

# Stephen Robert Mitroff, Ph.D.

Department of Psychological & Brain Sciences  
The George Washington University  
2125 G St., Suite 304  
Washington, D.C. 20052

202-994-6912 (*office*)  
202-994-1602 (*fax*)  
mitroff@gwu.edu  
www.mitrofflab.org

## Employment, Education, & Academic Interests

### Primary Academic Appointments

2018 – current	Professor ( <i>w/ tenure</i> )	The George Washington University Department of Psychological & Brain Sciences
2015 – 2018	Associate Professor ( <i>w/ tenure</i> )	The George Washington University Department of Psychology
2012 – 2015	Associate Professor ( <i>w/ tenure</i> )	Duke University Center for Cognitive Neuroscience Department of Psychology & Neuroscience
2005 – 2012	Assistant Professor	Duke University Center for Cognitive Neuroscience Department of Psychology & Neuroscience
2002 – 2005	Postdoctoral Research Fellow	Yale University Dept. of Psychology; Karen Wynn & Brian J. Scholl

### Additional Academic Appointments

2015 – 2018	Associate Research Professor	Duke University Department of Psychology & Neuroscience
2013 – current	Visiting Research Faculty	MedStar Health Research Institute Research Division, National Rehabilitation Hospital
2012 – 2016	Adjunct Asst/Assoc Professor	University of North Carolina, Chapel Hill School of Dentistry, Department of Orthodontics

### Education

2002	Ph.D.	Harvard University; Psychology Advisor: Daniel J. Simons
2000	M.A.	Harvard University; Psychology Advisor: Daniel J. Simons
1998	B.A., <i>summa cum laude</i>	University of California, Berkeley; Cognitive Science Advisor: Alison Gopnik

### General Research Interests

Individual differences, learning, & malleability in visual cognition; Visual perception, attention, & memory; Applied cognitive psychology; Use of “big data” to address psychological issues; Cognitive development

### Specific Research Questions

- How are items detected in rare, multi-target & real-world visual search (e.g., baggage screening/radiology)?
- What makes one individual a ‘better’ visual searcher than another?
- How can specific training regimens enhance visual and attentional abilities?
- What is the role of vision and attention in sports, and how can these abilities be enhanced?
- In what ways are visual representations similar and different for infants, young adults, and older adults?

## **Funding**

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### Current Support

*Title:* Leveraging big data to explore human variability  
*Funding Source:* Army Research Laboratory (Collaborative Agreement)  
*PIs:* Stephen R. Mitroff & Dwight J. Kravitz  
*Grant period:* August 1, 2019 to July 31, 2020  
*Total funding:* \$149,091

*Title:* Examining learning and influences on performance in visual search  
*Funding Source:* Army Research Office Award # W911NF-16-1-0274  
*PI:* Stephen R. Mitroff  
*Grant period:* July 1, 2016 to August 31, 2020  
*Total funding:* \$714,374

### Completed Research Support

*Title:* Using mobile technology for TSA personnel assessment and training  
*Funding Source:* Transportation Security Administration Contract #HSTS04-15-C-CT7031  
*Primary lead:* Kedlin Co.  
*Mitroff Role:* Research lead

*Title:* Mammography to Tomosynthesis: Examining the cognitive processes of three-dimensional visual search  
*Funding Source:* GWU Cross Disciplinary Research Fund, Office of Vice President of Research  
*PI:* Stephen R. Mitroff (Co-PI: Rachel F. Brem, Department of Radiology)  
*Grant period:* July 1, 2016 to June 30, 2018  
*Total funding:* \$89,059

*Title:* Identifying and understanding superior multiple-target visual search abilities  
*Funding Source:* Army Research Office Award # W911NF-14-1-0361  
*PI:* Stephen R. Mitroff  
*Grant period:* July 1, 2014 through December 31, 2015  
*Total funding:* \$200,917

*Title:* TSA Personnel Evaluation Project  
*Funding Source:* TSA, DHS (*Contract work funded to Stephen Mitroff, LLC*)  
*Primary lead:* RTI International  
*Mitroff Role:* Lead on basic research component  
*Funding period:* June 25, 2013 through October 31, 2014

*Title:* Conference on Visual Search: A Comprehensive Treatment of Search  
*Funding Source:* Army Research Office Award # W911NF-13-1-0418; Workshop Funding Mechanism  
*PI:* Stephen R. Mitroff  
*Grant period:* September 1, 2013 through August 31, 2014  
*Total funding:* \$44,337

*Title:* Assessing and Training Response Inhibition Abilities  
*Funding Source:* Army Research Office Award # W911NF-13-1-0480  
*PI:* Adam T. Biggs  
*Co-PI:* Stephen R. Mitroff  
*Grant period:* October 1, 2013 through June 30, 2014  
*Total funding:* \$50,000

*Title:* Identifying, assessing, and enhancing human perceptual and cognitive abilities  
*Funding Source:* DARPA (*Supplement to D12AP200025*)  
*Co-PIs:* L. Gregory Appelbaum & Stephen R. Mitroff  
*Grant period:* October 1, 2012 through March 29, 2014  
*Total funding:* \$986,757

*Title:* Identifying and enhancing superior searching abilities  
*Funding Source:* Army Research Office Award # W911NF-09-1-0092  
*PI:* Stephen R. Mitroff  
*Grant period:* April 1, 2009 through September 30, 2013  
*Total funding:* \$415,870

*Title:* Improving visual search accuracy and identifying superior performance  
*Funding Source:* Transportation Security Administration; Department of Homeland Security  
*PI:* Stephen R. Mitroff  
*Grant period:* October 1, 2011 through June 30, 2013  
*Total funding:* \$250,000

*Title:* Identifying predictive markers of individual difference in threat sensitivity  
*Funding Source:* Institute of Homeland Security Solutions  
*PI:* Stephen R. Mitroff  
*Co-PI:* Ahmad Hariri  
*Grant period:* March 1, 2010 through May 31, 2012  
*Total funding:* \$200,000

*Title:* Sports training and the malleability of visual cognition  
*Funding Source:* Nike Sparq Sensory Training, Nike, Inc.  
*PI:* Stephen R. Mitroff  
*Grant period:* December 16, 2009 through January 31, 2012  
*Total funding:* \$115,000

*Title:* Training that addresses individual differences in sustained vigilance tasks  
*Funding Source:* Institute of Homeland Security Solutions  
*PI:* Robert C. Hubal  
*Grant period:* July 1, 2009 through December 31, 2010  
*Total funding:* \$249,441  
*Funding for SRM:* \$96,185

*Title:* The nature of persisting object representations  
*Funding Source:* NIH/NIMH, R03 Award #R03 MH080849-01  
*PI:* Stephen R. Mitroff  
*Grant period:* July 1, 2007 through June 30, 2009  
*Total funding:* \$156,000

*Title:* Identifying predictive markers of individual difference in threat sensitivity  
*Funding Source:* Institute of Homeland Security Solutions & RTI  
*PI:* Stephen R. Mitroff  
*Grant period:* October 10, 2009 through November 9, 2009  
*Total funding:* \$5,500

*Title:* The representation of persisting objects  
*Funding Source:* NIMH NRSA Individual Postdoctoral Fellowship, F32 MH66553  
*PI:* Stephen R. Mitroff  
*Grant period:* July 1, 2002 through June 30, 2005

*Total funding:* \$194,774

*Funding Source:* National Science Foundation Graduate Research Fellowship  
*PI:* Stephen R. Mitroff

*Grant period:* July 1, 1999 through June 30, 2002

## Academic Consulting & Advisory Positions

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Senaptec

Role: Advisory Board Member  
September 2014 — current

Nike, Inc.; Nike Performance Network

Role: Sports Vision & Performance Advisor  
June 2014 — May 2015

Nike, Inc.; SPARQ Sensory Performance

Role: Advisory Board Member  
May 2012 — April 2014

## Non-Academic Consulting & Advisory Positions

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Next Century

Role: Subject Matter Expert  
April 2019 — current

RTI

Role: Research Advisor  
September 2013 — September 2014

## Publications & Presentations

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\* *Student and postdoctoral advisees*

### Referred Journal Articles (in reverse chronological order)

1. \*Porfido, C. L., \*Cox, P. H., \*Adamo, S. H., & **Mitroff**, S. R. (2020). Recruiting from the shallow end of the pool: Differences in cognitive and compliance measures for subject pool participants based on enrollment time across an academic term. *Visual Cognition*, 28(1), 1-9. DOI: 10.1080/13506285.2019.1702602
2. Biggs, A. T., & Mitroff, S. R. (2019). Visual search training via a consistency protocol: A pilot study. *Visual Cognition*, 27(9-10), 657-667. DOI: 10.1080/13506285.2019.1634662
3. \*Kramer, M. R., \*Porfido, C. L., & Mitroff, S. R. (2019). Evaluation of strategies to train visual search performance in professional populations. *Current Opinion in Psychology*, 29, 113-118. DOI: 10.1016/j.copsyc.2019.01.001
4. \*Adamo, S.H., \*Cox, P.H., Kravitz, D.J., & Mitroff, S.R. (2019). How to Correctly Put the “Subsequent” in Subsequent Search Miss Errors. *Attention Perception & Psychophysics*. DOI: 10.3758/s13414-019-01802-8
5. \*Adamo, S. H., \*Ericson, J. M., \*Nah, J. C., Brem, R., & **Mitroff**, S. R. (2018). Mammography to tomosynthesis: Examining the differences between two-dimensional and segmented-three-dimensional visual search. *Cognitive Research: Principles and Implications*, 3(17).

6. Biggs, A. T., \*Kramer, M. R., & **Mitroff, S. R.** (2018). Using cognitive psychology research to inform professional visual search operations. *Journal of Applied Research in Memory and Cognition*, 7(2), 189-198.
7. **Mitroff, S. R.**, \*Ericson, J. M., & Sharpe, B. (2017). Predicting airport security officers' visual search competency with a rapid assessment. *Human Factors*, 60(2), 201-211.
8. **Mitroff, S. R.**, & Sharpe, B. (2017). Using big data to solve real problems through academic and industry partnerships. *Current Opinion in Behavioral Sciences*, 18C, 91-96.
9. \*Ericson, J. M., Kravitz, D. J., & **Mitroff, S. R.** (2017). Visual search: You are who you are (+ a learning curve). *Perception*, 46(12), 1434-1441.
10. Chang, B. P., Cain, D., & **Mitroff, S. R.** (2017). Emergency department crowding associated with differences in CXR interpretations between emergency physicians and radiologists. *American Journal of Emergency Medicine*, 35(5), 793-794. <http://dx.doi.org/10.1016/j.ajem.2016.12.067>
11. \*Biggs, A. T., \*Clark, K., & **Mitroff, S. R.** (2017). Who should be searching? Differences in personality can affect visual search accuracy. *Personality and Individual Differences*, 116, 353-358. <https://doi.org/10.1016/j.paid.2017.04.045>
12. \*Devyatko, D., Appelbaum, L. G., & **Mitroff, S. R.** (2017). A common mechanism for perceptual reversals in motion-induced blindness, the Troxler effect and perceptual filling-in. *Perception*, 46(1), 50-77.
13. \*Adamo, S. H., \*Cain, M. S., & **Mitroff, S. R.** (2017). An individual differences approach to multiple-target visual search errors: How search errors relate to different characteristics of attention. *Vision Research*, 141, 258-265.
14. \*Dowd, E. W., **Mitroff, S. R.**, & LaBar, K. S. (2016). Fear generalization gradients in visuospatial attention. *Emotion*, 16(7), 1011-1018. DOI: 10.1037/emo0000197
15. Krasich, K., Ramger, B., Holton, L., Wang, L., **Mitroff, S. R.**, & Appelbaum, L. G. (2016). Sensorimotor learning in a computerized athletic training battery. *Journal of Motor Behavior*, 48(5), 401-412. DOI: 10.1080/00222895.2015.1113918
16. \*Adamo, S. H., \*Cain, M. S., & **Mitroff, S. R.** (2015). Targets need their own space: Effects of clutter on multiple-target visual search. *Perception*, 44(10), 1203-1214. DOI: 10.1177/0301006615594921
17. **Mitroff, S. R.**, \*Biggs, A. T., & \*Cain, M. S. (2015). Multiple-target visual search errors: Overview and implications for airport security. *Policy Insights from the Behavioral and Brain Sciences*, 2(1), 121-128. DOI: 10.1177/2372732215601111
18. \*Biggs, A. T., \*Cain, M. S., **Mitroff, S. R.** (2015). Cognitive training can reduce civilian casualties in a simulated shooting environment. *Psychological Science*, 26(8), 1164-1176. DOI: 10.1177/0956797615579274
19. \*Biggs, A. T., \*Adamo, S. H., & **Mitroff, S. R.** (2015). Mo' money, mo' problems: Monetary motivation can exacerbate the attentional blink. *Perception*, 44(4), 410-422. doi:10.1068/p7916
20. \*Clark, K., Appelbaum, L. G., van de berg, B., **Mitroff, S. R.**, & Woldorff, M. G. (2015). Improvement in visual search with practice: Mapping learning-related changes in neurocognitive stages of processing. *Journal of Neuroscience*, 35(13): 5351-5359. DOI: 10.1523/JNEUROSCI.1152-14.2015
21. \*Dowd, E. W., Kiyonaga, A., Egner, T., & **Mitroff, S. R.** (2015). Attentional guidance by working memory differs by paradigm: An individual-differences approach. *Attention, Perception, & Psychophysics*, 77, 704-712. DOI 10.3758/s13414-015-0847-z

22. \*Wang, L., \*Krasich, K., \*Bel-Bahar, T., \*Hughes, L., **Mitroff**, S. R., & Appelbaum, L. G. (2015). Mapping the structure of perceptual and visual-motor abilities in healthy young adults. *Acta Psychologica*, *157*, 74-84.
23. \*Biggs, A. T., \*Adamo, S. H., \*Dowd, E. W., & **Mitroff**, S. R. (2015). Examining perceptual and conceptual set biases in multiple-target visual search. *Attention, Perception, & Psychophysics*, *77*, 844-855. DOI 10.3758/s13414-014-0822-0
24. **Mitroff**, S. R., \*Biggs, A. T., \*Adamo, S. H., \*Dowd, E. W., \*Winkle, J., & \*Clark, K. (2015). What can 1 billion trials tell us about visual search? *Journal of Experimental Psychology: Human Perception & Performance*, *41*(1), 1-5. DOI: 10.1037/xhp0000012
25. \*Biggs, A. T., & **Mitroff**, S. R. (2014). Improving the efficacy of security screening tasks: A review of visual search challenges and ways to mitigate their adverse effects. *Applied Cognitive Psychology*, *29*(1), 142-148. DOI: 10.1002/acp.3083
26. \*Biggs, A. T., & **Mitroff**, S. R. (2014). Differences in multiple-target visual search performance between non-professional and professional searchers due to decision-making criteria. *British Journal of Psychology*. doi: 10.1111/bjop.12096
27. \*Biggs, A. T., \*Adamo, S. H., & **Mitroff**, S. R. (2014). Rare, but obviously there: Effects of target frequency and salience on visual search accuracy. *Acta Psychologica*, *152*, 158-165. <http://dx.doi.org/10.1016/j.actpsy.2014.08.005>
28. \*Cain, M. S., \*Biggs, A. T., \*Darling, E. F., & **Mitroff**, S. R. (2014). A little bit of history repeating: Splitting up multiple-target visual searches decreases second-target miss errors. *Journal of Experimental Psychology: Applied*, *20*(2), 112-125. <http://dx.doi.org/10.1037/xap0000014>
29. \*Clark, K., \*Cain, M. S., Adcock, R. A., & **Mitroff**, S. R. (2014). Context Matters: The structure of task goals affects accuracy in multiple-target visual search. *Applied Ergonomics*, *45*(3), 528-533. <http://dx.doi.org/10.1016/j.apergo.2013.07.008>
30. **Mitroff**, S. R., & \*Biggs, A. T. (2014). The Ultra-Rare-Item effect: Visual search for exceedingly rare items is highly susceptible to error. *Psychological Science*, *25*(1), 284-289. DOI: 10.1177/0956797613504221
31. \*Biggs, A. T., & **Mitroff**, S. R. (2014). Different predictors of multiple-target search accuracy between non-professional and professional visual searchers. *Quarterly Journal of Experimental Psychology*, *67*(7), 1335-1348. 10.1080/17470218.2013.859715
32. **Mitroff**, S. R., Friesen, P., Bennett, D., Yoo, H., & Reichow, A. (2013). Enhancing ice hockey skills through stroboscopic visual training—A pilot study. *Athletic Training & Sports Health Care*, *5*, 261-264. DOI: 10.3928/19425864-20131030-02
33. Jackson, T. H., **Mitroff**, S. R., \*Clark, K., Proffit, W. R., Lee, J. Y., & Nguyen, T. T. (2013). Face symmetry assessment abilities: Clinical implications for diagnosing asymmetry. *American Journal of Orthodontics and Dentofacial Orthopedics*, *114*(5), 663-671. Doi: 10.1016/j.ajodo.2013.06.020
34. \*Adamo, S. H., \*Cain, M. S., & **Mitroff**, S. R. (2013). Self-induced attentional blink: A cause of errors in multiple-target search. *Psychological Science*, *24*(12), 2569-2574. doi: 10.1177/0956797613497970
35. \*Cain, M. S., \*Adamo, S. H., & **Mitroff**, S. R. (2013). A taxonomy of multiple-target search errors. *Visual Cognition*, *21*(7), 899-921. DOI:10.1080/13506285.2013.843627
36. Jackson, T. H., \*Clark, K., & **Mitroff**, S. R. (2013). Enhanced facial symmetry assessment in orthodontists. *Visual Cognition*, *21*(7), 838-852. DOI:10.1080/13506285.2013.832450
37. Appelbaum, L. G., \*Cain, M. S., \*Darling, E. F., & **Mitroff**, S. R. (2013). Action video game playing is associated with improved visual sensitivity, but not alterations in visual sensory memory. *Attention, Perception, & Psychophysics*, *75*(6), 1161-1167. DOI: 10.3758/s13414-013-0472-7

38. \*Biggs, A. T., \*Cain, M. S., \*Clark, K., \*Darling, E. F., & **Mitroff**, S. R. (2013). Assessing visual search performance differences between Transportation Security Administration Officers and non-professional visual searchers. *Visual Cognition*, 21(3), 330-352. DOI: 10.1080/13506285.2013.790329
39. \*Dowd, E. W., & **Mitroff**, S. R. (2013). Attentional guidance by working memory overrides saliency cues in visual search. *Journal of Experimental Psychology: Human Perception & Performance*, 39(6), 1786-1796. DOI: 10.1037/a0032548
40. \*Cain, M. S., & **Mitroff**, S. R. (2013). Memory for found targets interferes with subsequent performance in multiple-target visual search. *Journal of Experimental Psychology: Human Perception & Performance*, 39(5), 1398-1408. DOI: 10.1037/a0030726
41. Smith, T. Q., & **Mitroff**, S. R. (2012). Stroboscopic training enhances anticipatory timing. *International Journal of Exercise Science*, 5(4), 344-353.
42. \*Donohue, S. E., \*Darling, E. F., **Mitroff**, S. R. (2012). Links between multisensory processing and autism. *Experimental Brain Research*, 222, 377-387. DOI: 10.1007/s00221-012-3223-4
43. \*Cain, M. S., Vul, E., \*Clark, K., & **Mitroff**, S. R. (2012). A Bayesian optimal foraging model of human visual search. *Psychological Science*, 23, 1047-1054. DOI 10.1177/0956797612440460
44. Appelbaum, L. G., \*Cain, M. S., \*Schroeder, J. E., \*Darling, E. F., & **Mitroff**, S. R. (2012). Stroboscopic visual training improves information encoding in short-term memory. *Attention, Perception, & Psychophysics*, 74(8), 1681-1691. DOI 10.3758/s13414-012-0344-6
45. \*Donohue, S., \*James, B., Eslick, A. N., & **Mitroff**, S. R. (2012). Cognitive Pitfall!: Video game players are not immune from dual-task costs. *Attention, Perception, & Psychophysics*, 74, 803-809. DOI 10.3758/s13414-012-0323-y
46. Appelbaum, L. G., \*Cain, M. S., \*Darling, E. F., Stanton, S. J., Nguyen, M. T., & **Mitroff**, S. R. (2012). What is the identity of a sports spectator? *Personality and Individual Differences*, 52, 422-427.
47. \*Cain, M. S., & **Mitroff**, S. R. (2011). Distractor filtering in media multitaskers. *Perception*, 40(10), 1183-1192.
48. Appelbaum, L. G., \*Schroeder, J. E., \*Cain, M. S., & **Mitroff**, S. R. (2011). Improved visual cognition through stroboscopic training. *Frontiers in Psychology*, 2:276. doi: 10.3389/fpsyg.2011.00276
49. \*Cain, M. S., \*Dunsmoor, J. E., LaBar, K. S., & **Mitroff**, S. R. (2011). Anticipatory anxiety hinders detection of a second target in dual-target search. *Psychological Science*, 22, 866-871. doi:10.1177/0956797611412393
50. \*Clark, K., \*Fleck, M. S., & **Mitroff**, S. R. (2011). Enhanced change detection performance reveals improved strategy use in avid action video game players. *Acta Psychologica*, 136, 67-72.
51. Wu, W., Tiesinga, P., Tucker, T., Heiner, J., **Mitroff**, S. R., & Fitzpatrick, D. (2011). Dynamics of Population Response to Changes of Motion Direction in Primary Visual Cortex. *Journal of Neuroscience*, 31(36), 12767-12777.
52. Costello, M. C., Madden, D. J., **Mitroff**, S. R., & Whiting, W. L. (2010). Age-related decline of visual processing components in change detection. *Psychology & Aging*, 25(2), 356-368.
53. Costello, M. C., Madden, D. J., Shepler, A. M., **Mitroff**, S. R., & Leber, A. B. (2010). Age-related preservation of top-down control over distraction in visual search. *Experimental Aging Research*, 36(3), 249-272.
54. \*Donohue, S. E., Woldorff, M. G., & **Mitroff**, S. R. (2010). Video game players show more precise multisensory temporal processing abilities. *Attention, Perception, & Psychophysics*, 72, 1120-1129.

55. \*Jordan, K. E., \*Clark, K., & **Mitroff**, S. R. (2010). See an object, hear an object file: Object correspondence transcends sensory modality. *Visual Cognition*, *18*, 492-503.
56. \*Fleck, M. S., Samei, E., & **Mitroff**, S. R. (2010). Generalized ‘satisfaction of search’: Adverse influences on dual-target search accuracy. *Journal of Experimental Psychology: Applied*, *16*, 60-71.
57. \*Dunsmoor, J. E., **Mitroff**, S. R., & LaBar, K. S. (2009). Generalization of conditioned fear along a dimension of increasing fear intensity. *Learning & Memory*, *16*, 460-469.
58. **Mitroff**, S. R., \*Arita, J. T., & \*Fleck, M. S. (2009). Staying in bounds: Contextual constraints on object file coherence. *Visual Cognition*, *17*, 195-211.
59. Wang, S, & **Mitroff**, S. R. (2009). Preserved visual representations despite change blindness in infants. *Developmental Science*, *12*, 681-687.
60. Cheries, E., **Mitroff**, S. R., Wynn, K., & Scholl, B. J. (2008). Cohesion as a constraint on object persistence in infancy. *Developmental Science*, *11*, 427-432.
61. **Mitroff**, S. R., Scholl, B. J., & Noles, N. S. (2007). Object files can be purely episodic. *Perception*, *36*, 1730-1735.
62. **Mitroff**, S. R., & Alvarez, G. A. (2007). Space and time, not surface features, underlie object persistence. *Psychonomic Bulletin & Review*. *14*, 1199-1204.
63. \*Fleck, M. S., & **Mitroff**, S. R. (2007). Rare targets are rarely missed in correctable search. *Psychological Science*, *18*, 943-947.
64. **Mitroff**, S. R., Sobel, D. M., Gopnik, A. (2006). Reversing how to think about ambiguous figure reversals: Spontaneous alternating by uninformed observers. *Perception*, *35*, 709-715.
65. Noles, N. S., Scholl, B. J., & **Mitroff**, S. R. (2005). The persistence of object file representations. *Perception & Psychophysics*, *67*, 324-334.
66. **Mitroff**, S. R., Scholl, B. J., & Wynn, K. (2005). The relationship between object files and conscious perception. *Cognition*, *96*, 67-92.
67. **Mitroff**, S. R. & Scholl, B. J. (2005). Forming and updating object representations without awareness: Evidence from motion-induced blindness. *Vision Research*, *45*, 961-967.
68. **Mitroff**, S. R. & Scholl, B. J. (2004). Seeing the disappearance of unseen objects. *Perception*, *33*, 1267-1273.
69. **Mitroff**, S. R., Scholl, B. J., & Wynn, K. (2004). Divide and conquer: How object files adapt when a persisting object splits into two. *Psychological Science*, *15*, 420-425.
70. **Mitroff**, S. R., Simons, D. J., & Levin, D. T. (2004). Nothing compares 2 views: Change blindness can occur despite preserved access to the changed information. *Perception & Psychophysics*, *66*, 1268-1281.
71. **Mitroff**, S. R. & Simons, D. J. (2002). Changes are not localized until they are explicitly detected. *Visual Cognition*, *9*, 937-968.
72. **Mitroff**, S. R., Simons, D. J., & Franconeri, S. L. (2002). The siren song of implicit change detection. *Journal of Experimental Psychology: Human Perception and Performance*, *28*, 798-815.

### **Peer-Reviewed Conference Papers**

73. \*Adamo, S. H., Cain, M. S., & **Mitroff**, S. R. (2018). Satisfaction at last: Evidence for the ‘satisfaction’ account for multiple-target search errors. *SPIE Medical Imaging symposium*. Houston, TX. DOI: 10.1117/12.2293692



74. Salazar, E., \*Cain, M. S., \*Darling, E. F., **Mitroff, S. R.**, & Carin, L. (2012). Inferring latent structure from mixed and real and categorical relational data. *International Conference on Machine Learning*. Edinburgh, Scotland.
75. Hubal, R., \*Cain, M. S., & **Mitroff, S. R.** (2011). Simulating a vigilance task: Technology for homeland security research. *Interservice/Industry Training, Simulation, and Education Conference (IIITSEC)*. Orlando, FL.
76. \*Cain, M. S., Vul, E., \*Clark, K., & **Mitroff, S. R.** (2011). Optimal models of human multiple-target visual search. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Boston, MA: Cognitive Science Society.
77. Hubal, R., **Mitroff, S. R.**, \*Cain, M. S., Scott, B., & DeWitt, R. (2010). Simulating a vigilance task: Extensible technology for baggage security assessment and training. *Proceedings of the IEEE Conference on Technologies for Homeland Security* (pp. 543-548). Los Alamitos, CA: IEEE.

### **Book Chapters & Research Briefs**

1. \*Clark, K., \*Cain, M. S., & **Mitroff, S. R.** (2015). Perception and human information processing in visual search. In R. Hoffman, J. Szalma, P. Hancock, R. Parasuraman, & M. Scerbo (Eds.), *Cambridge University Handbook on Applied Perception Research*. Cambridge University Press.
2. Harris, J. A., Barrack, D. L., McMahon, A. R., **Mitroff, S.R.**, & Woldorff, M. G. (2014). Object-category processing during motion-induced blindness as revealed by electrophysiological recordings. In G. R. Mangun (Ed.), *Cognitive Electrophysiology of Attention: Signals of the Mind* (pp. 97-106). San Diego, CA: Elsevier Academic Press.
3. \*Clark, K., \*Cain, M. S., \*Adamo, S. H., & **Mitroff, S. R.** (2012). Examining influences on applied visual search performance. In M. D. Dodd & J. H. Flowers (Eds.), *The Influence of Attention, Learning, and Motivation on Visual Search* (Vol. 59, pp. 147-181). New York: Springer.
4. **Mitroff, S. R.**, & Hariri, A. (2010). Identifying Predictive Markers of Field Performance: The Potential Role of Individual Differences in Threat Sensitivity. *Institute for Homeland Security Solutions Research Brief*. <https://www.ihssnc.org>
5. Madden, D. J., & **Mitroff, S. R.** (2010). Aging and Top-Down Attentional Control in Visual Search. *Institute for Homeland Security Solutions Research Brief*. <https://www.ihssnc.org>
6. Cheries, E., **Mitroff, S. R.**, Wynn, K. & Scholl, B. J. (2009). Constraints on Persisting Object Representations in Infants and Adults. In B. Hood & L. Santos (Eds.), *The Origins of Object Knowledge*. London: Oxford University Press.
7. Simons, D. J., **Mitroff, S. R.**, & Franconeri, S. L. (2003). Scene perception: What we can learn from visual integration and change detection. In M. Peterson & G. Rhodes (Eds.), *Perception of faces, objects, and scenes: Analytic and holistic processes. Advances in visual cognition* (pp. 335-351). London: Oxford University Press.
8. Simons, D. J., & **Mitroff, S. R.** (2001). The role of expectation in change detection and attentional capture. In L.R. Harris & M. Jenkin (Eds.), *Vision and Attention* (pp. 189-207). Springer.

### **Manuscripts under review & under revision**

1. Kravitz, D. J., & **Mitroff, S. R.** (under revision). The corrosive impact of common research practices: Empirical quantifications and statistical corrections.

2. Kramer, M. R., Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (under review). A data-driven characterization of trial-by-trial carryover effects.
3. Horner, C. A., Schroeder, J. E., Mitroff, S. R., & Cain, M. S. (under revision). The effect of extended target concealment on motion extrapolation.
4. \*Biggs, A.T., & **Mitroff**, S.R. (under revision). The cognitive cascade hypothesis: Examining the cognitive underpinnings of shooting behaviors.
5. \*Adamo, S. H., \*Biggs, A. T., & **Mitroff**, S. R. (under revision). Bags need their own space: Physical spacing between simultaneously presented visual search arrays affects multiple-target search accuracy.
6. \*Clark, K., Samei, E., Baker, J., & **Mitroff**, S. R. (under revision). Searching for Multiple Targets: How Radiologists Perform Differently than Non-professionals.

### **Sample manuscripts in preparation**

1. \*Cain, M. S., & **Mitroff**, S. R. (in preparation). Personality and demographic correlates of media multitasking behavior.
2. \*Clark, K., \*Cain, M. S., Adcock, R. A., & **Mitroff**, S. R. (in preparation). Motivational influences on satisfaction of search errors in multiple-target visual search.
3. \*Clark, K., \*Fleck, M. S., & **Mitroff**, S. R. (in preparation). Reducing satisfaction of search errors in visual search.
4. \*Clark, K., Zucker, N., Watson, K., Stanton, S. J., & **Mitroff**, S. R. (in preparation). Revealing individual differences in visual search: ADHD leads to seeing too little and anorexia nervosa leads to seeing too much.
5. Wynn, R. M., & **Mitroff**, S. R. (in preparation). Lasting inhibition: Mapping the time course of response inhibition with big data.

### **Conference Presentations (in reverse chronological order)**

1. Porfido, C. L., Cox, P. H., Adamo, S. H., & **Mitroff**, S. R. (2019, November). Perils of using psychology subject pools for cognitive psychology research. Paper presented at the annual meeting of the Psychonomic Society. Montreal, Canada. (Presented by Mitroff)
2. Kramer, M. R., Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (2019, November). Using big data to investigate the short-term and long-term synaptic maintenance of implicit learning. Poster presented at the annual meeting of the Psychonomic Society, Montreal, Canada.
3. Cox, P. H., Adamo, S. H., Porfido, C. L., Kravitz, D. J., & Mitroff, S. R. (2019, November). A miss in the subsequent search miss (SSM) effect: Proper quantification of an important phenomenon in visual search. Poster presented at the annual Object Perception, Attention, and Memory meeting. Montreal, Canada.
4. Nag, S., **Mitroff**, S. R., & Kravitz, D. J. (2019, November). Leveraging “big data” to examine the relationship between priming and response inhibition. Poster presented at the annual Object Perception, Attention, and Memory meeting. Montreal, Canada.
5. Porfido, C. L., Cox, P. H., Adamo, S. H., & **Mitroff**, S. R. (2019, November). Recruiting from the shallow end of the pool: Cognitive performance and study compliance differ between participant pool subjects from the start to the end of an academic term. Poster presented at the annual Object Perception, Attention, and Memory meeting. Montreal, Canada.
6. **Mitroff**, S. R. (2019, November). Which people are best suited to conduct visual searches? Paper presented at 21st annual Awareness and Localization of Explosives-related Threats Workshop. Boston, MA.

7. Kramer, M. R., Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (2019, October). Using a massive behavioral dataset to investigate the synaptic maintenance of implicit learning. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
8. Adamo, S. H., Cox, P. H., Kravitz, D. J. & **Mitroff**, S. R. (2019, May). Accurately quantifying the subsequent search miss effect in multiple-target visual search. Paper presented at the annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
9. Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (2019, May). Changes in target-distractor similarity space with experience in complex visual search. Poster presented at the annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
10. Kramer, M. R., Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (2019, May). A big data approach to revealing the nature of carryover effects. Poster presented at the annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
11. **Mitroff**, S. R., & Kravitz, D. J. (May, 2019). Leveraging big data to explore human variability. Human Variability Project Workshop. Human Research and Engineering Directorate, Army Research Laboratory. Aberdeen, MD.
12. Kramer, M. R., Cox, P. H., Kravitz, D. J., & **Mitroff**, S. R. (2019, April). The massive impact of carryover effects: Behavior is dramatically and systematically shaped by prior trials. Paper presented at the annual GW Institute for Neuroscience Symposium. Washington, D. C.
13. Kramer, M. R., Porfido, C. L., Cox, P. H., Kravitz, D. J., & Mitroff, S. R. (2019, March). Generalized training for visual search. Paper presented at the 73rd meeting of the Department of Defense Human Factors Engineering Technical Advisory Group. Aberdeen, MD.
14. Kramer, M. R., Cox, P. H., Kravitz, D. J., & **Mitroff**, S. R. (2019, January). The massive impact of carryover effects: Behavior is dramatically and systematically shaped by prior trials. Paper presented at the annual Capital Area Cognition, Attention, and Perception conference. Washington, D. C.
15. Adamo, S. H., Brem, R., & **Mitroff**, S. R. (2018, November). Subsequent Search Misses and Tomosynthesis: Reduced Multiple-Target Search Errors in Segmented-3D Search Displays. Poster presented at the annual meeting of the Psychonomic Society. New Orleans, LA.
16. Kramer, M. R., Cox, P. H., Kravitz, D. J., & **Mitroff**, S. R. (2018, November). Revealing the Nature of Carryover Effects: Using Big Data to Quantify Evidence Accumulation in Behavioral Data. Poster presented at the annual meeting of the Psychonomic Society. New Orleans, LA.
17. Kravitz, D. J., Kramer, M. R., Cox, P. H., & **Mitroff**, S. R. (2018, November). The dominance of individual differences and short-term adaptation: insights from “Big Data.” Paper presented at the annual meeting of the Psychonomic Society. New Orleans, LA.
18. **Mitroff**, S. R., & Adamo, S. H. (2018, November). Using cognitive psychology tools to understand breast cancer detection in segmented-3D displays. Paper presented at the annual meeting of the Psychonomic Society. New Orleans, LA.
19. **Mitroff**, S. R., Kramer, M. R., Cox, P., & Kravitz, D. J. (2018, November). Using Big Data to Improve Research Practices in the lab. Paper presented at the annual meeting of the Psychonomic Society. New Orleans, LA.
20. Kramer, M. R., Cox, P. H., Kravitz, D. J., & **Mitroff**, S. R. (2018, November). The massive impact of carryover effects: Behavior is dramatically and systematically shaped by prior trials. Paper presented at the annual Object Perception, Attention, and Memory meeting. New Orleans, LA.
21. Cox, P. H., **Mitroff**, S. R., & Kravitz, D. J. (2018, November). Mapping the behavioral similarity space of targets and distractors in complex visual search. Poster presented at the annual Object Perception, Attention, and Memory meeting. New Orleans, LA.

22. Kramer, M. R., Kravitz, D. J., & **Mitroff**, S. R. (2018, May). Get more out of your data: Breaking down response time to improve its usefulness. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
23. Cox, P. H., Kravitz, D. J., & **Mitroff**, S. R. (2018, May). Predicting ultimate visual search competency from initial performance. Paper presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
24. Mitroff, S. R. (2018, January). Predicting professional visual search competency with a brief assessment. Paper presented at the Capital Area Cognition/Attention/Perception Conference. Washington D.C.
25. Kravitz, D. J., & **Mitroff**, S. R., (2017, November). Modeling the visual search literature I: An empirical estimate of a priori power. Paper presented at the annual meeting of the Psychonomic Society. Vancouver, B.C.
26. **Mitroff**, S. R., Adamo, S. H., Kramer, M. R., Sharpe, B., & Kravitz, D. J. (2017, November). Applied visual search: Studying search in practical situations. Paper presented at the annual meeting of the Psychonomic Society. Vancouver, B.C.
27. Adamo, S. H., Ericson, J. M., Nah, J. C., Brem, R., & **Mitroff**, S. R. (2017, November). Mammography to tomosynthesis: Examining the differences between two-dimensional and segmented-three-dimensional visual search. Poster presented at the annual meeting of the Psychonomic Society. Vancouver, B.C.
28. Kramer, M. R., Kravitz, D. J., & **Mitroff**, S. R. (2017, November). Escaping isolation: Using “big data” to demonstrate trial-by-trial, and session-by-session, influences on cognition. Poster presented at the annual Object Perception, Attention, and Memory meeting. Vancouver, B. C.
29. Schubel, L., Kramer, M. R., Kravitz, D. J., & **Mitroff**, S. R. (2017, November). Shirts, shoes, and... Shark? Investigating the effects of infrequent distractors on visual search performance. Poster presented at the annual Object Perception, Attention, and Memory meeting. Vancouver, B. C.
30. Onefater, R., Kramer, M. R., & **Mitroff**, S. R. (2017, November). Perfection and satisfaction: A motivational predictor of cognitive abilities. Poster presented at the annual Object Perception, Attention, and Memory meeting. Vancouver, B. C.
31. Adamo, S. H., Ericson, J. M., Nah, J. C., Brem, R., & **Mitroff**, S. R. (2017, November). Mammography to tomosynthesis: Examining the differences between two-dimensional and segmented-three-dimensional visual search. Paper presented at the annual meeting of the annual Object Perception, Attention, and Memory meeting. Vancouver, B. C.
32. **Mitroff**, S. R. (2017, September). Identifying capable screeners. Paper presented at the annual Airport Security Conference. Vienna, Austria.
33. Adamo, S. H., Ericson, J. M., Nah, J. C., Brem, R., & **Mitroff**, S. R. (2017, July). Mammography to tomosynthesis: Comparing two-dimensional to three-dimensional visual search in radiologists and undergraduates. Paper presented at the 27th annual meeting of the Medical Image Perception Society. Houston, TX.
34. Biggs, A. T., Sharpe, B., & **Mitroff**, S. R. (2017, May). Using big data to enhance checkpoint security: What can we learn from big data that we cannot learn from existing systems? Paper presented at the 71st meeting of the Department of Defense Human Factors Engineering Technical Advisory Group. Atlantic City, NJ.
35. Sharpe, B., Kudrick, B., Ericson, J. M., Smith, D., Dressel, J., & **Mitroff**, S. R. (2017, May). Using big data and a rapid software-based assessment to predict airport screening officers’ visual search competency. Paper presented at the 71st meeting of the Department of Defense Human Factors Engineering Technical Advisory Group. Atlantic City, NJ.

36. Scotti, P., Adamo, S. R., **Mitroff**, S. R., & Shomstein, S. (2017, May). Repetition priming preferentially benefits infrequent targets. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
37. Kravitz, D. J., & **Mitroff**, S. R. (2017, May). Estimates of a priori power and false discovery rates induced by post-hoc changes from thousands of independent replications. Paper presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
38. Kramer, M. R., Wynn, R. M., & **Mitroff**, S. R. (2017, May). Individual differences in susceptibility to irrelevant environmental influences predict visual search performance. Paper presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
39. Wynn, R. M., Kravitz, D. J., & **Mitroff**, S. R. (2017, May). Lingering effects of response inhibition: Evidence for both control settings and memory association mechanisms. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
40. **Mitroff**, S. R., Ericson, J. M., & Sharpe, B. (2017, May). Predicting airport screening officers visual search competency with a rapid assessment. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
41. Cain, M. S., Dunsmoor, J. E., LaBar, K. S., & **Mitroff**, S. R. (2017, May). Trait anxiety is associated with increased multiple-target visual search errors. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
42. Philbeck, J. W., Kravitz, D. J., **Mitroff**, S. R., & Houck, L. A. (2017, May). Contextual influences of room width and depth on egocentric distance judgments in natural scenes. Poster presented at the annual meeting of the Vision Science Society. St. Pete Beach, FL.
43. **Mitroff**, S. R., Ericson, J. M., & Kravitz, D. J. (2016, November). Modeling the visual search literature II: Correcting for post-hoc design changes. Paper presented at the annual meeting of the Psychonomic Society. Boston, MA.
44. Ericson, J. M., Kravitz, D. J., & **Mitroff**, S. R. (2016, November). Visual search: You are who you are (+ a learning curve). Poster presented at the annual meeting of the Psychonomic Society. Boston, MA.
45. Wynn, R. M., & **Mitroff**, S. R. (2016, November). Lasting inhibition: Mapping the time course of response inhibition with big data. Poster presented at the annual Object Perception, Attention, and Memory meeting. Boston, MA.
46. Ericson, J. M., **Mitroff**, S. R., & Sharpe, B. (2016, September). Long-term visual search: Using mobile app “big data” to reveal key aspects of experience in visual search. Paper presented at the annual meeting of the Human Factors & Ergonomic Society, Washington D.C.
47. **Mitroff**, S. R. (2016, May). Improving performance of human operators. Paper presented at 14th annual Awareness and Localization of Explosives-related Threats Workshop. Boston, MA.
48. **Mitroff**, S. R., Winkle, J., Ericson, J. M., & Gancayco, C. A. (2015, November). The long and short of visual search: Examining both long- and short-term influences on search performance. Paper presented at the annual meeting of the Psychonomic Society, Chicago, IL.
49. Ericson, J. M., Winkle, J., & **Mitroff**, S. R., (2015, November). Moving at the speed of search: Long-term visual search and the influence of lapses in time between search activity. Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.
50. Adamo, S. H., Cain, M. S., & **Mitroff**, S. R. (2015, November). Satisfaction at last: Evidence for the “satisfaction” hypothesis for multiple-target search errors. Paper presented at the annual Object Perception, Attention, and Memory meeting, Chicago, IL.

51. **Mitroff**, S. R., Biggs, A. T., Ericson, J. M., Winkle, J., Gancayco, C. A., Adamo, S. H., & Wu Dowd, E. (2015, September). Using mobile technology (and big data) to understand medical errors. Paper presented at the Diagnostic Error in Medicine 8th International Conference, Washington, D.C.
52. **Mitroff**, S. R., Biggs, A. T., Ericson, J. M., Winkle, J., Adamo, S. H., & Wu Dowd, E. (2015, June). Using mobile technology (and big data) to inform radiological research. Paper presented at the annual meeting of the Medical Imaging Perception Society, Ghent, Belgium.
53. Ericson, J. M., Biggs, A. T., Winkle, J. A., Gancayco, C. A., & **Mitroff**, S. R. (2015, May). Long-term visual search: Examining trial-by-trial learning over extended visual search experiences. Talk presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.
54. Adamo, S. H., Cain, M. S., & **Mitroff**, S. R. (2015, May). An individual differences approach to multiple-target search errors: Errors correlate with attentional deficits. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.
55. Winkle, J. A., Biggs, A. T., Ericson, J. M., & **Mitroff**, S. R. (2015, May). For better or worse: Prior trial accuracy affects current trial performance in visual search. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.
56. Shah, N., Holley, R. J., Benschir, M. D., & **Mitroff**, S. R. (2015, April). Use of visual stroboscopic therapy to Address hemianopsia and visual inattention following stroke – a pilot study. Poster presented at the annual meeting of the American Occupational Therapy Association, Nashville, TN.
57. **Mitroff**, S. R., Biggs, A. T., Adamo, S. H., Dowd, E. W., Winkle, J. & Clark, K. (2014, November). What can 1,000,000,000 trials tell us about visual search? Paper presented at the annual meeting of the Psychonomic Society, Long Beach, CA.
58. Biggs, A. T., Adamo, S. H., Dowd, E. W., & **Mitroff**, S. R. (2014, November). Perceptual and conceptual set biases in multiple-target visual search. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.
59. Biggs, A. T., Cain, M. S., **Mitroff**, S. R. (2014, November). Reducing civilian casualties through cognitive training. Paper presented at the annual Object Perception, Attention, and Memory meeting, Long Beach, CA.
60. Berg, B. V., Appelbaum, L. G., Clark, K., **Mitroff**, S. R., & Woldorff, M. G. (2014, November). The neural cascade of processing underlying response time variability in visual search. Poster to be presented at the annual meeting of the Neuroscience Society, Washington, D.C.
61. **Mitroff**, S. R. (2014, August). Expand funding opportunities by embracing (and enjoying) applied research. Invited presentation in the “Navigating the National Funding Climate—Why What Happens on Capitol Hill Matters” symposium at the annual meeting of the American Psychological Association, Washington, DC.
62. Dowd, E. W., Monroe, D. M., LaBar, K. S., & **Mitroff**, S. R. (2014, April). Attentional prioritization of threat may be driven by perceptual changes. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Boston, MA.
63. **Mitroff**, S. R. (2013, December). Multiple-target visual search. Talk presented at Visual Search: A Comprehensive Treatment. Army Research Office supported workshop. Washington, D.C.
64. Appelbaum, L. G., Bel-Bahar, T., Wang, L., Krasich, K., Hughes, L., **Mitroff**, S. R. (2013, November). *Mapping the core factors of visual perceptual performance*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
65. Bel-Bahar, T., Gentzler, E., Adamo, S. H., Wang, L., Krasich, K., Hughes, L., **Mitroff**, S. R., & Appelbaum, L. G. (2013, November). *Visuomotor performance is predicted by ERP amplitudes in a rapid*

- serial visual presentation (RSVP) protocol*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
66. Biggs, A. T., & **Mitroff**, S. R. (2013, November). *Finding a needle (and a thread, and a thimble, and...) in a haystack: Multiple-target visual search for ultra-rare items*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
67. Cain, M. S., Finn, A. S., Gabrieli, J. D., & **Mitroff**, S. R. (2013, November). *Cognitive, personality, and neuroimaging correlates of media multitasking*. Paper presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
68. Adamo, S. H., Biggs, A. T., & **Mitroff**, S. R. (2013, November). *Mo' money, mo' problems: Monetary motivation can exacerbate attentional blink errors*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Toronto, ON, Canada.
69. Clark, K., & **Mitroff**, S. R. (2013, November). *I knew you were going to miss that: Predicting future visual search performance from initial search abilities*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Toronto, ON, Canada.
70. Krasich, K., Hughes, L., Wang, L., Bel-Bahar, T., **Mitroff**, S. R., & Appelbaum, L. G. (2013, November). *Visual Perception and Motor Skills Across the Day*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Toronto, ON, Canada.
71. **Mitroff**, S. R. (2013, November). *Marrying theoretical and practical goals to advance psychological science and society*. Keynote Address presented at the annual Object Perception, Attention, and Memory meeting. Toronto, ON, Canada.
72. **Mitroff**, S. R. (2013, November). The human role in the Army's future: The need for high-level assessment & training. Talk presented at the Army Science Planning & Strategy Meeting: The Human Dimension. Potomac, MD.
73. **Mitroff**, S. R. (2013, October). *Enhancing personnel and standard operating procedures to improve homeland security*. Paper presented at the 2013 Homeland Security Expo, Washington, D.C.
74. Adamo, S. H., Biggs, A. T., & **Mitroff**, S. R. (2013, May). *Visual searches need their own personal space: The importance of spacing between simultaneously presented search arrays*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
75. Appelbaum, L. G., Cain, M. S., Schroeder, J. E., Darling, E. F., & **Mitroff**, S. R. (2013, May). *Visual plasticity: Altering cognition through stroboscopic training*. Paper presented at the annual meeting of the Vision Sciences Society, Naples, FL.
76. Biggs, A. T., Spaventa, T., Hopfinger, J., & **Mitroff**, S. R. (2013, May). The effects of searching for something you love (or hate): *Duke and UNC students search for rival team logos*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
77. Clark, K., Biggs, A. T., Darling, E. F., Cain, M. S., Jackson, T. H., Samei, E., Baker, J. A., & **Mitroff**, S. R. (2013, May). *Visual expertise: Insights gained by comparing professional populations*. Paper presented at the annual meeting of the Vision Sciences Society, Naples, FL.
78. Devyatko, D., Appelbaum, L. G., & **Mitroff**, S. R. (2013, May). *A common mechanism for perceptual reversals in motion-induced blindness, the Troxler effect, and perceptual filling-in*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
79. Dowd, E. W., Kiyonaga, A., Egner, T., & **Mitroff**, S. R. (2013, May). *Individual differences may reveal distinct mechanisms of attentional guidance*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
80. Jackson, T. H., **Mitroff**, S. R., Clark, K., Proffit, W. R., Lee, J. Y., & Nguyen, T. T. (2013, May). *Clinical Implications of Enhanced Face Symmetry Assessment Abilities in Orthodontists*. Poster presented at the annual meeting of the American Association of Orthodontists. Philadelphia, PA.

81. Jackson, T. H., **Mitroff**, S. R., Clark, K., Proffit, W. R., Lee, J. Y., & Nguyen, T. T. (2013, March). *Characterizing clinical skill acquisition: Face symmetry assessment abilities in orthodontists*. Paper presented at the annual meeting of the International Association for Dental Research. Seattle, WA.
82. Jackson, T. H., **Mitroff**, S. R., Clark, K., Proffit, W. R., Lee, J. Y., & Nguyen, T. T. (2013, February). *Clinical Skill Acquisition: Test-Enhanced Learning of Symmetry Assessment in Dental Education*. Paper presented at the UNC Dental Research in Review Day. Chapel Hill, NC.
83. Adamo, S. H., Cain, M. S., & **Mitroff**, S. R. (2012, November). *Self-Induced attentional blink: A cause of errors in multiple-target visual search*. Paper presented at the annual Object Perception, Attention, and Memory meeting. Minneapolis, MN.
84. Clark, K., Jackson, T. H., & **Mitroff**, S. R. (2012, November). *Face symmetry assessment: Evidence for malleability and expertise*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Minneapolis, MN.
85. Biggs, A. T., & **Mitroff**, S. R. (2012, November). *Second search same as the first: The benefit of consistency in multiple target search*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Minneapolis, MN.
86. Cain, M. S., & **Mitroff**, S. R. (2012, November). *Found targets are powerful distractors in multiple-target visual search*. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
87. **Mitroff**, S. R., Biggs, A. T., Cain, M. S., Darling, E. F., Clark, K., Adamo, S. H., & Dowd, E. W. (2012, November). *In search of experience effects: How TSA officers differ from undergraduates on visual search tasks*. Paper presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
88. Appelbaum, L. G., Clark, K., **Mitroff**, S. R., & Woldorff, M. G. (2012, October). *Cognitive and neural plasticity due to visual search training*. Paper presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
89. Adamo, S. H., Cain, M. S., & **Mitroff**, S. R. (2012, May). *Targets need their own personal space*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
90. Cain, M. S., Adamo, S. H., & **Mitroff**, S. R. (2012, May). *What eye-tracking can tell us about multiple-target visual search*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
91. Clark, K., Appelbaum, L. G., **Mitroff**, S. R., & Woldorff, M. G. (2012, May). *Neural correlates of learning during a visual search task*. Paper presented at the annual meeting of the Vision Sciences Society, Naples, FL.
92. Dowd, E. W., & **Mitroff**, S. R. (2012, May). *Attentional guidance by working memory overrides saliency cues in visual search*. Paper presented at the annual meeting of the Vision Sciences Society, Naples, FL.
93. **Mitroff**, S. R., Biggs, A. T., Cain, M. S., Darling, E. F., Clark, K., Adamo, S. H., & Dowd, E. W. (2012, May). *Visual search at the airport: Testing TSA officers*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
94. Dowd, E. W., & **Mitroff**, S. R. (2012, February). *Attentional guidance by working memory overrides saliency cues in visual search*. Poster presented at the annual meeting of the North Carolina Cognition Conference, Chapel Hill, NC.
95. **Mitroff**, S. R., Appelbaum, L. G., Schroeder, J. E., & Cain, M. S. (2011, November). *Improved visual cognition through stroboscopic training*. Paper presented at the annual meeting of the Psychonomic Society, Seattle, WA.
96. Clark, K., Samei, E., Baker, J., & **Mitroff**, S. R. (2011, November). *Expertise in radiological screening and satisfaction of search*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Seattle, WA.



97. Cain, M. S., & **Mitroff**, S. R. (2011, November). *Examining relationships between attentional traits and media multitasking behavior*. Poster presented at the annual Object Perception, Attention, and Memory meeting. Seattle, WA.
98. Cain, M. S., Vul, E., Clark, K., & **Mitroff**, S. R. (2011, July). *Optimal models of human multiple-target visual search*. Paper presented at the 33<sup>rd</sup> Annual Conference of the Cognitive Science Society. Boston, MA.
99. Clark, K., Cain, M. S., Adcock, R. A., & **Mitroff**, S. R. (2011, May). *Interactions between reward, feedback, and timing structures on dual-target search performance*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
100. Cain, M. S., Dunsmoor, J. E., LaBar, K. S., & **Mitroff**, S. R. (2011, May). *Accuracy in dual-target visual search is hindered by anticipatory anxiety*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
101. Schroeder, J. E., Appelbaum, L. G., Cain, M. S. & **Mitroff**, S. R. (2011, May). *Examining the effects of stroboscopic vision*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
102. Cain, M. S., Dunsmoor, J. E., LaBar, K. S., & **Mitroff**, S. R. (2011, April). *Anticipatory anxiety decreases accuracy in dual-target visual search*. Poster presented at the 59<sup>th</sup> Annual Symposium on Motivation, Lincoln, NE.
103. Clark, K., Cain, M. S., Adcock, R. A., & **Mitroff**, S. R. (2011, April). *Motivational influences of monetary reward and performance feedback on dual-target search performance*. Poster presented at the 59<sup>th</sup> Annual Symposium on Motivation, Lincoln, NE.
104. **Mitroff**, S. R. (2011, April). *Examining influences on applied visual search performance*. Invited paper presented at the 59<sup>th</sup> Annual Symposium on Motivation. Lincoln, NE.
105. Cain, M. S., Vul, E., Clark, K., & **Mitroff**, S. R. (2010, November). Human search strategies are informed by complex target distribution statistics. Paper presented at the annual Object Perception, Attention, and Memory meeting, St. Louis, MO.
106. Clark, K., Zucker, N., Watson, K., & **Mitroff**, S. R. (2010, November). Revealing individual differences in visual search: ADHD leads to see too little and anorexia nervosa leads to seeing too much. Poster presented at the annual Object Perception, Attention, and Memory meeting, St. Louis, MO.
107. Cain, M. S., & **Mitroff**, S. R. (2010, November). *Impact of media multitasking on attentional filtering and disengagement*. Poster presented at the annual meeting of the Psychonomic Society, St. Louis, MO.
108. **Mitroff**, S. R., Clark, K., & Cain, M. S. (2010, November). *Identifying and reducing satisfaction of search errors: How to alleviate dual-target search costs*. Paper presented at the annual meeting of the Psychonomic Society, St. Louis, MO.
109. Hubal, R., **Mitroff**, S. R., Cain, M. S., Scott, B. & DeWitt, R. (2010, November). *Simulating a vigilance task: Extensible technology for baggage security assessment and training*. Poster presented at the 2010 IEEE International Conference on Technologies for Homeland Security, Waltham, MA.
110. **Mitroff**, S. R., Clark, K., & Cain, M. S. (2010, October). *Improving DHS Performance with visual cognition research*. Poster presented at the 2<sup>nd</sup> Annual Research Summit of the Institute for Homeland Security Solutions, Cary, NC.
111. **Mitroff**, S. R. & Hariri, A. R. (2010, October). *Exploring behavioral, neural and genetic markers of threat sensitivity*. Paper presented at the 2<sup>nd</sup> Annual Research Summit of the Institute for Homeland Security Solutions, Cary, NC.
112. Cain, M. S., & **Mitroff**, S. R. (2010, May). *Distractor filtering in media multitaskers*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

113. Clark, K., Fleck, M. S., & **Mitroff**, S. R. (2010, May). *Reducing satisfaction of search errors in visual search*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
114. Clark, K., Fleck, M. S., & **Mitroff**, S. R. (2009, November). *Video game players excel at change detection*. Poster presented at the annual Object Perception, Attention, and Memory meeting, Boston, MA.
115. Fleck, M. S., Samei, E., & **Mitroff**, S. R. (2009, November). *Generalized 'satisfaction of search': Adverse influences on dual-target search accuracy*. Paper presented at the annual meeting of the Psychonomic Society, Boston, MA. (presented by S. R. Mitroff)
116. Hubal, R., & **Mitroff**, S. R. (2009, October). *Improving vigilance for homeland security personnel*. Paper presented at the Inaugural Research Summit of the Institute for Homeland Security Solutions, Chapel Hill, NC.
117. Carter, O., Luedeman, R., **Mitroff**, S. R., Nakayama, K. (2009, September). *Motion Induced Blindness: The more you attend the less you see*. Paper presented at the 32nd Annual Meeting of the Japan Neuroscience Society, Nagoya, Japan.
118. Clark, K., Fleck, M. S., & **Mitroff**, S. R. (2009, May). *Effects of videogame expertise on change detection abilities*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
119. Donohue, S. E., Woldorff, M. G., & **Mitroff**, S. R. (2009, May). *Multisensory benefits of playing video games*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
120. Jordan, K. E., Clark, K., & **Mitroff**, S. R. (2009, May). *See an object, hear an object file: Object correspondence transcends sensory modality*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
121. Dunsmoor, J. E., **Mitroff**, S. R., & LaBar, K. S. (2009, March). *Generalization of human fear learning along a perceptual gradient of expression intensity*. Poster presented at the annual meeting of the North Carolina Cognition Conference, Durham, NC.
122. Dunsmoor, J. E., **Mitroff**, S. R., & LaBar, K. S. (2008, November). *Generalization of human fear learning along a perceptual gradient of expression intensity*. Poster presented at the annual meeting of the Society for Neuroscience, Washington, DC.
123. Wu, W., Tiesinga, P. H., Tucker, T. R., **Mitroff**, S. R., Heiner, J. A., & Fitzpatrick, D. (2008, November). *VI population response to changes in direction of stimulus motion: modeling and perception*. Poster presented at the annual meeting of the Society for Neuroscience, Washington, DC.
124. **Mitroff**, S. R. (2008, November). *Motivational benefits of video game playing*. Paper presented at the annual meeting of the Psychonomic Society, Chicago, IL.
125. **Mitroff**, S. R. (2008, October). *Identification and Training of "Hyperfocusers": those with remarkable attentional capability*. Invited Paper presented at the Neuroergonomics and Neuromorphics Workshop sponsored by the Life Sciences Division of the U.S. Army Research, Development, and Engineering Command of the Army Research Office. University of Maryland, MD.
126. **Mitroff**, S. R. (2008, August). *The malleability of visual cognition: Effects of videogame playing on vision and motivation*. Paper presented at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning, Hood River, OR.
127. Carter, O., Luedeman, R., & **Mitroff**, S. R., & Nakayama, K. (2008, May). *Motion induced blindness: The more you attend the less you see*. Paper presented at the annual meeting of the Vision Sciences Society, Naples, FL.
128. Fleck, M. S., & **Mitroff**, S. R. (2008, May). *Videogamers excel at finding rare targets*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

129. **Mitroff**, S. R., & Jordan, K. E. (2008, May). *Videogame players demonstrate enhanced multi-sensory abilities*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
130. Wu, W., Tiesinga, P., Tucker, T., Heiner, J., **Mitroff**, S. R., & Fitzpatrick, D. (2008, May). *The dynamics of V1 population response to instantaneous changes in direction of stimulus motion*. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.
131. **Mitroff**, S. R., Arita, J. T., & Fleck, M. S. (2007, November). *Staying in Bounds: Contextual constraints on object file coherence*. Paper presented at the annual meeting of the Psychonomic Society, Long Beach, CA.
132. Fleck, M. S., & **Mitroff**, S. R. (2007, May). *Catching a miss: Error reduction in low prevalence search*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
133. **Mitroff**, S. R., & Wang, S. (2007, May). *Preserved visual representations despite change blindness in 11-month-old infants*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
134. **Mitroff**, S. R., & Alvarez, G. A. (2006, November). *Space and time, not surface features, underlie object persistence*. Paper presented at the annual meeting of the Psychonomic Society, Houston, TX.
135. Arita, J. T. & **Mitroff**, S. R. (2006, May), *Staying in bounds: A critical role of closure for object files*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
136. **Mitroff**, S. R., Sobel, D. M., Gopnik, A. (2006, May). *Reversing how to think about ambiguous figure reversals: Spontaneous alternating by uninformed observers*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
137. **Mitroff**, S. R. (2006, May). *Seeing without seeing: Complex perception outside of awareness*. Invited talk presented at the annual meeting of the American Psychological Society, New York, NY.
138. **Mitroff**, S. R. (2006, February). *Visual perception without awareness: Evidence from motion-induced blindness*. Invited talk presented at the annual meeting of the North Carolina Cognition Conference, Greensboro, NC.
139. **Mitroff**, S. R., Scholl, B. J., & Wynn, K. (2005, November). *One plus one equals one: The effects of merging on object files*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
140. **Mitroff**, S. R., Cheries, E. W., Scholl, B. J., & Wynn, K. (2005, May). *Cohesion as a principle of object persistence in infants and adults*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
141. **Mitroff**, S. R., Scholl, B. J., & Wynn, K. (2005, April). *What vision scientists can learn from infants: Evidence of core principles guiding adult object persistence*. Paper presented at the Yale Object Symposium, New Haven, CT.
142. **Mitroff**, S. R., Wynn, K., & Scholl, B. J. (2005, April). *Exploring persisting object representations with infants and adults*. Paper presented at the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
143. **Mitroff**, S. R. & Scholl, B. J. (2004, May). *Online grouping and segmentation without awareness: Evidence from motion-induced blindness*. Paper presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
144. **Mitroff**, S. R., Wynn, K., Scholl, B. J., Johnson, S. P., & Shuwairi, S. M. (2004, May). *'Bouncing vs. streaming' as a measure of infants' dynamic object individuation*. Poster presented at the annual meeting of the International Society on Infant Studies, Chicago, IL.

145. **Mitroff**, S. R. & Scholl, B. J. (2003, November). *Perceiving the disappearances of unseen objects in Motion-induced Blindness*. Paper presented at the annual *Object Perception, Attention, and Memory* meeting, Vancouver, B.C.
146. **Mitroff**, S. R., Scholl, B. J., & Wynn, K. (2003, May). *The relationship between object files and conscious perception*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
147. Noles, N. S., Scholl, B. J., **Mitroff**, S. R. (2003, May). *The persistence of object-file representations*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
148. **Mitroff**, S. R., Simons, D. J., & Levin, D. T. (2002, November). *Three blinding devices: See how change detection runs*. Paper presented at the annual Object Perception, Attention, and Memory meeting, Kansas City, MO.
149. **Mitroff**, S. R. & Simons, D. J. (2001, May). *A lack of confidence in implicit change detection*. Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
150. **Mitroff**, S. R. & Simons, D. J. (2000, November). *Without explicit detection, change localization is chance localization*. Poster presented at the annual Object Perception, Attention, and Memory meeting, New Orleans, LA.
151. **Mitroff**, S. R. & Simons, D. J. (2000, March). *Changes are not localized until they are explicitly detected*. Poster presented at the annual meeting of the Association for Research in Vision and Ophthalmology, Ft. Lauderdale, FL.

## Research

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### Awards

NIMH National Research Service Award, Post-doctoral Fellow, 2002 to 2005  
 National Science Foundation Graduate Fellow, 1999 to 2002  
 Derek Bok Teaching Award, Harvard University, Spring 2001  
 George W. Goethals Teaching Prize, Harvard University, 2001-2002

### Brownbags, Colloquia, and Talks

Apr 2019	Vrije University	Department of Psychology
Feb 2018	Yale University	Current Work in Cognitive Psychology
Oct 2017	University of Chicago	Department of Psychology
Dec 2016	Georgetown University	Translational Biomedical Science Program
Nov 2016	George Mason University	Human Factors & Applied Cognition, Psychology
Apr 2016	George Washington University	School of Public Health, mobile-health group
Apr 2016	George Washington/ARL workshop	GW CogNeuro and Army Research Labs meeting
Apr 2015	George Washington University	Department of Psychology
Apr 2015	American University	Department of Psychology
Apr 2015	George Washington University	Milkin School of Public Health
Nov 2014	University of Virginia	Cognitive Lunch; Psychology Department
Mar 2014	Lehigh University	Psychology Department Colloquium
Mar 2014	Catholic University	Biomedical Engineering Seminar
Feb 2014	Georgetown University	Department of Neuroscience, Brownbag
Jan 2014	George Washington University	Department of Psychology, Brownbag
Dec 2013	MedStar Center for Human Factors	Brown Bag
Oct 2013	University of Delaware	Department of Psychology
Sep 2013	National Rehabilitation Hospital, DC	Motor Control & Munchies Brownbag Series
Sep 2013	University of Maryland, College Park	Computer Vision Laboratory, Computer Science
Sep 2013	George Mason University	Human Factors & Applied Cognition, Psychology
Dec 2012	Georgetown University	Department of Psychology

Nov 2012	American University	Center for Behavioral Neuroscience
Jul 2012	The Johns Hopkins University	Vision Seminar; Psychological and Brain Sciences
Apr 2012	Duke University	Center for Cognitive Neuroscience
Mar 2012	Duke University	Computer Science-Visualization Technology Group
Jan 2012	U. of Illinois, Urbana-Champaign	Department of Psychology
Mar 2011	North Dakota State University	Department of Psychology
Feb 2011	University of California, Riverside	Department of Psychology
Nov 2009	Duke University	Department of Psychology & Neuroscience
Mar 2009	Univ. of North Carolina, Greensboro	Department of Psychology
Feb 2009	Brown University	Cognitive, Linguistic & Psychological Sciences
Jan 2009	Emory University	Department of Psychology
Oct 2008	Wofford College	Department of Psychology
Sep 2008	University of Delaware	Department of Psychology
Aug 2008	University of Oregon	Posner & Keele Center for Cognitive Neurosciences
May 2008	Duke University	Duke Advanced Imaging Labs, Medical Center
Jan 2008	Duke University	Center for Cognitive Neuroscience
Oct 2007	University of California, Berkeley	Institute of Cognitive and Brain Sciences
Sep 2007	North Carolina State University	Computer Science-Digital Games Research Center
Sep 2007	U. of North Carolina, Chapel Hill	Department of Psychology
Apr 2007	University of Hong Kong	Department of Psychology
Feb 2007	Penn State University	Department of Psychology
Jan 2007	Yonsei University, South Korea	Department of Psychology
Nov 2006	Duke University	Computer Science-Visualization Technology Group
Oct 2005	Harvard University	Vision Lab, Department of Psychology
Mar 2005	Duke University	Center for Cognitive Neuroscience
Feb 2005	U. Colorado, Boulder	Institute of Cognitive Sciences
Feb 2005	U. Colorado, Boulder	Department of Psychology
Feb 2005	University of California, Santa Cruz	Department of Psychology
Feb 2005	University of California, Irvine	Department of Cognitive Sciences
Dec 2004	Boston College	Department of Psychology
Dec 2004	Duke University	Psychological and Brain Sciences, Lunchbox
Oct 2004	Stanford University	Department of Psychology, Cognitive Seminar
Oct 2004	University of California, Berkeley	Cognition, Brain, & Behavior Colloquium
Mar 2003	Yale University	Current Work in Cognitive Psychology
Oct 2000	Harvard University	Cognition, Brain, & Behavior Seminar

#### Public Addresses and Industry/Government Presentations

Oct 2019	US Army Natick Army Research Labs	Combat Capabilities Development Command
Sep 2019	NIH, National Cancer Institute	Cognition & Medical Image Perception Think Tank
Apr 2017	TSA Human Factors Symposium	TSA Headquarters, Research Briefing
Jul 2016	TSA Human Factors Symposium	TSA Headquarters, Research Briefing
Jun 2016	Canadian Air Transport Security Auth.	CATSA Headquarters, Research Briefing
Mar 2016	US Army Natick Army Research Labs	Research, Development, & Engineering Center
Sep 2015	Human Factors Integrated Project Team	TSA Headquarters, Research Briefing
Jan 2015	National Geospatial Intelligence Agency	Brownbag
Oct 2014	MedStar Institute for Innovation	Thinking Differently Forum
Feb 2014	Federal Drug Administration	Research Briefing
Feb 2014	NIH; National Cancer Institute	Brown Bag
Feb 2014	Army Research Labs, Aberdeen	Research Briefing
Jan 2014	TSA Townhall	TSA Headquarters, Research Briefing
Jul 2013	United States Congress	Congressional Briefing on Homeland Security
Dec 2012	RDU airport, TSA leadership	Research Briefing
Sep 2012	TSA Headquarters, Washington D.C.	Research Briefing

Sep 2012	Friesen Physio Fitness Summit	Sports Medicine Conference
Jul 2012	N.C. Military Business Center	N.C. Federal Advanced Technologies Symposium
Oct 2011	Athletic Republic	Facility Conference on Sports Vision Training
Sep 2011	RDU airport, TSA leadership	Research Briefing
Feb 2011	Durham Academy High School	High School Assembly
Sep 2009	Osher Life Long Learning Inst.; Duke	Continuing Studies: Cognitive Neuroscience Series
May 2008	Alienware Computers	Research & Development, Emerging Technologies

## Professional Service

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### Organizational Duties

Psychonomic Society Program Committee	Member, 2017—
Visual Search: A Comprehensive Treatment (ARO funded workshop)	Organizer, 2013
Psychonomic Society Annual Meeting	Session Chair, 2007; 2009
Object Perception, Attention, & Memory Workshop	Organizer; 2004, 2005

### University Service

2019 –	<i>Director</i> , Cognitive Neuroscience Program, Department of Psychological & Brain Sciences
2019 –	<i>Director</i> , GW Cognitive Neuroscience Graduate Program
2019 –	<i>Co-Director</i> , GW Mind-Brain Institute
2019 –	<i>Member</i> , GW Neuroscience & Cognitive Neuroscience Majors Advisory Board
2018 – 2019	GW Advisory Council for Research Committee
2018	GW Inside GW Panel for Admitted Students
2009 – 2010	<i>Director of Graduate Studies</i> , Duke Cognitive Neuroscience Graduate Admitting Program
2010	Sophomore Year Experience, Duke Career Luncheon speaker
2009	Duke Responsible Conduct of Research Grad Student Orientation, Faculty Panel member
2009	Duke Responsible Conduct of Research Grad Student Orientation, Breakout session leader
2007 – 2009	Duke Center for Instructional Technology Faculty Ambassador, P&N Department

### Departmental & Center Service

2018 – 2019	GW Psychology Department Executive Committee
2016 – 2019	GW Psychology Colloquium Committee
2015 – current	<i>Chair</i> , GW Psychology Department Cog. Neuroscience Graduate Admissions Committee
2015 – 2017	GW Psychology Department Newsletter Committee
2010 – 2012	Duke Cognitive Neuroscience Graduate Admitting Program Steering/Admissions Committee
2009 – 2010	<i>Chair</i> , Duke Cognitive Neuroscience Graduate Admitting Program Admissions Committee
2009 – 2010	<i>Chair</i> , Duke Cognitive Neuroscience Graduate Admitting Program Steering Committee
2008 – 2010	Duke Center for Cognitive Neuroscience Retreat Committee
2007 – 2008	Duke Psychology & Neuroscience Cognitive Neuroscience LunchBox committee
2007 – 2012	Duke Psychology & Neuroscience Department Colloquium Committee
2008	Duke Center for Cognitive Neuroscience Colloquium Series Coordinator
2005 – 2008	Duke Interdisciplinary Program in Cognitive Neuroscience Graduate Admissions Committee
2005 – 2008	Duke Interdisciplinary Program in Cognitive Neuroscience Steering Committee
2006	Duke Cognitive Psychology/Cognitive Neuroscience Faculty Search Committee
2005	Duke Psychological & Brain Sciences Graduate Admissions Committee

### Editorial Boards

Acta Psychologica (2009– )
Attention, Perception & Psychophysics (2008– )
Frontiers in Perception Science (2010– )
Journal of Experimental Psychology: Applied (2017– )
Psychological Science (2011 & 2012)

Psychonomic Bulletin & Review (2011–)  
 Visual Cognition (2007–)

### Grant Reviewing

Doctoral Fellowship Programme of the Austrian Academy of Sciences  
 National Institutes of Health, Cognition & Perception Panel, 2/2008, Ad-hoc  
 National Science Foundation Review Panel, 4/2017  
 National Science Foundation  
 National Science Foundation SBE Postdoctoral Research Fellowship  
 Macquarie University Research Fellowship Program, Australia  
 National Sciences and Engineering Research Council of Canada  
 The Leverhulme Trust (UK)  
 United States Army Research Laboratory  
 United States Army Research Office  
 United States Army Natick Research & Development Center  
 United Kingdom Economic and Social Research Council

### Ad-hoc Journal Reviewing (52 Journals)

Acta Psychologica; Applied Cognitive Psychology; Attention, Perception & Psychophysics, Behavioral and Brain Functions, British Journal of Psychology, Cerebral Cortex, Child Development, Cognition, Cognitive Brain Research, Cognitive Processing, Cognitive Research: Principles and Implications, Cognitive Science, Consciousness and Cognition, Current Opinion in Behavioral Sciences, Current Opinion in Psychology, Developmental Psychology, Developmental Science, Ergonomics, European Journal of Neuroscience, Experimental Psychology, Health Education & Behavior, Human Factors, Japanese Psychological Research, Journal of Cognition and Development, Journal of Cognitive Enhancement, Journal of Cognitive Neuroscience, Journal of Gerontology: Psychological Sciences, Journal of Experimental Child Psychology, Journal of Experimental Psychology: Applied, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception & Performance, Journal of Experimental Psychology: Learning, Memory, and Cognition, Journal of Motor Behavior, Journal of Neuroscience, Journal of Sports Sciences, Journal of Vision, Motor Control, Neuropsychologia, Perception, Perceptual & Motor Skills, Perspectives on Psychological Science, PLoS ONE (Public Library of Science), Proceedings of the National Academy of Sciences, Psychological Research / Psychologische Forschung, Psychological Science, Psychological Bulletin, Psychonomic Bulletin & Review, Public Health, Quarterly Journal of Experimental Psychology, Scientific Reports, Trends in Cognitive Sciences, Visual Cognition

### Professional Society Membership

American Psychological Association	Member, 2003 – 2014
American Psychological Society	Member, 2003 –
Association for Research in Vision and Ophthalmology	Member, 2000
Human Factors and Ergonomic Society	Member, 2017
Psychonomic Society	Member, 2004 –
Vision Sciences Society	Member, 2001 –

## **Teaching and Supervision**

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### Courses Taught

2020, Spring	George Wash.	Undergraduate Honors Seminar
2020, Spring	George Wash.	Introduction to Cognitive Psychology
2019, Fall	George Wash.	Undergraduate Seminar: Science in the District
2019, Fall	George Wash.	Graduate Seminar: Topics in Cognitive Neuroscience
2019, Fall	George Wash.	Graduate Seminar: Cognitive Neuroscience (ProSem)
2019, Spring	George Wash.	Introduction to Cognitive Psychology

2018, Fall	George Wash.	First-year Dean's Seminar: Science in the District
2018, Spring	George Wash.	Graduate Seminar: Cognitive Neuroscience (Foundations)
2018, Spring	George Wash.	Graduate Seminar: Cognitive Neuroscience (ProSem)
2017, Fall	George Wash.	First-year Dean's Seminar: Science in the District
2017, Spring	George Wash.	Undergraduate Honors Seminar
2017, Spring	George Wash.	Graduate Seminar: Cognitive Neuroscience (Foundations)
2016, Fall	George Wash.	First-year Dean's Seminar: Science in the District
2016, Spring	George Wash.	Introduction to Cognitive Psychology
2015, Fall	George Wash.	First-year Dean's Seminar: Science in the District
2013, Spring	Duke Univ.	Introduction to Cognitive Psychology
2012, Fall	Duke Univ.	Graduate Seminar: Cognitive Psychology
2011, Fall	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2010, Fall	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2010, Spring	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2009, Fall	Duke Univ.	Cognitive Neuroscience Colloquia Course
2009, Fall	Duke Univ.	Introduction to Cognitive Psychology
2008, Fall	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2008, Spring	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2007, Fall	Duke Univ.	Introduction to Cognitive Psychology
2007, Spring	Duke Univ.	Neurobiology Graduate Seminar: Vision ( <i>Co-Instructor</i> )
2006, Fall	Duke Univ.	Introduction to Cognitive Psychology
2006, Spring	Duke Univ.	Seminar: Seeing & Knowing; Intro to Visual Cognition
2002, Spring	Harvard Univ.	Sophomore Tutorial in Psychology
2001, Fall	Harvard Univ.	Sophomore Tutorial in Psychology
2001, Spring	Harvard Univ.	Vision and the Brain ( <i>Teaching Fellow</i> )
2000, Fall	Harvard Univ.	Introduction to Cognitive Psychology ( <i>Teaching Fellow</i> )
2000, Spring	Harvard Univ.	Vision and the Brain ( <i>Teaching Fellow</i> )
1999, Fall	Harvard Univ.	Introduction to Cognitive Psychology ( <i>Teaching Fellow</i> )

### Other Teaching

2012, Fall	Duke Univ.	Introduction to Visual Culture ( <i>Guest Lecturer</i> )
2011, Fall	Duke Univ.	Introduction to Visual Culture ( <i>Guest Lecturer</i> )
2011, Fall	Duke Univ.	Principles of Cog. Neuroscience I, Graduate level ( <i>Guest Lecturer</i> )
2010, Spring	Duke Univ.	Principles of Cog. Neuroscience II, Graduate level ( <i>Guest Lecturer</i> )
2010, Fall	Duke Univ.	Principles of Cog. Neuroscience I, Graduate level ( <i>Guest Lecturer</i> )
2010, Fall	Duke Univ.	Duke Neuroscience Bootcamp, Graduate level ( <i>Guest Lecturer</i> )
2010, Spring	Duke Univ.	Principles of Cog. Neuroscience II, Graduate level ( <i>Guest Lecturer</i> )
2008, Spring	Duke Univ.	Principles of Cog. Neuroscience II, Graduate level ( <i>Guest Lecturer</i> )
2008, Spring	Duke Univ.	Introduction to Cognitive Neuroscience, ( <i>Guest Lecturer</i> )
2007, Fall	Duke Univ.	Principles of Cog. Neuroscience I, Graduate level ( <i>Guest Lecturer</i> )
2006, Spring	Duke Univ.	Introduction to Cognitive Neuroscience ( <i>Guest Lecturer</i> )

### Postdoctoral Fellow Advising

Matthew S. Cain	Duke University	08/2009 – 06/2012	
L. Gregory Appelbaum	Duke University	12/2009 – 05/2011	(10% effort)
Tarik S. Bel-Behar	Duke University	10/2012 – 10/2013	(co-advisor with L.G. Appelbaum)
Lingling Wang	Duke University	01/2013 – 02/2014	(co-advisor with L.G. Appelbaum)
Adam T. Biggs	Duke University	10/2011 – 06/2014	
Justin Ericson	Duke University	08/2014 – 06/2016	
Justin Ericson	George Washington	07/2016 – 02/2017	
Stephen Adamo	George Washington	08/2016 – 08/2018	(co-advisor with Shomstein & Brem)
Patrick Cox	George Washington	08/2017 –	



Graduate Student Advising

Mathias Fleck	Duke Psychology & Neuroscience, 2006–2009, <i>primary advisor</i>
Kait Clark	Duke Psychology & Neuroscience; CN Admitting Prgm, 2008–2014, <i>primary advisor</i>
Stephen Adamo	Duke Psychology & Neuroscience, 2010–2016, <i>primary advisor</i>
Emma Wu Dowd	Duke Psychology & Neuroscience; CN Admitting Program, 2011 – 2016, <i>co-advisor</i>
Dina Devyatko	Duke Psychology & Neuroscience, 2010 – 2011, <i>Visiting Fulbright Scholar advisor</i>
Jonathan Winkle	Duke Psychology & Neuroscience; CN Admitting Program, 2012 – 2017, <i>co-advisor</i>
Anastasia Kiyonaga	Duke Psychology & Neuroscience, practicum, Spring 2010
Joseph Dunsmoor	Duke Psychology & Neuroscience, practicum, Spring 2008
Yonatan Mazuz	Duke Cognitive Neuroscience Admitting Program rotation, Spring 2008
Jeffrey Nelson	Duke Psychology & Neuroscience, practicum, Fall 2007
Klaus Libertus	Duke Psychology & Neuroscience, practicum, Spring 2006
Sarah Donohue	Duke Cognitive Neuroscience Admitting Program rotation, Spring 2007
Joseph Harris	Duke Cognitive Neuroscience Admitting Program rotation, Fall 2007
Rachel Wynn	George Washington Psychology, 2016 – 2017, <i>primary advisor</i>
Michelle Kramer	George Washington Psychology, 2016 –, <i>primary advisor</i>
Samoni Nag	George Washington Psychology, 2018 –, <i>primary advisor</i>

M.A. Committees

Stephen Adamo	Duke Psychology & Neuroscience (chair)
Kait Clark	Duke Psychology & Neuroscience (chair)
Emma Wu Dowd	Duke Psychology & Neuroscience (chair)
Mathias Fleck	Duke Psychology & Neuroscience (chair)
Jonathan Winkle	Duke Psychology & Neuroscience (co-chair)
David Bulkin	Duke Neurobiology
Simon Davis	Duke Psychology & Neuroscience
Sarah Donohue	Duke Neurobiology
Joseph Dunsmoor	Duke Psychology & Neuroscience
Joseph Harris	Duke Psychology & Neuroscience
Jiefeng Jiang	Duke Psychology & Neuroscience
Sarah Jones	Duke Psychology & Neuroscience
Anastasia Kiyonaga	Duke Psychology & Neuroscience
Klaus Libertus	Duke Psychology & Neuroscience
Ariel Starr	Duke Psychology & Neuroscience
Andrew Collegio	George Washington Psychology
Chunyue Teng	George Washington Psychology
Matthew Hitchins	George Washington Psychology
Sammy Dhaliwal	George Washington Psychology
Michelle Kramer	George Washington Psychology

Ph.D. Dissertation Committees

Mathias Fleck	Duke Psychology & Neuroscience	Ph.D. awarded 2009 (chair)
Kait Clark	Duke Psychology & Neuroscience	Ph.D. awarded 2014 (chair)
Stephen Adamo	Duke Psychology & Neuroscience	Ph.D. awarded 2016 (chair)
Emma Wu Dowd	Duke Psychology & Neuroscience	Ph.D. awarded 2016 (co-chair)
Kerry Jordan	Duke Psychology & Neuroscience	Ph.D. awarded 2007
Chien-Te Vince Wu	Duke Psychology & Neuroscience	Ph.D. awarded 2007
David Bulkin	Duke Neurobiology	Ph.D. awarded 2010
Klaus Libertus	Duke Psychology & Neuroscience	Ph.D. awarded 2010
Simon Davis	Duke Psychology & Neuroscience	Ph.D. awarded 2011
Sarah Donohue	Duke Neurobiology	Ph.D. awarded 2012

Joseph Harris	Duke Psychology & Neuroscience	Ph.D. awarded 2012
Joseph Dunsmoor	Duke Psychology & Neuroscience	Ph.D. awarded 2012
Sarah Jones	Duke Psychology & Neuroscience	Ph.D. awarded 2012
Anastasia Kiyonaga	Duke Psychology & Neuroscience	Ph.D. awarded 2015
Jonathan Winkle	Duke Psychology & Neuroscience	Ph.D. awarded 2017
Rachel Wynn	George Washington Psychology	Ph.D. awarded 2017 (chair)
Matthew Hitchins	George Washington Psychology	Ph.D. awarded 2017
Breana Carter	George Washington Psychology	Ph.D. awarded 2017
Andrew Collegio	George Washington Psychology	Ph.D. awarded 2018
Chunyue Teng	George Washington Psychology	Ph.D. awarded 2019
Joseph Nah	George Washington Psychology	Ph.D. awarded 2019

### Additional Graduate Committees

James Niehaus	NC State Univ.	Computer Science	Ph.D. committee	awarded 2009
Tate Jackson	UNC-CH	Orthodontics	Residency committee	awarded 2013

### Undergraduate Honors Thesis Committees

Emily Bray	Duke Psychology, B.A. awarded 2012 ( <i>Zener Award winner</i> )
Louis Bonacorci	Duke Psychology, B.A. awarded 2011
Brittany James	Duke Psychology, B.A. awarded 2009 (chair)
Laura Sestokas	Duke Psychology, B.A. awarded 2009 (chair)
Viktoria Elkis	Duke Psychology, B.A. awarded 2008 (chair)
Tina Liang	Duke Psychology, B.A. awarded 2008
Margaret Bates	Duke Psychology, B.A. awarded 2007

### Undergraduate Supervised Research in Psychology

2020, Spring	GW Psychology Independent Research
2019, Fall	GW Psychology Independent Research
2019, Spring	GW Psychology Independent Research
2018, Fall	GW Psychology Independent Research
2018, Spring	GW Psychology Independent Research
2017, Fall	GW Psychology Independent Research
2017, Spring	GW Psychology Independent Research
2016, Fall	GW Psychology Independent Research
2016, Spring	GW Psychology Independent Research
2012, Spring	Duke Independent Study; Practicum
2011, Fall	Duke Independent Study; Practicum
2011, Spring	Duke Independent Study; Practicum
2010, Fall	Duke Independent Study; Practicum
2010, Spring	Duke Independent Study; Practicum
2009, Fall	Duke Independent Study; Practicum
2009, Spring	Duke Independent Study; Practicum
2008, Fall	Duke Independent Study; Practicum
2008, Spring	Duke Independent Study; Practicum; Robertson Program, UNC Chapel Hill
2007, Fall	Duke Independent Study; Practicum; Robertson Program, UNC Chapel Hill
2007, Spring	Duke Practicum

### High School Student Supervised Research in Psychology

Soleille Everest	NC School of Science and Mathematics HS Mentorship Program, Fa2007-Sp2008
Somin Lee	U.S. Army High School Apprenticeship Program, Summer 2010
James Vanderburg	U.S. Army High School Apprenticeship Program, Summer 2010
Edward Liu	U.S. Army High School Apprenticeship Program, Summer 2011

Mary-Gray Southern U.S. Army High School Apprenticeship Program, Summer 2011  
Pace Bongiovanni DC School Without Walls Internship, Spring 2017

### Supervised Student Research Fellowships

NIMH NRSA Individual Pre-doctoral Fellowship  
“External influences on visual search” (F31 MH082582)  
Grant period: May 1, 2008 through April 30, 2009  
Student Investigator; Mathias S. Fleck

National Science Foundation Graduate Research Fellowship  
Awarded: 2011 (3 years of funding)  
Student Investigator: Stephen Adamo

Ford Foundation Graduate Fellowship  
Awarded: 2011 (3 years of funding)  
Student Investigator: Stephen Adamo

### Supervised Student Research Support

Duke Vertical Integration Program, Summer 2013  
Graduate Student Investigators: Kait Clark  
Undergraduate Student Investigator: Clara Colombatto  
\$4800 in research-based stipends

Duke Visual Studies Initiative, Summer 2011  
Undergraduate Student Investigators: Michael Schallmo & Benjamin Crisp  
\$2000 in summer fellowships

Duke Vertical Integration Program, Summer 2010  
Graduate Student Investigators: Kait Clark  
Undergraduate Student Investigator: Katherine Grace Kohut  
\$3300 in research-based stipends

Duke Vertical Integration Program, Summer 2008  
Graduate Student Investigators: Mathias S. Fleck & Sarah Donohue  
Undergraduate Student Investigators: Laura Sestokas & Brittany James  
\$8600 in research-based stipends

Duke Vertical Integration Program, Summer 2007  
Graduate Student Investigators: Mathias S. Fleck  
Undergraduate Student Investigators: Viktoria Elkis, Ricky Green  
\$8600 in research-based stipends

Sigma Xi, Grants-in-Aid of Research, 2006  
Student Investigator; Kerry E. Jordan  
\$600 direct costs towards research

APA Dissertation Award, 2006  
Student Investigator; Kerry E. Jordan  
\$1000 direct costs towards research