CURRICULUM VITAE

December, 2010

George Angelo Alvarez

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ACADEMIC APPOINTMENTS

2008-present	Assistant Professor	Harvard University Department of Psychology
2005 -2008	NIH Postdoctoral Fellow	Massachusetts Institute of Technology Dept. of Brain and Cognitive Sciences Sponsor: Dr. Aude Oliva

EDUCATION

2000-2005	Ph.D., Psychology	Harvard University Advisor: Dr. Patrick Cavanagh
1994-1998	A.B., Psychology	Princeton University Advisor: Dr. Ronald Kinchla

RESEARCH INTERESTS

General Areas

- Visual Cognition, Perception, Attention, and Memory
- Cognitive Capacity, Cognitive Resources, Efficient Coding in High-level Vision

Specific Research Topics

- What are our cognitive resources? How should we characterize them? How do they constrain cognitive function? Can they be enhanced through training?

- How does the visual system optimize the use of its limited resources? What strategies does the system use to manage, cope with, and even overcome these limitations?

- How do we select and keep track of visual information as it changes over time? What attention and memory mechanisms are involved, how do they function, what are their limits, and how do they interact to contribute to our visual experience?

AWARDS AND FELLOWSHIPS

2010	Vision Sciences Society Young Investigator Award
2005-2008	NIH/NEI National Research Service Award , Postdoctoral Fellowship, Massachusetts Institute of Technology
2005	Herrnstein Prize for Doctoral Dissertation in the Social Sciences, Harvard University
2004-2005	NIH/NIMH National Research Service Award, Pre-doctoral Fellowship, Harvard University
2003	Certificate of Distinction in Teaching, Harvard University
1998	Honors, Department of Psychology, Princeton University

RESEARCH GRANTS

2010-2015 National Science Foundation CAREER Award (BCS-0953730)
Title : Flexible Resource Allocation and Efficient Coding in Human Vision
PI: Alvarez
Total Amount: $680,907

2010-2011 National Science Foundation CELEST Sub-Award (SMA-0835976)
Title : Fluid Allocation of Attentional Resources
PI: Alvarez
Total Amount: $191, 253

2009-2012 National Science Foundation REESE (DRL-0910070)
Title : Collaborative Research: Mental Abacus Education and Spatial Representations
PI: Alvarez
Total Amount: $70,387

2010-2012 NIH/NIMH (MH086743)
Title : Learning and Compression in Human Working Memory
PI: Alvarez
Total Amount: $168,000

PUBLICATIONS

Refereed Journal Articles

available for download at http://visionlab.harvard.edu/Members/George/Publications.html

1. Alvarez, G. A. (*in press*). Representing multiple objects as an ensemble enhances visual cognition. *Trends in Cognitive Sciences.*

2. Suchow, J. W., & Alvarez, G. A. (*in press*). Motion silences awareness of visual change. *Current Biology, 21*(2), 1-4. doi:10.1016/j.cub.2010.12.019

3. Brady, T. F., Alvarez, G. A. (*in press*). Hierarchical encoding in visual working memory: ensemble statistics bias memory for individual items. *Psychological Science.*

4. Konkle, T., Brady, T. F., Alvarez, G. A., & Oliva, A. (2010). Scene memory is more detailed than you think: the role of categories in visual long-term memory. *Psychological Science, 21* (11), 1551-1556.

5. Konkle, T., Brady, T. F., Alvarez, G. A., & Oliva, A. (2010). Conceptual distinctiveness supports detailed visual long-term memory for real-world objects. *Journal of Experimental Psychology: General*, *139*(3), 558-578.

6. Carlson, T. C., Alvarez, G. A., Wu, D., Verstraten, F. (2010). Rapid assimilation of external objects into the body schema. *Psychological Science, 21(7)*, 1000-1005.

7. Shim, W., Vickery, T., Alvarez, G. A., Jiang, Y. (2010). The number of attentional foci and their precision are dissociated in the posterior parietal cortex. *Cerebral Cortex, 20,* 1341-1349.

8. Franconeri, S. L., Bemis, D., & Alvarez, G. A. (2009). Number estimation relies on a set of segmented objects. *Cognition, 113*, 1-13.

9. Brady, T. F., Konkle, T., Alvarez, G. A. (2009). Compression in visual working memory: Using statistical regularities to form more efficient memory representations. *Journal of Experimental Psychology: General, 138*(4), 487-502.

10. Alvarez, G. A., & Oliva, A. (2009). Spatial ensemble statistics are efficient codes that can be represented with reduced attention. *Proceedings of the National Academy of Sciences, USA, 106,* 7345-7350.

11. Battelli, L., Alvarez, G. A., Carlson, T. A., & Pascual-Leone, A. (2009). The role of the parietal lobe in visual extinction studied with transcranial magnetic stimulation. *Journal of Cognitive Neuroscience*, *21*(10), 1946-1955.

12. Horowitz, T. S., Wolfe, J. M., Alvarez, G. A., Cohen, M. A., & Kuzmova, Y. I. (2009). The speed of free will. *The Quarterly Journal of Experimental Psychology*.

13. Brady, T. F., Konkle, T., Oliva, A., Alvarez, G. A. (2009). Detecting changes in real-world objects: The relationship between visual long-term memory and change blindness. *Communicative & Integrative Biology*, 2:1, 1-3.

14. Alvarez,, G. A., & Thompson, T. W. (2009). Overwriting and rebinding: Why feature-switch detection tasks underestimate the binding capacity of visual working memory. *Visual Cognition, 17*(1-2), 141-159.

15. Alvarez, G. A., & Cavanagh, P. (2008). Visual short-term memory operates more efficiently on boundary features than it does on the surface features. *Perception & Psychophysics, 70*(2), 346-364.

16. Alvarez, G. A., & Oliva, A. (2008). The representation of simple ensemble features outside the focus of attention. *Psychological Science*, *19*(4), 392-398.

17. Brady, T. F., Konkle, T., Alvarez, G. A., Oliva, A. (*2008*). Visual long-term memory has a massive storage capacity for object details. *Proceedings of the National Academy of Sciences, USA, 105*(38), 14325-14329.

18. Shim, W., Alvarez, G. A., & Jiang, Y. (2008). Spatial separation between targets constrains maintenance of attention on multiple objects. *Psychonomic Bulletin & Review*, *15*(2), 390-397.

19. Alvarez, G. A., & Franconeri, S. L. (2007). How many objects can you attentively track?: Evidence for a resource-limited tracking mechanism. *Journal of Vision*, *7*(13):14, 1-10, http://journalofvision.org/7/13/14/, doi:10.1167/7.13/14.

20. Alvarez, G. A., Konkle, T., & Oliva, A. (2007). Searching in dynamic displays: Effects of configural predictability and spatio-temporal continuity. *Journal of Vision,* 7(14), 1-12. http://journalofvision.org/7/14/12/, doi:10.1167/7.14.12.

21. Alvarez, G. A., & Oliva, A. (2007). The role of global layout in visual short-term memory. *Visual Cognition*, *15*(1), 70-73.

22. Carlson, T. A., Alvarez, G. A., & Cavanagh, P. (2007). Quadrantic deficit reveals anatomical constraints in attentional tracking. *Proceedings of the National Academy of Sciences, 104* (33), 13496-13500.

23. Franconeri, S., Alvarez, G. A., & Enns, J. (2007). How many locations can be selected at once? *Journal of Experimental Psychology: Human Perception and Performance, 33*(5), 1003-1012.

24. Horowitz, T. S., Klieger, S. B., Fencsik, D. E., Yang, K. K., Alvarez, G. A., & Wolfe, J. M. (2007). Tracking unique objects. *Perception & Psychophysics*, *69*(2), 172-184.

25. Mitroff, S. R., & Alvarez, G. A. (2007). Space and time, not surface features, guide object persistence. *Psychonomic Bulletin & Review*, *14*, 1199-1204.

26. Alvarez, G. A., & Scholl, B. J. (2005). How does attention select and track spatially extended objects? New effects of attentional concentration and amplification. *Journal of Experimental Psychology: General, 134*(4), 461-476.

27. Cavanagh, P. & Alvarez, G. A. (2005). Tracking multiple targets with multifocal attention. *Trends in Cognitive Sciences*, *9*(7) , 349-354.

28. Alvarez, G. A., Horowitz, T. S., Arsenio, H. C., & DiMase, J. S., & Wolfe, J. M. (2005). Do multielement visual tracking and visual search draw continuously on the same visual attention resources? *Journal of Experimental Psychology: Human Perception and Performance, 31*(4), 643-667.

29. Alvarez, G. A., & Cavanagh, P. (2005). Independent resources for attentional tracking in the left and right visual hemifields. *Psychological Science*, *16*(8), 637-643.

30. Alvarez, G. A., & Cavanagh, P. (2004). The capacity of visual short-term memory is set both by visual information load and by number of objects. *Psychological Science*, *15(2)*, 106-111.

31. Wolfe, J. M., Alvarez, G. A., & Horowitz, T. S. (2000). Attention is fast but volition is slow. *Nature*, *406*, 691.

CONFERENCE PRESENTATIONS

Alvarez, G. A., Konkle, T., Brady, T. F., Gill, J., & Oliva, A. (2009). Comparing the Fidelity of Perception, Short-term Memory, and Long-term Memory: Evidence for Highly Detailed Long-term Memory Representations. Talk presented at the annual meeting of the *Vision Sciences Society*, May 8-13, Naples, FL.

Gill, J., & Alvarez, G. A. (2009). Attentional Tracking of Spatially Extended Objects: Evidence for Object-based Competition Between Lateralized Attentional Systems. Poster presented at the annual meeting of the *Vision Sciences Society*, May 8-13, Naples, FL.

Oliva, A., Konkle, T., Brady, T. F. , & Alvarez, G. A (2009). The high fidelity of scene representation in visual long-term memory. Talk presented at the annual meeting of the *Vision Sciences Society*, May 8-13, Naples, FL.

Vul, E., Frank, M., Alvarez, G., Tenenbaum, J. (2009). Statistical decision theory and the allocation of cognitive resources in multiple object tracking. Talk presented at the annual meeting of *Computational and Systems Neuroscience*, Feb. 26-Mar. 1, Salt Lake City, Utah.

Wu, D., Carlson, T., Alvarez, G. A., & Cavanagh, P. (2009). Visual manifestation of body schema abnormalities in a case of alien hand syndrome. Poster presented at the annual meeting of the *Vision Sciences Society*, May 8-13, Naples, FL.

Alvarez, G. A., & Franconeri, S. L. (2008). Crowding and multifocal attention: Splitting attention increases the size of the isolation field. Talk presented at the 31st annual meeting of the *European Conference on Visual Perception*, August 24-28, Utrecht, The Netherlands.

Brady, T. F., Konkle, T., Alvarez, G. A., Oliva, A. (2008). How big is visual long-term memory? Evidence for massive and high fidelity storage. Poster presented at the 31st annual meeting of the *European Conference on Visual Perception*, August 24-28, Utrecht, The Netherlands.

Carlson, T., Alvarez, G. A., Wu, D., Verstraten, F. (2008). Seeing objects in the dark: Evidence for a robust internal representation of external objects in the world. Talk presented at the 31st annual meeting of the *European Conference on Visual Perception*, August 24-28, Utrecht, The Netherlands.

Brady, T. F., Konkle, T., Alvarez, G. A. (2008). Efficient coding in visual short-term memory: Evidence for an information-limited capacity. Paper presented at 30th annual meeting of the *Cognitive Science Society*, July 23-26, Washington, DC.

Alvarez, G. & Franconeri, S. (2008). The magical number 4 in visual cognition. Poster presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Naples, FL.

Brady, T. F., Konkle, T., Alvarez, G. A., & Oliva, A. (2008). Compression in visual short-term memory: using statistical regularities to form more efficient memory representations. Poster presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Naples, FL.

Frank, M., Vul, E., Mansinghka, V., & Alvarez, G. (2008). What limits performance in multiple object tracking? Poster presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Naples, FL.

Konkle, T., Brady, T., Alvarez, G., & Oliva, A. (2008). Remembering thousands of objects with high fidelity. Talk presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Naples, FL.

Wolfe, J., Alvarez, G., Rosenholtz, R., Oliva, A., Torralba, A., Kuzmova, Y., & Uhlenhuth, M. (2008). Search for arbitrary objects in natural scenes is remarkably efficient. Poster presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Naples, FL.

Alvarez, G. A. (2007). How attention determines what we see, and what we remember. Talk presented at the annual meeting of the *Society for Advancement of Chicanos and Native Americans in Science*, October 11-14, Kansas City, MO.

Rosenholtz, R., & Alvarez, G. A. (2007). How and why we perceive sets: What does modeling tell us? Talk presented at the annual meeting of the *European Conference on Visual Perception*, August 27-31, Arezzo, Italy.

Alvarez, G. A. & Oliva, A. (2007). The representation of ensemble visual features outside the focus of attention. Talk presented at the annual meeting of the *Vision Sciences Society*, May 11-16, Sarasota, FL. [Abstract published in *Journal of Vision*, *7*(9), 129a, http://www.journalofvision.org/7/9/129/]

Shim, W., Alvarez, G. A., & Jiang, Y. (2007). Maintaining multiple attentional foci: spatial separation affects behavior but not posterior parietal activity. Talk presented at the annual meeting of the *Vision Sciences Society*, May 11-16, Sarasota, FL. [Abstract published in *Journal of Vision*, *7*(9), 581a, http://www.journalofvision.org/7/9/581/]

Alvarez, G. A. & Oliva, A. (2006). The effect of global image properties on memory for spatial layout. Talk presented at the annual *Object Perception, Attention, and Memory* meeting, November 16, Houston, TX.

Mitroff, S. R., & Alvarez, G. A. (2006). Space and time, not surface features, guide object persistence. Talk presented at the annual meeting of the *Psychonomic Society*, November 16, Houston, TX.

Shim, W. M., Alvarez, G. A., Vickery, T. J., & Jiang, Y. (2006). Effects of spatial and non-spatial attentional load on posterior parietal cortex. Talk presented at the annual meeting of the *Society for Neuroscience,* October 14, Atlanta, GA.

Alvarez, G. A. & Cavanagh, P. (2006). Multifocal attention: what's fixed and what's flexible in the allocation of tracking resources? Talk presented at the annual meeting of the *Vision Sciences Society*, *Satellite Workshop*, *Twenty Years of Multiple Object Tracking: What have we learned?*, May 5, Sarasota, FL.

Horowitz, T. S., Wolfe, J. M., Alvarez, G. A., & Fencsik, D. E. (2006). Attentional time-sharing in multiple object tracking. Talk presented at the annual meeting of the *Vision Sciences Society*, *Satellite Workshop*, *Twenty Years of Multiple Object Tracking: What have we learned?*, May 5, Sarasota, FL.

Alvarez, G.A. & Cavanagh, P. (2006). Hemifield independence is a signature of location-based attentional filtering. Poster presented at the annual meeting of the *Vision Sciences Society*, May 5-10, Sarasota, FL. [Abstract published in *Journal of Vision*, *6*(6), 943a, http://www.journalofvision.org/6/6/943/]

Carlson, T., & Alvarez, G. A. (2006). Suboptimal allocation of visual short term memory. Poster presented at the annual meeting of the *Vision Sciences Society*, May 5-10, Sarasota, FL. [Abstract published in *Journal of Vision*, *6*(6), 36a, http://www.journalofvision.org/6/6/36/]

Shim, W. M., Alvarez, G. A., Vickery, T. J., & Jiang, Y. (2006). Effects of spatial and non-spatial attentional load on posterior parietal cortex. Poster presented at the annual meeting of the *Vision Sciences Society*, May 5-10, Sarasota, FL. [Abstract published in *Journal of Vision*, *6*(6), 518a, http://www.journalofvision.org/6/6/518/]

Battelli, L., Alvarez, G. A., Carlson, T., & Pascual-Leone, A. (2006). The role of MT and the parietal lobe in visual tracking studied with transcranial magnetic stimulation. Talk presented at the annual meeting of the *Vision Sciences Society*, May 5-10, Sarasota, FL. [Abstract published in *Journal of Vision*, *6*(6), 822a, http://www.journalofvision.org/6/6/822/]

Alvarez, G. A., & Franconeri, S. L. (2005). How many objects can you track? Evidence for a flexible tracking resource. Talk presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 641a, http://www.journalofvision.org/5/8/641/]

Shim, W., Alvarez, G. A., & Jiang, Y. (2005). Capacity limit of visual working memory in parietal cortex reflects capacity limit of spatial selection. Talk presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 914a, http://www.journalofvision.org/5/8/914/]

Scholl, B. J., & Alvarez, G. A. (2005). How does attention select and track spatially extended objects?: New effects of attentional concentration and amplification. Talk presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 640a, http://www.journalofvision.org/5/8/640/]

Rein, J., Pylyshyn, Z., & Alvarez, G. A. (2005). Using multiple-object tracking (MOT) to test whether cerebral hemispheres share common visual attention resources. Poster presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 32a, http://www.journalofvision.org/5/8/32/]

Franconeri, S. L., & Alvarez, G. A. (2005). How many locations can you select at once? Poster presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 1008a, http://www.journalofvision.org/5/8/1008/]

Bemis, D., Franconeri, S. L., & Alvarez, G. A. (2005). It takes attention to capture attention. Poster presented at the annual meeting of the *Vision Sciences Society*, May 6-11, Sarasota, FL. [Abstract published in *Journal of Vision*, *5*(8), 510a, http://www.journalofvision.org/5/8/510/]

Alvarez, G. A. & Franconeri, S. L. (2004). How many objects can you track? Talk given at the annual *Object Perception, Attention, and Memory* meeting, November 18, Minneapolis, MN.

Franconeri, S. L. & Alvarez, G. A. (2004). Magic numbers in visual attention: The case of spatial location? Poster presented at the annual *Object Perception, Attention, and Memory* meeting, November 18, Minneapolis, MN.

Alvarez, G. A. & Cavanagh, P. (2004). The structure of visual short-term memory: evidence for a flexible storage mechanism. Talk given at the 45th annual meeting of the *Psychonomic Society*, November 18-21, Minneapolis, MN. [Abstract published in *Abstracts of the Psychonomic Society*, 9, p. 17]

Horowitz, T. S., Fensick, D., Wolfe, J. M. & Alvarez, G. A. (2004). How many unique objects can you track? Talk given at the 45th annual meeting of the *Psychonomic Society*, , November 18-21, Minneapolis, MN. [Abstract published in *Abstracts of the Psychonomic Society*, 9, p. 37]

Alvarez, G. A. & Franconeri, S. L. (2004). How many objects can you track? Talk given at the annual *Object Perception, Attention, and Memory* meeting, November 18, Minneapolis, MN.

Alvarez, G. A., & Cavanagh, P. (2004). Independent attentional resources for the left and right visual hemifields. Talk presented at the annual meeting of the *Vision Sciences Society*, April 30-May 5, Sarasota, FL. [Abstract published in *Journal of Vision*, *4*(8), 29a, http://www.journalofvision.org/4/8/29/]

Franconeri, S., Halberda, J., Feigensun, L., & Alvarez, G. A. (2004). Common fate defined objects in multiple object tracking. Poster presented at the annual meeting of the *Vision Sciences Society*, April 30-May 5, Sarasota, FL. [Abstract published in *Journal of Vision*, *4*(8), 365a, http://www.journalofvision.org/4/8/365/]

Bemis, D., Franconeri, S., & Alvarez, G. A. (2004). Rapid number estimation: A new paradigm for investigating the rules of objecthood. Poster presented at the annual meeting of the *Vision Sciences Society*, April 30-May 5, Sarasota, FL. [Abstract published in *Journal of Vision*, *4*(8), 269a, http://www.journalofvision.org/4/8/269/]

Horowitz, T. S., Klieger, S. B., Wolfe, J. M., Alvarez, G. A., & Fencsik, D. E. (2004). Do you know what you're tracking? *European Conference on Visual Perception*, Budapest, Hungary.

Alvarez, G. A., & Cavanagh, P. (2003). Visual short-term memory capacity for orientations is lower for oriented Gabors than for oriented lines. Talk presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Sarasota, FL. [Abstract published in *Journal of Vision*, *3*(9), 25a, http://www.journalofvision.org/3/9/25/]

DiMase, J. S., Alvarez, G. A., Horowitz, T. S. & Wolfe, J. M. (2003). Constraints on task switching in multielement tracking and visual search. Poster presented at the annual meeting of the *Vision Sciences Society*, May 9-14, Sarasota, FL. [Abstract published in *Journal of Vision*, *3*(9), 337a, http://www.journalofvision.org/3/9/337/]

Alvarez, G. A., & Cavanagh, P. (2002). The capacity of visual short-term memory is set by total information load, not number of objects. Talk presented at the annual meeting of the *Vision Sciences Society*, May 10-15, Sarasota, FL. [Abstract published in *Journal of Vision*, *2*(7), 273a, http://www.journalofvision.org/2/7/273/]

Most, S. B. & Alvarez, G. A. (2002). But it's the only thing there! Sustained inattentional blindness for a solitary stimulus. Poster presented at the annual meeting of the *Vision Sciences Society*, May 10-15, Sarasota, FL. [Abstract published in *Journal of Vision*, *2*(7), 444a, http://www.journalofvision.org/2/7/444/]

Alvarez, G. A., Wolfe, J. M., Horowitz, T. S., & Arsenio, H. C. (2001). Limits on Multielement Tracking. Talk presented at the 1st annual meeting of the *Vision Sciences Society*, May 4-8, Sarasota, FL. [Abstract published in *Journal of Vision*, *1*(3), 347a, http://www.journalofvision.org/1/3/347/]

Horowitz, T. S., Alvarez, G. A., & Wolfe, J. M. (2000). Desperately seeking memory in visual search. Presented at the 41st annual meeting of the *Psychonomic Society*, Nov. 16-19, New Orleans, LA.

Alvarez, G. A., Horowitz, T. S., & Wolfe, J. M. (2000). Multielement tracking and visual search use independent resources. Talk presented at the annual meeting of the *Association for Research in Vision and Ophthalmology,* April 30-May 5, Ft. Lauderdale, FL. [Abstract published in *Investigative Ophthalmology & Visual Science*, *41*(4)].

Wolfe, J. M., Horowitz, T. S., & Alvarez, G. A. (2000). Further evidence for amnesic search: attention is still lost in space. Talk presented at the annual meeting of the *Association for Research in Vision and Ophthalmology,* April 30-May 5, Ft. Lauderdale, FL. [Abstract published in *Investigative Ophthalmology & Visual Science*, *41*(4)].

Horowitz, T. S., Holcombe, A. O., Alvarez, G. A., & Wolfe, J. M. (2000). Tracking ambiguous motion enables fast attentional shifts. Presented at the annual meeting of the *Association for Research in Vision and Ophthalmology,* April 30-May 5, Ft. Lauderdale, FL. [Abstract published in *Investigative Ophthalmology & Visual Science*, *41*(4)].

Alvarez, G. A., Horowitz, T. S., Wong, A., & Wolfe, J. M. (1999). New evidence against global accumulation of information in visual search. Poster presented at the annual meeting of the *Association for Research in Vision and Ophthalmology,* May 9-14, Ft. Lauderdale, FL. [Abstract published in *Investigative Ophthalmology & Visual Science*, *40*(4)].

Wolfe, J. M., & Alvarez, G. A. (1999). Give me liberty or give me more time! Your visual attention is faster if you don't tell it what to do. Talk presented at the annual meeting of the *Association for Research in Vision and Ophthalmology,* May 9-14, Ft. Lauderdale, FL. [Abstract published in *Investigative Ophthalmology & Visual Science*, *40*(4)].

Horowitz, T. S., Wolfe, J. M., Wong, A., & Alvarez, G. A. (1999). Amnesic search is not an artifact of stimulus duration. Presented at the 3rd annual *Vision Research Conference*, May 7-9, Ft. Lauderdale, FL.

PROFESSIONAL SERVICE

Ad-hoc Grant Reviewing

The National Science Foundation (PAC), The Israel Science Foundation

Ad-hoc Journal Reviewing

Acta Psychologica, Brain Research, Cognition, Current Biology, Journal of Cognitive Neuroscience, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: Learning Memory and Cognition, Journal of Vision, Memory, Memory & Cognition, Perception & Psychophysics, PLoS ONE (Public Library of Science), Psychologia, Psychological Bulletin and Review, Psychological Research, Psychological Science, Quarterly Journal of Experimental Psychology, Science, Vision Research, Visual Cognition

Professional Society and Board Membership

2009- National Science Foundation-SLC (CELEST) Governing Board (*member*)
2009- American Psychological Association
2006- Society for the Advancement of Chicanos and Native Americans in Science
2005- American Psychological Society
2000- Vision Sciences Society

University Service (Harvard University)

2010- Mind, Brain, Behavior Program (f*aculty head of the psychology track*)
2009- Summer Research Program at Harvard (*mentor*)
2009 Gendered Spaces Committee (*advisor*)

Departmental Service (Harvard University)

2009- Department Colloquium Committee (*co-chair*)
2009- Cognition Brain and Behavior Lunch Committee (*co-chair*)
2009- Vision Sciences Laboratory Seminar Committee (*co-chair*)

TEACHING AND SUPERVISION

Courses Taught (Harvard University)

2010, Spring	Visual Cognition Seminar, Graduate Level (*Instructor*)
2010, Spring	CBB Proseminar, Graduate Level (*Instructor, 1 Week Module*)
2010, Spring	Methods of Behavioral Research (*Instructor*)
2010, Fall	Cognitive Neuroscience (*Instructor*)
2009, Summer	Introduction to MATLAB Experiment Programming (*Instructor*)
2009, Spring	CBB Proseminar, Graduate Level (*Instructor, 1 Week Module*)
2009, Spring	Methods of Behavioral Research (*Instructor*)
2006, Spring	Vision and the Brain (*Head Teaching Fellow*)
2004, Spring	Molecular and Cellular Biology (*Instructor, 3 Week Module*)
2004, Fall	Vision and the Brain (*Teaching Fellow*)
2003, Spring	Molecular and Cellular Biology (*Teaching Fellow, 3 Week Module*)
2003, Spring	Vision and the Brain (*Teaching Fellow*)
2003, Fall	Cognitive Psychology (*Teaching Fellow*)
2002, Fall	Introduction to Psychology (*Teaching Fellow*)

Other Teaching

2009, Fall/Spring	Visual Cognition Seminar (*Instructor*)
2009, Fall/Spring	Vision Sciences Laboratory Talk Series (*organizer*)
2009, Spring	Mind, Brain, Behavior, Undergraduate Level Seminar (*Guest Lecturer*)
2009, Fall	Psychology Department, Graduate Level Seminar (*Guest Lecturer*)
2009, Fall	Psychology Live, Undergraduate Level (*Guest Lecturer*)
2006, Spring	Sensation & Perception (*Emerson College, Instructor*)
2000, Spring	Introduction to Psychology (*MIT, Teaching Fellow*)
1999, Spring	Introduction to Psychology (*MIT, Teaching Fellow*)

Graduate Student Advising (Harvard University)

Jordan Suchow	Psychology, July 2009-
Michael Cohen	Psychology, September 2009-

Ph.D. Dissertation Committees (Harvard University)

Rebecca Rosenberg	Psychology (*outside examiner*), Ph.D. awarded 2009
Arash Afraz	Psychology (*moderator*), Ph.D. awarded 2009

Ph.D. Dissertation Committees (Massachusetts Institute of Technology)

Timothy F. Brady	Brain and Cognitive Sciences
Barbara Hidalgo-Sotelo	Brain and Cognitive Sciences
Todd Thompson	Brain and Cognitive Sciences

Undergraduate Honors Thesis Committees (Harvard University)

Judy Fan	Neurobiology (*advisor*), A.B. expected 2010
Ashley Sherman	Psychology (*advisor*), A.B. expected 2010
Nicholas Navarro	Psychology (*reader*), A.B. expected 2010
Long Ouyang	Psychology (*reader*), A.B. expected 2010
Douglas Bemis	Mind, Brain, and Behavior (*advisor*), A.B. awarded 2005

INVITED UNIVERSITY TALKS AND COLLOQUIA

04/2010	*SACNAS*, Regional Meeting, Brandeis University
10/2009	*SACNAS*, Neuroscience Symposium
05/2009	*Harvard University Center for Brain Science*, Annual Meeting
05/2009	*Vision Sciences Society*, Workshop on Number Perception
03/2009	*Temporal Dynamics of Learning and Memory (TDLC),* NSF SLC Annual Meeting
10/2008	*SACNAS*, Neuroscience Symposium
02/2008	*Vanderbilt University*, Department of Psychology
02/2008	*Massachusetts Institute of Technology,* Dept. of Brain and Cognitive Sciences
01/2008	*New York University,* Department of Psychology
01/2008	*Harvard University,* Department of Psychology
01/2008	*University of Rochester,* Department of Psychology
12/2007	*University of California San Diego,* Department of Psychology
11/2007	*University of Illinois at Urbana Champaign,* Department of Psychology
10/2007	*SACNAS*, Neuroscience Symposium
4/2007	*THRUST,* CELEST NSF SLC Talk Series, Boston University
5/2006	*Vision Sciences Society*, Workshop on Attention
3/2006	*Massachusetts General Hospital*, NMR-MGH Center
11/2005	*Duke University*, Psychological & Brain Sciences
10/2005	*Harvard University,* MCB Consciousness Seminar
03/2005	*Harvard Medical School*, Visual Attention Laboratory
02/2005	*Massachusetts Institute of Technology,* Cognitive Group
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