Curriculum Vitae

Moshe Bar, Ph.D.

Contact information

Massachusetts General Hospital / Harvard Medical School:

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Bar-Ilan University:

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Academic and Professional History

2011-	Director, Leslie and Susan Gonda Multidisciplinary Brain Research Center, Bar-Ilan University, Ramat-Gan, Israel
2011 -	Associate Professor in Psychiatry Harvard Medical School, Boston, MA
2009 -	Associate Professor in Psychiatry Massachusetts General Hospital, Boston, MA
2007 -	Associate Professor in Radiology Harvard Medical School, Boston, MA
2007 -	Associate Neuroscientist Department of Radiology Massachusetts General Hospital, Boston, MA
2005 -	Affiliated Faculty of the Harvard-MIT Division of Health Sciences and Technology, Boston, MA
2009 - 2011	Assistant Professor in Psychiatry, Harvard Medical School, Boston, MA
2002 - 2007	Assistant Professor in Radiology

Harvard Medical School, Boston, MA

2000 - 2001 Instructor in Radiology
Harvard Medical School, Boston, MA

2000 - 2009 Assistant Professor in Neuroscience
Massachusetts General Hospital, Boston, MA

1998 - 2001 Post-doctoral Research Fellow
Department of Psychology, Harvard University, Cambridge, MA and
Massachusetts General Hospital, Boston, MA

1994 - 1998 Ph.D. in Psychology, Cognitive Neuroscience Program
University of Southern California, Los Angeles, CA
Dissertation: *Characteristics and Cortical Localization of Subliminal Visual Priming.* Advisor: I. Biederman

1992 - 1994 M.Sc. Computer Science and Applied Mathematics
The Weizmann Institute of Science, Israel

Dissertation: *Spatial Context in Recognition*. Advisor: S. Ullman

1988 - 1994 Israeli Air-Force

1984 - 1988 B.Sc. Electrical Engineering
Ben-Gurion University, Israel
Major: *Image processing and biomedical engineering.*

Awards and Honors

1994 - 1998 Research and Teaching Assistant, Department of Psychology, University of Southern California, Los Angeles, CA
1998 Cold Spring Harbor Laboratory. Course on the Structure, Function & Development of the Visual System
1998 *Outstanding Doctoral Thesis* Award, Department of Psychology, University of Southern California, Los Angeles, CA
1998 Summer Institute in Cognitive Neuroscience at Dartmouth College, NH
1998 - 2001 McDonnell-Pew Program in Cognitive Neuroscience Award
2002 - 2007 21st Century Science Initiative Award, McDonnell Foundation
2007 Dart Neuroscience Scholar, Marine Biological Laboratory, Woods Hole, MA
2008 Fellow, American Psychological Society, Division 3
2010 Lifetime Fellow, Society of Experimental Psychologists
2012 Hebb Award, International Neural Networks Society

Professional Memberships

1998 Society for Neuroscience

1999	American Association for the Advancement of Science
1999	American Psychological Society
1999	Cognitive Neuroscience Society
2000	American Psychological Association
2000	Human Brain Mapping Association
2000	Psychonomic Society
2001	Vision Sciences Society
2008	American Psychological Association – Division 3 Fellow

Teaching Experience

2010	Instructor, Visual Neuroscience, Harvard Summer School, Trento, Italy
2000 - 2003	Instructor, Department of Radiology, Harvard Medical School, Boston, MA
1994 - 1998	Teaching Assistant, Department of Psychology, University of Southern California, Los Angeles, CA - *Introduction to Psychology, Statistics I, Developmental Psychology, Cognitive Psychology, Behavioral Neuroscience*
1993 - 1994	Lecturer in Visual perception, The Academy of Arts, Tel-Aviv, Israel - *Camera Obscura*
1992 - 1993	Teacher, Department of Computer science, High School for the Gifted Hertzelia, Israel

Trainees

Currently supervising:

2012 – present	Shira Baror	Graduate Student
2012 – present	Einav Sudai	Postdoctoral Fellow
2011 - present	Matthew Panichello	Research Assistant
2010 - present	Eiran Harel	Postdoctoral Fellow
2010 - present	Olivia Cheung	Postdoctoral Fellow

Past supervised:

2011 - 2012	Tomer Livne	Postdoctoral Fellow, University of Washington St. Louis, St. Louis, MO
2010 - 2012	Alex Milner	Graduate Student
2007 - 2012	Amitai Shenhav	Postdoctoral Fellow, Princeton University, Princeton, NJ
2009 - 2011	Kathryn Devaney	Graduate Student, Boston University, Boston, MA
2009 - 2011	Andrea Heberlein	Assistant Professor, Boston College, Boston, MA
2009 - 2011	Trang Nguyen	Research Assistant, Massachusetts General Hospital, Boston, MA
2009 - 2011	Mona Tousian	Research Assistant
2008 - 2011	Maximilien Chaumon	Postdoctoral Fellow, Berlin School of Mind and Brain, Berlin, Germany
2007 - 2011	Kathrine Shepherd	Graduate Student, Kent State University,

		Kent, OH
2009 - 2010	Andreja Bubic	Faculty, University of Split, Split, Croatia
2009 - 2010	Kathrin Herbst	Graduate Student
2007 - 2009	Cibu Thomas	Postdoctoral Fellow at NIH, Washington, DC
2005 - 2009	Kestutis Kveraga	Faculty at MGH, Charlestown, MA
2009 - 2009	Meghan Frederico	Editor at Extraneous Noise
2009 - 2009	Will Jaffee	Graduate Student
2009 - 2009	Maya Rosen	Graduate Student at Boston University, Boston, MA
2009 - 2009	Pablina Roth	Graduate Student at Heidelberg University, Germany
2004 - 2009	Jasmine Boshyan	Graduate Student, Brandeis University, Waltham, MA
2003 - 2008	Elissa Aminoff	Postdoctoral Fellow, Carnegie Mellon University, Pittsburg, PA
2005 - 2008	Dana Carney	Faculty at the Columbia Business School, New York, NY
2003 - 2007	Mark J. Fenske	Associate Professor at the University of Guelph, Ontario, Canada
2004 - 2007	Nurit Gronau	Senior Lecturer, Open University, Rananna, Israel
2005 - 2007	Malia Mason	Associate Professor, Columbia Business School, New York, NY
2002 - 2007	Avniel Ghuman	Assistant Professor, University of Pittsburgh, Pittsburgh, PA
2004 - 2006	Maital Neta	Postdoctoral Fellow, Washington University School of Medicine, St. Louis, MO
2002 - 2004	Karim Kassam	Assistant Professor, Carnegie Mellon University, Pittsburg, PA
2003 - 2004	Irina Ostrovskaya	Graduate Student, Massachusetts Institute of Technology, Cambridge, MA
2002 - 2003	Heather Linz	Research Analyst at Metaworks, Inc. Cambridge, MA
2003 - 2003	Laure Zago	Faculty,CNRS CEA Universities Paris 5 and Caen, France
2001 - 2003	Annette Schmid	Head of Oncology Strategy, Perceptive Informatics, Boston, MA

Invited Colloquia

- July 1996 Vision Science Laboratory, Harvard University, Cambridge, MA
- October 1996 Psychology Department, Stanford University, Stanford CA
- May 1998 Vision Psychophysics Laboratory, California Institute of Technology, Pasadena, CA
- March 1999 Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany
- December 1999 Neural Computation Center, Hebrew University, Jerusalem, Israel
- January 2000 Department of Biomedical Engineering, Boston University, Boston, MA
- February 2001 Department of Psychology, Stanford University, Stanford, CA
- October 2001 Department of Psychology, Boston University, Boston, MA

- January 2002 Memory Disorders Research Center, Boston University School of Medicine, Boston, MA
- February 2002 Cognition, Brain and Behavior Seminar, Harvard University, Cambridge, MA
- February 2003 Massachusetts Institute of Technology Business School, Cambridge, MA
- May 2004 The Eight International Conference on Cognitive and Neural Systems, Boston, MA
- October 2004 Neuroscience Program, Brown University, Providence, RI
- November 2004 Social and Affective Neuroscience Seminar, Harvard University, Cambridge, MA
- January 2005 Computation and Neural Systems, California Institute of Technology, Pasadena, CA
- February 2005 Memory Disorders Research Center, Boston University School of Medicine, Boston, MA
- February 2005 Vision Science Lab Seminar Series, Harvard University, Cambridge, MA
- March 2005 CIMIT (Center for Integration of Medicine and Innovative Technology), Massachusetts General Hospital, Boston, MA
- March 2005 Institute for Cognitive and Brain Science Colloquia, University of California Berkeley, Berkeley, CA
- August 2005 European Conference on Visual Perception, A Coruña, Galicia, Spain
- November 2005 Partners Radiology Research Retreat, Boston, MA
- March 2006 Division of Neurosurgery and Neurobiology, Barrow Neurological Institute, Phoenix, AZ
- March 2006 Psychology Department Colloquium Series, University of Arizona, Tucson, AZ
- April 2006 Institute of Cognitive Neuroscience and Department of Psychology, University College, London, UK
- April 2006 Cognition and Brain Sciences Unit, Department of Experimental Psychology, University of Cambridge, UK
- July 2006 Biomedical Imaging and Analysis Series, MIT Computer Science and Artificial Intelligence Laboratory (CSAIL), Cambridge, MA
- November 2006 The 2nd Shanghai International Conference on Physiological Biophysics--Audition & Vision, Shanghai, China
- December 2006 The Weizmann Institute of Science, Department of Neurobiology, Rehovot, Israel
- April 2007 The Cognitive Neuroscience of Prospective Thought Symposia, Cognitive Neuroscience Society, San Francisco, CA
- May 2007 Medial Temporal Lobe Workshop, Boston University, Boston, MA
- August 2007 Marine Biology Laboratory, Woods Hole, MA
- September 2007 Institute for Psychiatric Research, Columbia University college of Physicians & Surgeons, New York, NY
- October 2007 International Conference on Computer Vision (ICCV), Rio de Janeiro, Brazil
- October 2007 Social Psychology, Harvard University, Boston, MA
- November 2007 Philosophy of Neuroscience, Boston University/MIT, Boston, MA
- March 2008 Psychology Department, University of Massachusetts, Amherst, MA
- April 2008 Satellite Symposium, Cognitive Neuroscience Society, San Francisco, CA
- May 2008 Vision Sciences Society Annual Meeting, Naples, FL
- May 2008 International Workshop on Object Recognition, Lake Como, Italy
- June 2008 Satellite Symposium, Human Brain Mapping, Melbourne, Australia
- July 2008 Symposium on New Concepts in Structural and Functional Neuroimaging, IBILI-Faculdade de Medicina, Coimbra, Portugal
- July 2008 XXIX International Congress of Psychology, Berlin, Germany
- September 2008 Psychology Department, Princeton Colloquium, Princeton, NJ

- December 2008 Distinguished Speakers in Behavioral and Brain Sciences Series, Cornell University, Ithaca, NY
- February 2009 NovoBrain Conference, Ruhr-University Bochum, Germany
- April 2009 Vision Science Society Annual Meeting, Naples, Florida
- May 2009 The Proactive Brain: An International Workshop, Harvard University, Cambridge, MA
- June 2009 Colloquium in Neuroscience and Psychology, University of Western Ontario, Canada
- August 2009 Cognitive Science Workshop, Groot Begijnhof University, Leuven, Belgium
- September 2009 Cognitive Brain and Behavior Colloquium, Department of Psychology, Harvard University, Cambridge, MA
- September 2009 Graduate Program Seminar Series, Department of Neuroscience, Brown University, Providence, RI
- October 2009 Knowledge and Performance in Perception Conference, Center for Interdisciplinary Research, Bielefeld, Germany
- October 2009 Philosophy of Cognition Colloquium, Ruhr University Bochum, Bochum, Germany
- October 2009 Perceptual Expertise Network Meeting, Pittsburgh, PA
- November 2009 Department of Psychology, Brandeis Colloquium, Waltham, MA
- November 2009 Wandering Minds and Brains Symposium, Psychonomic Society Meeting, Boston, MA
- January 2010 Alpine Brain Imaging Conference, Geneva, Switzerland
- March 2010 Visual Opinions in Mind and Brain, Graduate School of Design, Harvard University, Cambridge, MA
- May 2010 Object Recognition: Object and Scene Processing, Vision Sciences Society, Naples, FL
- May 2010 Fourteenth International Conference on Cognitive and Neural Systems, Boston University, Boston, MA
- May 2010 Biomarkers of Depression, Spring Series Grand Rounds, Department of Psychiatry at MGH, Boston, MA
- June 2010 Top-Down Modulation in Visual Processing, Organization for Human Brain Mapping, Barcelona, Spain
- September 2010 Neuroscience Colloquium, Washington University in St. Louis, St. Louis, MO
- October 2010 Neuropsychology Lecture Series, VA Boston Healthcare System, Boston, MA
- November 2010 Interdisciplinary Workshop on Society, Culture and Language at University of Plymouth, UK
- December 2010 Center for Depression, Anxiety, and Stress Research, McLean Hospital, Belmont, MA
- February 2011 Cognitive and Brain Science Series, Tufts University in Medford, MA
- June 2011 Symposium on Gist Perception, Association for Scientific Study of Consciousness, Kyoto, Japan
- September 2011 11th International Conference on Cognitive Science (ICON XI), Mallorca, Spain

Committee Work

- Director, Brain Mapping Colloquium series at MGH (1999-2001).
- Chair and Organizer for symposium: "Imaging Visual Object Representations: Let's Look The Controversy In The Eyes" at the Annual Meeting of the Cognitive Neuroscience Society, March 2001, New York. Speakers: R. Malach, J. Haxby, I. Gauthier, N. Kanwisher and M. Bar.

- Co-chairing a training program between the NMR Center at MGH and the Harvard Psychology Department.
- NYU Conte Advisory Board Member, NYU School of Medicine and Nathan Kline Institute.
- Permanent member of NIH study section, Cognition and Perception (2010-Present).

Manuscript and Grant Reviews

Ad Hoc Grant Reviewer:

- NIH
- United States-Israel Binational Science Foundation (BSF)
- The National Science Foundation (NSF)
- The Netherlands Computer Science Research Foundation (SION)
- The Wellcome Trust
- James S. McDonnell Foundation

Editorial Boards:

- 2009 - Behavioral and Brain Sciences
- 2010 - Frontiers in Perception Science

Ad Hoc Reviewer:

- 2000 - Brain Research
- 2001 - Canadian Journal of Experimental Psychology
- 1999 - Cerebral Cortex
- 1999 - Cognition
- 1999 - Cognitive, Affective, & Behavioral Neuroscience
- 2002 - Cognitive Brain Research
- 2002 - Cognitive Psychology
- 2001 - Human Brain Mapping
- 1999 - Journal of Cognitive Neuroscience
- 2000 - Journals of Experimental Psychology
- 2000 - Memory & Cognition
- 2002 - Journal of Neuroscience
- 2005 - Nature Neuroscience
- 2003 - Nature Reviews Neuroscience
- 2004 - Neural Computation
- 2000 - Neuroimage
- 2000 - Neuron
- 2000 - Neuropsychologia
- 1999 - Perception
- 1999 - Perception & Psychophysics
- 2006 - PLoS
- 2001 - Proceedings of The National Academy of Sciences
- 2001 - Psychological Science
- 1999 - Vision Research
- 2000 - Visual Cognition

Research Support

1. Active - NSF BCS-0842947, Moshe Bar (PI), 9/09-1/13, $368,952. *Contextual Contribution in Brain and Cognition.*

2. Active - DARPA, Moshe Bar (PI on subcontract with Teledyne), 6/10-8/13, $1,377,168. *Top-Down Contribution to Visual Recognition.*

3. Active - NIH R01 MH084940, Moshe Bar (PI), 4/10-3/13, $800,880*. A Cognitive Neuroscience Framework for Understanding and Treating Mood Disorders.*

4. Completed - NIH 1R01 EY019477-01A1, Moshe Bar (PI), 7/09-6/11, $715,920. *Prefrontal Cortex Top-Down Contribution to Visual Object Recognition*.

5. Completed - NIH P01AT002048-06, Moshe Bar (PI on subcontract with B. Rosen), 6/09-5/11, $205,136. *Neuroimaging Acupuncture Effects on Human Brain Activity*.

6. Completed - NIH R01 NS057500-01, Moshe Bar (PI on subcontract with S. Ahlfors), 7/07-6/10, $742,264. *Inferring Cortical Feedforward and Feedback Processes with Human Neuroimaging.*

7. Completed - NIH R01 MH060901-07, Moshe Bar (PI on subcontract with D.L. Schacter), 4/05-3/10, $446,956. *Event Related Neuroimaging of Human Memory Formation.*

8. Completed - NIH R01 NS50615, Moshe Bar (PI), 9/04-5/10, $1,865,831. *Contextual Predictions Facilitate Visual Cognition.*

9. Completed - NIH R01 NS44319, Moshe Bar (PI), 8/02-7/07, $950,000. *Top-Down Cortical Facilitation During Visual Object Recognition.*

10. Completed - James S. McDonnell Foundation, 21st Century Science Initiative Award # 21002039, Moshe Bar (PI), 1/02-1/07, $454,965. *Revealing the Perceptual and Neural Mechanisms of First Impressions.*

Publications

Original Reports (all published in peer-reviewed journals only):

1. Bar, M., Ullman, S. (1996). Spatial context in recognition. *Perception*, 25, 343-52.

2. Bar, M., Biederman, I. (1998). Subliminal visual priming. *Psychological Science*, 9, 464-9.

3. Biederman, I., Bar, M. (1999). One-shot viewpoint invariance in matching novel objects. *Vision Research*, 39, 2885-99.

4. Bar, M., Biederman, I. (1999). Localizing the cortical region mediating visual awareness of object identity. *Proceedings of the National Academy of Sciences*, 96, 1790-3.

5. Biederman, I., Subramaniam, S., Bar, M., Kaloscai, P., Fiser, J. (1999). Subordinate-level object classification reexamined. *Psychological Research*, 62, 131-53.

6. Biederman, I., Bar, M. (2000). Differing views on views: Response to Hayward and Tarr. *Vision Research*, 40, 3901-5.

7. Vogels, R., Biederman, I., Bar, M., Lorincz, A. (2001). Inferior temporal neurons show greater sensitivity to non-accidental than metric shape differences. *Journal of Cognitive Neuroscience*, 13(4), 444-53.

8. Bar, M., Tootell, R., Schacter, D.L., Greve, D., Fischl, B., Mendola, J., Rosen, B., Dale, A.M. (2001). Cortical mechanisms of explicit visual object recognition. *Neuron*, 29, 529-35.

9. Bar, M. (2001). Viewpoint dependency in visual object recognition does not necessarily imply viewer-centered representation. *Journal of Cognitive Neuroscience*, 13(6), 793-9.

10. Bar, M. (2003). A cortical mechanism for triggering top-down facilitation in visual object recognition. *Journal of Cognitive Neuroscience*, 15, 600-9.

11. Bar, M., Aminoff, E. (2003). Cortical analysis of visual context. *Neuron*, 38, 347-58.

12. Bar, M. (2004). Visual objects in context. *Nature Reviews Neuroscience*, 5, 617-29.

13. Zago, L., Fenske, M.J., Aminoff, E., Bar, M. (2005). The rise and fall of priming: How visual exposure shapes cortical representations of objects. *Cerebral Cortex*, 15, 1655-65.

14. Fenske, M.J., Aminoff E., Gronau N.. & Bar, M. (2006). Top-down facilitation of visual object recognition: Object-based and context-based contributions. *Progress in Brain Research*, 155, 3-21.

15. Bar, M., Linz, H., Neta, M. (2006). Very first impressions. *Emotion*, 6(2), 269-78.

16. Bar, M., Neta, M. (2006). Humans prefer curved visual objects. *Psychological Science,* 17(8), 645-48.

17. Ghuman, A., Bar, M. (2006). The influence of non-remembered affective associations on preference. *Emotion*, 6(2), 215-23.

18. Bar, M., Kassam, K., Ghuman, A., Boshyan, J., Dale, A., Hämäläinen, M., Marinkovic, K., Schacter, D.L., Rosen, B., and Halgren, E. (2006). Top-down facilitation of visual recognition. *Proceedings of the National Academy of Sciences*, 103(2), 449-54.

19. Aminoff, E., Gronau, N., and Bar, M. (2007). The parahippocampal cortex mediates spatial and non-spatial associations. *Cerebral Cortex*, 27, 1493-1503.

20. Bar, M. (2007). The proactive brain: Using analogies and associations to generate predictions. *Trends in Cognitive Sciences*, 11(7), 280-289.

21. Bar, M., Aminoff, E., Mason, M., and Fenske, M. (2007). The units of thought. *Hippocampus*, 17(6), 420-428.

22. Bar, M., and Neta, M. (2007). Visual elements of subjective preference modulate amygdala activation. *Neuropsychologia*, 45, 2191-2200.

23. Kveraga, K., Ghuman, A.S., and Bar, M. (2007). Top-down predictions in the cognitive brain. *Brain and Cognition*, 65, 145-168.

24. Bar, M. (2007). The continuum of "looking forward," and paradoxical requirements from memory. *Behavioral and Brain Sciences*, 30(3), 315-316.

25. Kveraga, K., Boshyan, J., and Bar, M. (2007). Magnocellular projections as the trigger of top-down facilitation in recognition. *Journal of Neuroscience*, 27, 13232-13240.

26. Gronau, N., Neta, M., and Bar, M. (2008). Integrated contextual representation for objects' identities and their locations. *Journal of Cognitive Neuroscience*, 20(3), 371-388.

27. Bar, M., Aminoff, E., and Ishai, A. (2008). Famous Faces activate contextual associations in the parahippocampal cortex. *Cerebral Cortex*, 18(6), 1233-1238.

28. Ghuman, A., Bar, M., Dobbins, I.G., and Schnyer, D. (2008). The effects of priming on frontal-temporal communication. *Proceedings of the National Academy of Science*, 105(24), 8405-8409.

29. Bar, M., and Neta, M. (2008). The proactive brain: Using little information to make predictive judgments. *Journal of Consumer Behavior*, 7(4-5), 319-330.

30. Bar, M., Aminoff, E., and Schacter, D.L. (2008). Scenes unseen: The parahippocampal cortex intrinsically subserves contextual associations, not scenes or places per se. *Journal of Neuroscience*, 28, 8539-8544.

31. Aminoff, E., Schacter, D.L., and Bar, M. (2008). The cortical underpinnings of context-based memory distortion. *Journal of Cognitive Neuroscience*, 20(12), 2226-2237.

32. Chiao, J.Y., Iidaka, T., Gordon, H.L., Nogawa, J., Bar, M., Aminoff, E., Sadato, N., and Ambady, N. (2008). Cultural specificity in amygdala response to fear faces. *Journal of Cognitive Neuroscience*, 20(12), 2167-2174.

33. Bar, M. (2009). Predictions: A universal principle in the operation of the human brain (Introduction). Theme issue: Predictions in the brain: Using our past to generate a future. In Bar, M., (Ed.) *Philosophical Transactions of the Royal Society B*, 364, 1181-1182.

34. Barrett, L.F., and Bar, M. (2009). See it with feeling: Affective predictions during object perception. Theme issue: Predictions in the brain: Using our past to generate a future. Bar, M. (Ed.) *Philosophical Transactions of the Royal Society B*, 364, 1325-1334.

35. Bar, M. (2009). The proactive brain: memory for predictions. Theme issue: Predictions in the brain: Using our past to generate a future. In Bar, M. (Ed.) *Philosophical Transactions of the Royal Society B*, 364, 1235-1243.

36. Mason, M., Bar, M., and Macrae, M.N. (2009). Exploring past and present: Mind wandering in the brain's default state. *Cognitive Sciences*, 3(2), 143-162.

37. Bar, M. (2009). A cognitive neuroscience hypothesis of mood and depression. *Trends in Cognitive Sciences*, 13(11), 456-63.

38. Bar, M. (2010). Wait for the Marshmallow? Future-Oriented Thinking and Delayed Reward Discounting in the Brain. *Neuron, 66(1), 4-5*.

39. K. Kveraga, A.S. Ghuman, K.S. Kassam, E. Aminoff, M.S. Hamalainen, M. Chaumon, M. Bar (2011). Early onset of neural synchronization in the contextual associations network. *Proceedings of the National Academy of Sciences*. *108(8), 3389-94*.

40. Mason, M.F., & Bar, M. (2011). The effect of mental progression on mood. *Journal of Experimental Psychology: General*. 141(2), 217-221.

41. Shepherd, K., & Bar, M. (2011). Preference for Symmetry: Only on Mars? *Perception*, 40, 1254-1256.

42. Leder. H., Tinio. P.P.L., & Bar, M. (2011). Emotional valence modulates the preference for curved objects. *Perception*. 40(6) 649-655

43. Thomas, C., Kveraga, K., Huberle, E., Karnath, H-O., & Bar, M. (2012) Enabling global processing in simultanagnosia by psychophysical biasing of visual pathways. *Brain.* 135(5), 1578-1585.

44. Calderone, D.J., Hoptman, M.J., Martinez, A., Nair-Collins, S., Mauro, C.J., Bar, M., Javitt, D.C., & Butler, P.D. (2012). Contributions of Low and High Spatial Frequency Processing to Impaired Object Recognition Circuitry in Schizophrenia. *Cerebral Cortex.* Advance online publication.

45. Cheung, O.S. & Bar, M. (2012). Visual prediction and perceptual expertise. *International Journal of Psychophysiology*, 83(2), 156-163.

46. Lebrecht, S., Bar M., Barrett, L.F., & Tar, M.J. (2012). Micro-Valences: Affective valence in everyday objects. *Frontiers in Psychology*, 3(107).

Book Chapters and Books:

1. Biederman, I., Subramaniam, S., Kaloscai, P., Bar, M. (1997). Viewpoint-invariant information in subordinate-level object classification. In Gopher D., Koriat A., (Eds.) *Attention and Performance XVII. Cognitive regulation of performance: Interaction of theory and application* (pp. 91-112). Cambridge, MA: MIT Press.

2. Bar, M. (2000). Conscious and nonconscious processing of visual object identity. Rossetti, Y., Revonsuo, A., (Eds.) *Beyond Dissociations: Interaction between dissociable conscious and nonconscious processing* (pp. 153-74). Amsterdam: John Benjamins Publishing Company.

3. Bar, M. (2005). Top-down facilitation of visual object recognition. In: Itti, L., Rees, G., Tsotsos, J., (Eds.) *Neurobiology of Attention* (pp. 140-5). Burlington, MA: Elsevier Academic Press.

4. Kveraga, K., Boshyan, J., and Bar, M. (2008). The proactive brain: Using memory-based predictions in visual recognition. In Dickinson, S., Tarr, M., Leonardis, A., and Schiele, B., (Eds.) *Object Categorization: Computer and Human Vision Perspectives*. New York: Cambridge University Press.

5. Bar, M. (Ed.) (2011). *Predictions in the Brain.* New York: Oxford University Press Inc.

6. Bar, M. (2011). The proactive brain: memory for predictions. In Bar, M., (Ed.) *Predictions in the Brain.* (pp. 13-26). New York: Oxford University Press Inc.

7. Bar, M. (2011). Predictions: A universal principle in the operation of the human brain (Introduction). In Bar, M., (Ed.) *Predictions in the Brain.* (pp. v-vii). New York: Oxford University Press Inc.

8. Yardley, H., Perlovsky, L., & Bar, M. (2012). Predictions and Incongruency in Object Recognition: A Cognitive Neuroscience Perspective. In *Detection and Identification of Rare Audiovisual Cues*. *Studies in Computational Intelligence Series*, Springer Publishing.

9. Bar, M. and Bubic. A. Top-down Effects in Visual Perception. In *The Oxford Handbook of Cognitive Neuroscience. The Oxford Handbook Series*, Oxford University Press (in press).