holloway, Koyama, Watanabe (2005). "Seeing what isn't there; the costs of perceptual learning", VSS.
125. Lefebvre, Seitz, Watanabe, Jolicoeur (2005). "Learning Blinks During the Attentional Blink", VSS
126. Nanez, Seitz, Holloway, Koyama, Watanabe (2005). "Subliminal Perceptual Learning of Motion Results in Improvements of Critical Flicker Fusion Thresholds", VSS.
127. Yamagishi, Seitz, Werner, Kawato, Watanabe (2005). "Task specific disruption of perceptual learning", VSS.
128. Holloway, Seitz, Náñez, Engles. Watanabe (2004). "Critical Flicker Fusion Threshold as a Function of Subliminal Neural Plasticity", NAN.
129. Seitz, Nanez, Sasaki, Engles, Holloway, and Watanabe (2003). "Learning spillover to invisible dots?", ECVF.
130. Seitz and Watanabe (2003). How can subliminal perceptual learning be active? *Journal of Vision*, 3(9), 177a.
131. Seitz and Grossberg (2002). "A Neural Model of How the Cortical Subplate Coordinates the Laminar Development of Orientation and Ocular Dominance Maps." ICCNS.
132. 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.
133. 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".