

Curriculum Vita Lynn Nadel

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Degrees

1963 B.Sc. in Biological Sciences, McGill University, Montreal
1965 M.Sc. in Psychology, McGill University, Montreal
1967 Ph.D. in Physiological Psychology, McGill University, Montreal

Positions

1963-64 Research Asst, Dept of Psychology, McGill Univ, Montreal, Canada
1964-67 Teaching Asst, Dept of Psychology, McGill Univ, Montreal, Canada
1967-70 NIMH Postdoctoral Fellow, Institute of Physiology, Czechoslovak Academy
 of Science, Prague, Czechoslovakia
1968-69 NIMH Postdoctoral Fellow, MRC Neural Mechanisms of Behavior Unit,
 University College, London, UK
1970-76 Research Assoc, MRC Cerebral Functions Res Gp., Dept of Anatomy and
 Embryology, University College, London, UK
1975-76 Dozent in Neurophysiology, Inst of Physiology, Univ of Bergen, Norway
1976-77 Sr Research Assoc, Dept of Psychiatry, UC San Diego, California
1977-79 Assoc Professor, Dept of Psychology, Dalhousie Univ, Halifax, Canada
1980-85 Assoc Research Psychologist, Social Sciences, UC Irvine, California
1985 → Prof of Psychology and Res Cognitive Scientist, Univ of Arizona, Tucson,
 Arizona
1987-98 Deputy Director, Ctr for the Study of Complex Systems, Univ of Arizona,
 Tucson, Arizona
1989-92 Head, Department of Psychology, Univ of Arizona, Tucson, Arizona
1993-02 Head, Department of Psychology, Univ of Arizona, Tucson, Arizona
1989-92 Director, Arizona Res Labs, Neural Systems, Memory and Aging Research
 Unit, University of Arizona, Tucson, Arizona
1992-93 Acting Dean, Faculty of Social and Behavioral Sciences, University of
 Arizona, Tucson, Arizona
1993-94 Faculty Assoc to the Provost, Univ of Arizona, Tucson, Arizona
1998-05 External Faculty, Santa Fe Institute, Santa Fe, New Mexico.
2000 → Co-Director, Cognition and Neuroimaging Laboratories, University of
 Arizona, Tucson, Arizona
2003 → Regent's Professor, University of Arizona, Tucson, Arizona
2003 → Director, Cognition and Neural Systems Program, Department of
 Psychology, University of Arizona, Tucson, Arizona
2011 Visiting Professor, University of Amsterdam Brain and Cognition Priority
 Research Program, June 13-18.

Honors

National Down Syndrome Society Award for Research, 2005
Grawemeyer Psychology Prize, 2006 (shared with John O'Keefe)
J. Mills Award for Exceptional Contribution to Research in Down Syndrome, 2011
Sisley-Jerome Lejeune International Prize for Research on Intellectual Disability, 2013

Memberships

Fellow, AAAS
Fellow, American Psychological Society
Fellow, Society of Experimental Psychologists
Member, American Psychological Society
Member, Psychonomic Society
Member, Society for Neuroscience
Member, British Neuroscience Association
Member, Dana Alliance for Brain Initiatives
Member, International Neuropsychological Symposium
Member, Cognitive Science Society
Member, European Brain and Behavior Society
Member, Memory Disorders Research Society

Fellowships and Grants

1965-67	NIMH Predoctoral Fellow; McGill
1967-70	NIMH Postdoctoral Fellow; Prague, London
1970-71	MRC (UK) Grant for research on mechanisms of vision.
1971-73	SRC (UK) Grant for research on hippocampus.
1973-76	Wellcome Trust (UK) Grant for research on hippocampus.
1977-78	Dalhousie University Development Fund Grant for research on hippocampus and amnesia.
1978-79	NSERC (Canada) Grant for research on hippocampus.
1981-84	NINCDS (USA) Grant for research on hippocampus and cognition.
1984-86	March of Dimes Birth Defects Foundation Grant for research on hippocampal development.
1986-87	BRSF Grant for research on hippocampal development.
1986-88	Univ. of Arizona grant for study of children with Down Syndrome.
1987-89	Sloan Foundation Grant for computational modeling of hippocampal formation.
1989-90	Hasselblad Foundation Grant for Computational Modeling of Spatial Cognition.
1989-90	NSF Grant for Computational Modeling of Olfaction and Spatial Cognition.

1989-90 BRSB Grant for Limbic System Antibodies.
1990-93 ONR Grant for computational modeling of hippocampus.
1991-02 NIMH Grant for the Complex Systems Summer School.
1992-93 NSF Grant for Study of Cognition in Premature Infants.
1990-97 McDonnell-Pew Cognitive Neuroscience Center Grant.
1993-01 Flinn Foundation Cognitive Neuroscience Center Grant.
1992-95 McDonnell Foundation Grant for Collaborative Research with Dr. Jan Bures (Prague) on Hippocampus and Consolidation.
1995-98 McDonnell Foundation Grant for Collaborative Research with Dr. Laszlo Seress (Pecs) on Hippocampus, Consolidation and Aging
1998-03 NICHD Grant for Neuropsychological Study of Down Syndrome.
1998-01 McDonnell Foundation Grant for Collaborative Research with Andre Fenton and Jan Bures (Prague)
1998-01 McDonnell Foundation Grant for Collaborative Research with Janos Kallai (Pecs) and WJ Jacobs (Tucson).
2003-08 NINDS Grant for Role of Hippocampus in Episodic Memory (co-PI, Lee Ryan)
2005-10 ARC (Arizona) Grant for study of Down Syndrome.
2006-08 Sie Foundation Grant for study of Down Syndrome.
2007-08 ARC (Arizona) Grant for study of memory in aging.
2008-14 DSRTF Grant for study of genetic modifiers in Down syndrome.
2008-12 NSF Grant for study of memory reconsolidation (co-PI, Rebecca Gomez).
2009-14 DSRTF grant for a Down Syndrome Virtual Center for Basic and Translational studies.
2010-12 Lejeune Foundation grant for study of memory intervention in Down syndrome.
2010-13 Thrasher Research Fund grant for study of sleep apnea in Down syndrome.
2012-14 Lejeune Foundation grant for the study of EEB biomarkers in Down syndrome.
2013-18 NICHD grant to study language in Down syndrome

Publications

Papers

1. Nadel, L. Cortical spreading depression and habituation. *Psychonomic Science* 5: 119-120, 1966.
2. Nadel, L. Dorsal and ventral hippocampal lesions and behavior. *Physiology and Behavior* 3: 891-900, 1968.
3. Nadel, L. and Buresova, O. Monocular input and interhemispheric transfer in the reversible split-brain. *Nature* 220: 914-915, 1968.
4. Nadel, L. and Buresova, O. Interocular transfer in the hooded rat. *Physiology and Behavior* 4: 613-619, 1969.
5. Nadel, L. and Buresova, O. Monocular input and interhemispheric transfer: Reversed transfer trials. *Behavioral Biology* 5: 63-65, 1970.
6. Buresova, O. and Nadel, L. Interhemispheric transfer in the rat. *Physiology and Behavior* 5: 849-853, 1970.
7. Nadel, L. Interhemispheric transfer: monocular input and varied sensory conditions. *Physiology and Behavior* 6: 655-661, 1971.
8. Nadel, L. and O'Keefe, J. The hippocampus in pieces and patches: an essay on modes of explanation in physiological psychology. In R. Bellairs and E.G. Gray (Eds.) *Essays on the nervous system. A Festschrift for J.Z. Young.* Pp. 367-390, Oxford: The Clarendon Press, 1974.
9. O'Keefe, J. and Nadel, L. Maps in the brain. *New Scientist*, 27 June 1974.
10. Nadel, L., O'Keefe, J. and Black, A.H. Slam on the brakes: a critique of Altman, Brunner and Bayer's response-inhibition model of hippocampal function. *Behavioral Biology* 14: 151-166, 1975.
11. O'Keefe, J., Nadel, L., Keightley, S. and Kill, D. Fornix lesions selectively abolish place learning in the rat. *Experimental Neurology* 48: 152-166, 1975.
12. Black, A.H., Nadel, L. and O'Keefe, J. Hippocampal function in avoidance learning and punishment. *Psychological Bulletin* 84: 1107-1129, 1977.
13. Nadel, L. Working memory won't work. *The Behavioral and Brain Sciences* 2: 338-339, 1979.
14. O'Keefe, J. and Nadel, L. *Precis of O'Keefe and Nadel's The hippocampus as a*

- cognitive map, and Author's Response to Commentaries. *The Behavioral and Brain Sciences* 2: 487-534, 1979.
15. O'Keefe, J., Nadel, L. and Willner, J. Tuning out irrelevancy? Comments on Solomon's temporal mapping view of hippocampus. *Psychological Bulletin* 86: 1280-1289, 1979.
 16. Nadel, L. Cognitive and neural maps. In P.W. Juszyk and R. Klein (Eds.) *Essays on the nature of thought. A symposium in honor of D.O. Hebb*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1980.
 17. Barnes, C., Nadel, L. and Honig, W.K. Spatial memory deficits in senescent rats. *Canadian Journal of Psychology* 34: 29-39, 1980.
 18. Nadel, L. and Willner, J. Context and conditioning: a place for space. *Physiological Psychology* 8: 218-228, 1980.
 19. Nadel, L. and MacDonald, L. Hippocampus: cognitive map or working memory? *Behavioral and Neural Biology* 29: 405-409, 1980.
 20. Squire, L.R., Nadel, L. and Slater, P.C. Anterograde amnesia and memory for contextual information. *Neuropsychologia* 19: 141-145, 1981.
 21. Nadel, L. Some thoughts on the proper foundation for the study of cognition. *The Behavioral and Brain Sciences* 5: 383-384, 1982.
 22. Nadel, L. and Morris, R.G.M. On novelty, places and the septo-hippocampal system. *The Behavioral and Brain Sciences* 5: 493-494, 1982.
 23. Kean, M.-L. and Nadel, L. On the emergence of cognitive neuroscience. In J. Mehler, E.C.T. Walker and M. Garrett (Eds.) *Perspectives on mental representation*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1982.
 24. Nadel, L. and Zola-Morgan, S. Infantile amnesia: a neurobiological perspective. In M. Moscovitch (Ed.) *Infant memory*. Pp. 145-172, New York: Plenum Press, 1984.
 25. Squire, L.R., Cohen, N.J. and Nadel, L. The medial temporal region and memory consolidation: a new hypothesis. In H. Weingartner and E. Parker (Eds.) *Memory consolidation*. pp. 185-210, Hillsdale, NJ: Lawrence Erlbaum Associates, 1984.
 26. Nadel, L. and Wexler, K. Neurobiology, representations and memory. In G. Lynch, J.L. McGaugh and N. Weinberger (Eds.) *The neurobiology of learning and memory*. New York: The Guilford Press, 1984.
 27. Nadel, L., Willner, J. and Kurz, E.M. Cognitive maps and environmental context. In

- P. Balsam and A. Tomie (Eds.) Context and learning. pp. 385-406, Hillsdale, NJ: Lawrence Erlbaum Associates, 1985.
28. Jacobs, W.J. and Nadel, L. Stress-induced recovery of fears and phobias. *Psychological Review* 92: 512-531, 1985.
 29. Nadel, L. Down syndrome in neurobiological perspective. In C.J. Epstein (Ed.) *The neurobiology of Down Syndrome*. Pp. 239-251, New York: The Raven Press, 1986.
 30. Nadel, L., Willner, J. and Kurz, E.M. The neurobiology of mental representation. In M. Brand and R.M. Harnish (Eds.) *The representation of knowledge and belief*. Tucson: The University of Arizona Press, 1986.
 31. Wilson, D.A., Willner, J., Kurz, E.M. and Nadel, L. Early experience alters brain plasticity. *Behavioural Brain Research* 21: 223-227, 1986.
 32. Morris, R.G.M., Hagan, J.J., Nadel, L., Jensen, J., Baudry, M. and Lynch, G.S. Spatial learning in the rat: impairment by the thiol-proteinase inhibitor, Leupeptin, and an analysis of [3H] Glutamate receptor binding in relation to learning. *Neural and Behavioral Biology*, 47: 333-345, 1987.
 33. Nadel, L. Afterthoughts: Psychobiological perspectives on Down syndrome. In L. Nadel (Ed.) *The psychobiology of Down syndrome*. Cambridge, MA: Bradford Books/MIT Press, 1988.
 34. Nadel, L. Landmarks: Neurobiological perspectives. *British Journal of Developmental Psychology* 6: 383-385, 1988.
 35. Nadel, L., Cooper, L.A.C., Culicover, P. and Harnish, R.M. Connections and computation. In L. Nadel, L.A.C. Cooper, P. Culicover and R.M. Harnish (Eds.) *Neural connections, mental computations*. Cambridge, MA: Bradford Books/MIT Press, 1989.
 36. Tataryn, D., Nadel, L. and Jacobs, W.J. Cognitive therapy and cognitive science. In A. Freeman, K. Simon, L. Beutler and H. Arkowitz (Eds.) *Comprehensive handbook of cognitive therapy*. New York: Plenum Press, 1989.
 37. Nadel, L. and Willner, J. Some implications of postnatal maturation in the hippocampal formation. In V. Chan-Palay and C. Kohler (Eds.) *The hippocampus: new vistas*. New York: AR Liss, 1989.
 38. Schacter, D. and Nadel, L. Varieties of spatial memory: A problem for cognitive neuroscience. In H. Weingartner and R. Lister (Eds.) *Cognitive Neuroscience*. New York: Oxford University Press, 1990.

39. Nadel, L. Computation in the brain: the organization of the hippocampal formation in space and time. In J.R. Brink (Ed.) *Computer and the brain*. New York: Elsevier, 1991.
40. McNaughton, B.L. and Nadel, L. Hebb-Marr networks and the neurobiological representation of action in space. In M.A. Gluck and D. Rumelhart (Eds.) *Neuroscience and Connectionist Theory*, Hillsdale, NJ: L. Erlbaum, 1990.
41. Nadel, L. Varieties of spatial cognition: psychobiological considerations. In A. Diamond (Ed.) *The Development and Neural Bases of Higher Cognitive Functions*, New York Academy of Sciences (1990).
42. Nadel, L. Models of memory. In F. Morrell (Ed.) *Kindling and synaptic plasticity: Graham Goddard's legacy*. Birkhauser Boston, 1991.
43. Polster, M., Nadel, L. and Schacter, D. Cognitive neuroscientific analyses of memory: A historical perspective. *Journal of Cognitive Neuroscience* 3: 95-116, 1991.
44. Nadel, L. The hippocampus and space revisited. *Hippocampus* 1: 221-229, 1991.
45. Nadel, L., Wilson, L. and Kurz, E.M. Hippocampus: Effects of alterations in timing of development. In G. Turkewitz & D. Devenny, (Eds.), *Developmental time and timing*, Hillsdale, NJ: Erlbaum, 1992.
46. Nadel, L. Multiple Memory Systems: What and Why. *Journal of Cognitive Neuroscience* 4: 179-188, 1992.
47. Jacobs, W.J., Nadel, L. and Hayden, V.C. Anxiety disorders. In D. Stein and J. Young (Eds.), *Cognitive science and clinical disorders* pp. 211-233, San Diego: Academic Press, 1992.
48. Nadel, L. Learning and cognition in Down Syndrome. In I.T. Lott and E.E. McCoy (Eds.) *Down syndrome: Advances in medical care*, New York: Wiley-Liss, 1992.
49. Uecker, A., Mangan, P.A., Obrzut, J.E. and Nadel, L. Down syndrome in neurobiological perspective: An emphasis on spatial cognition. *Journal of Clinical Child Psychology*, 22: 266-276, 1993.
50. Uecker, A., Obrzut, J.E. and Nadel, L. Mental rotation performance by learning disabled and Down's syndrome children: A study of imaginal development. *Developmental Neuropsychology*, 10: 395-411, 1994.
51. Nadel, L. Multiple memory systems: What and Why. An Update. In D. Schacter and E. Tulving (Eds.) *Memory Systems 1994*, pp. 39-63, Cambridge, MA, MIT Press, 1994.

52. Wilcox, T., Rosser, R. and Nadel, L. Representation of object location in 6.5-month-old infants. *Cognitive Development*, 9: 193-209, 1994.
53. Nadel, L. Neural and cognitive development in Down syndrome. In L. Nadel and D.M. Rosenthal (Eds.) *Down syndrome: Living and Learning in the Community*, Wiley-Liss, New York, 1994.
54. Nadel, L. Hippocampus, Space and Relations, *Behavioral and Brain Sciences*, 17: 490-491, 1994.
55. Nadel, L. The Role of the Hippocampus in Declarative Memory: A Comment on Zola-Morgan, Squire and Ramus. *Hippocampus*, 5: 232-234, 1995.
56. Nadel, L. The psychobiology of spatial behavior: The hippocampal formation and spatial mapping. In E. Alleva, H.-P. Lipp, L. Nadel, A. Fasolo and L. Ricceri (Eds.) *Behavioural brain research in naturalistic and semi-naturalistic settings: Possibilities and Perspectives*, Kluwer Press, 1995.
57. Thomas, K.G.F., Laurance, H., Jacobs, W.J. and Nadel, L. Memory for Traumatic Events: Formulating Hypotheses and Critical Experiments *Traumatology*, 1: #2, November 1995.
58. Bohbot, V., Otahal, P., Liu, Z., Nadel, L. and Bures, J. Electronconvulsive shock and lidocaine reveal rapid consolidation of spatial working memory in the water maze task. *Proceedings of the National Academy of Science*, 93: 4016-4019, 1996.
59. Nadel, L. Learning, memory and neural function in Down syndrome. In J.A. Rondal, J. Perera, L. Nadel and A. Comblain, (Eds.) *Down syndrome: Psychological, psychobiological and socio-educational perspectives*. Whurr Publications, London, 1996.
60. Uecker, A. and Nadel, L. Spatial locations gone awry: Object and spatial memory deficits in children with fetal alcohol syndrome. *Neuropsychologia*, 34: 209-223, 1996.
61. Peterson, M.A., Nadel, L., Bloom, P., and Garrett, M. Space and language. In P. Bloom, M.A. Peterson, M. Garrett and L. Nadel (Eds.), *Language and space*, Cambridge, MA., MIT Press, 1996.
62. Nadel, L. and Jacobs, W.J. The role of the hippocampus in PTSD, panic and phobia, In N. Kato (Ed.) *Hippocampus: Functions and Clinical Relevance*, pp. 455-463, Amsterdam, Elsevier Science B.V., 1996.
63. Wilcox, T., Nadel, L. and Rosser, R. Location Memory in Healthy Preterm and Fullterm Infants. *Infant Behavior and Development*, 19: 309-323, 1996.
64. Nadel, L. The selective role of the hippocampus in memory. In T. Ono, B.L.

- McNaughton, S. Molotchnikoff, E.T. Rolls, and H. Nishijo (Eds.) Perception, Memory and Emotion: Frontier in Neuroscience, pp. 305-317, Elsevier, Oxford, 1996.
65. Jacobs, W.J., Laurance, H.E., Thomas, K.G.F., Luczak, S.E. and Nadel, L. On the veracity and variability of traumatic memory. *Traumatology*, 2: #2
 66. Czurku, A., Czeh, B., Seress, L., Nadel, L. and Bures, J. Severe spatial navigation deficit after single high dose of neonatal x-ray irradiation in the rat. *Proceedings of the National Academy of Sciences*, 94: 2766-2771, 1997.
 67. Nadel, L. and Moscovitch, M. Consolidation, retrograde amnesia and the hippocampal formation. *Current Opinion in Neurobiology*, 7: 217-227, 1997.
 68. Bohbot, V., Jech, R., Bures, J., Nadel, L. and Ruzicka, E. Spatial and non-spatial memory involvement in myasthenia gravis. *Journal of Neurology*, 244: 529-532, 1997.
 69. Nadel, L. & Moscovitch, M. Hippocampal contribution to cortical plasticity. *Neuropharmacology*, 37: 431-440, 1998.
 70. Nadel, L., Thomas, K.G.F., Laurance, H.E., Skelton, R., Tal, T. & Jacobs, W.J. Human Spatial Cognition in A Computer-Generated Arena. In C. Freksa, C. Habel & K.F. Wender (Eds.), *Spatial cognition - An interdisciplinary approach to representation and processing of spatial knowledge*, pp. 399-427, Berlin: Springer-Verlag, 1998.
 71. Moscovitch, M. & Nadel, L. Consolidation and the hippocampal complex revisited: In defense of the multiple-trace model. *Current Opinion in Neurobiology*, 8: 297-300, 1998.
 72. Bohbot, V., Kalina, M., Stepankova, K., Spackova, K., Petrides, M., and Nadel, L. Lesions to the right parahippocampal cortex cause spatial memory deficits in humans. *Neuropsychologia*, 36: 1217-1238, 1998.
 73. Uecker, A. & Nadel, L. Spatial but not object memory impairments in children with fetal alcohol syndrome (FAS) *American Journal of Mental Retardation*, 103: 12-18, 1998.
 74. Czeh, B., Seress, L., Nadel, L. & Bures, J. Lateralized fascia dentata lesion and blockade of one hippocampus: effect on spatial memory in rats. *Hippocampus*, 8: 647-650, 1998.
 75. Nadel, L. Neural mechanisms of spatial orientation and wayfinding: An overview. In R. Golledge (Ed.) *Wayfinding: Cognitive Maps and Spatial Behavior*, Baltimore, MD: The Johns Hopkins University Press, 1998.

76. Jacobs, W.J., Thomas, K.G.F., Laurance, H.E. & Nadel, L. Place learning in virtual space II: Topographical relations as one dimension of stimulus control. *Learning and Motivation*, 29: 288-308, 1998.
77. Nadel, L. & Jacobs, W.J. Traumatic memory is special. *Current Directions in Psychological Science*, 7: 154-157, 1998.
78. Jacobs, W.J. & Nadel, L. Neurobiology of reconstructed memory. *Psychology, Public Policy, and Law*, 4: 1110-1134, 1998.
79. Moscovitch, M. & Nadel, L. Multiple-trace theory and semantic dementia: Response to K.S. Graham (1999). *Trends in Cognitive Sciences*, 3: 87-89, 1999.
80. Nadel, L. Learning and memory in Down syndrome. In Perera, J., Rondal, J. & Nadel, L. (Eds.) *Down's Syndrome: A review of current knowledge*, 1999, Whurr Publications: UK.
81. Jacobs, W.J. and Nadel, L. The first panic attack. *Canadian Journal of Psychology*, 53: 92-107, 1999.
82. Nadel, L. Down syndrome in cognitive neuroscience perspective. Tager-Flusberg, H. (Ed.) *Neurodevelopmental disorders: Contributions to a new framework from the cognitive neurosciences*. Pp. 187-221, Cambridge, MA., MIT Press, 1999.
83. Nadel, L., Ryan, L., Keil, K. & Putnam, K. Episodic memory: It's about time (and place). *Behavioral and Brain Sciences*, 22: 463-464, 1999.
84. Lane, R.D., Nadel, L., Allen, J.J.B. & Kaszniak, A.W. The study of emotion from the perspective of cognitive neuroscience. In R.D. Lane, L. Nadel, G. Ahern, J.J.B. Allen, A.W. Kaszniak, S. Rapcsak & G. Schwartz (Eds.) (Eds.) *The cognitive neuroscience of emotion*, Oxford University Press, 1999.
85. Moscovitch, M., Yaschyshyn, T., Ziegler, M. & Nadel, L. Remote episodic memory and retrograde amnesia: Was Endel Tulving right all along? In *Memory, consciousness and the brain: The Tallinn conference* pp. 331-345, 1999.
86. Nadel, L. and Eichenbaum, H. Introduction to the Special Issue on Place Cells. *Hippocampus*, 9: 341-345, 1999.
87. Nadel, L. Meeting Report: The Parahippocampal Region: Basic Science and Clinical Implications, *Hippocampus*, 10: 133-135, 2000.
88. Fujii, T, Moscovitch, M. and Nadel, L. Memory consolidation, retrograde amnesia, and the temporal lobe. F. Boller and J. Grafman (Eds) *Handbook of Neuropsychology*, pp. 223-250, Elsevier Science B.V., Amsterdam, 2000.

89. Nadel, L., Samsonovitch, A., Ryan, L. and Moscovitch, M. Multiple trace theory of human memory: Computational, neuroimaging and neuropsychological results. *Hippocampus*, 10: 352-368, 2000.
90. Bohbot, V.D. Allen, J.J.B. and Nadel, L. Memory deficits characterized by patterns of lesions to the hippocampus and parahippocampal cortex. *Annals of the New York Academy of Sciences*, 911: 355-368, 2000.
91. Rosenbaum, R.S., Priselac, S., Kohler, S., Black, S.E., Nadel, L. and Moscovitch, M. Studies of remote spatial memory in an amnesic person with extensive bilateral hippocampal lesions. *Nature Neuroscience*, 3: 1044-1048, 2000.
92. Baddeley, A., Bueno, O., Cahill, L., Fuster, J.M., Izquierdo, I., McGaugh, J.L., Morris, R.G.M., Nadel, L., Routtenberg, A., Xavier, G. & Da Cunha, C. The brain decade in debate: I. Neurobiology of learning and memory. *Brazilian Journal of Medical and Biological Research*, 33: 993-1002, 2000.
93. Nadel, L. and Land, C.L. Memory traces revisited. *Nature Reviews Neuroscience*, 1: 209-212, 2000.
94. Nadel, L. and Bohbot, V. Consolidation of memory. *Hippocampus*, 11: 56-60, 2001.
95. Nadel, L. and Moscovitch, M. The Hippocampal Complex and Long-Term Memory Revisited, *Trends in Cognitive Sciences*, 5, 228-230, 2001.
96. Thomas, K.G.F., Hsu, M., Laurance, H.E., Nadel, L. & Jacobs, W.J. Place learning in virtual space. III: Investigation and application of three training procedures in the study of human spatial navigation. *Behavior Research Methods, Instruments & Computers* 33: 21-37, 2001.
97. Ryan, L., Nadel, L., Keil, K., Putnam, K., Schnyer, D., Trouard, T. & Moscovitch, M. The hippocampal complex is equally involved in retrieving recent and very remote autobiographical memories: Evidence from functional magnetic resonance imaging in neurologically intact people. *Hippocampus* 11: 707-714, 2001.
98. Payne, J.D., Nadel, L., Allen, J.J.B., Thomas, K.G.F. & Jacobs, W.J. Stress increases false memories. *Memory*, 10: 1-6, 2002.
99. Makany, T., Karadi K., Kallai J., Nadel, L. Interference between verbal concept formation and spatial mental rotation in female subjects. *Perceptual and Motor Skills* 95: 227-232. 2002.
100. Nadel, L. & Payne, J.D. The hippocampus, wayfinding, and episodic memory. In P. Sharp (Ed). *The neural basis of navigation: Evidence from single cell recording*. pp. 235-247. Boston: Kluwer Academic Publishers, 2002.
101. Learmonth, A.E., Nadel, L. & Newcombe, N.S. Children's use of landmarks:

- Implications for modularity theory. *Psychological Science*, 13: 337-341, 2002.
102. Nadel, L. & Payne, J. The relationship between episodic memory and context: Clues from memory errors made while under stress. *Physiological Research*, 51 (Suppl.1): S3-S11, 2002.
 103. Bohbot, V.D., Jech, R., Ruzicka, E., Nadel, L., Kalina, M., Stepankova, K. and Bures, J. Rat spatial memory tasks adapted for humans: Characterization in subjects with intact brain and subjects with medial temporal lobe lesions. *Physiological Research*, 51 (Suppl.1): S49-S64, 2002.
 104. Laurance, H.E., Thomas, K.G.F., Newman, M.C., Kaszniak, A.W., Nadel, L. & Jacobs, W.J. Older adults map novel environments but do not place learn: Findings from a computerized spatial task. *Aging, Neuropsychology and Cognition*, 9, 85-97, 2002.
 105. Pennington, B.F., Moon, J., Edgin, J., Stedron, J. and Nadel, L. The neuropsychology of Down syndrome: Evidence for hippocampal dysfunction. *Child Development*, 74: 75-93, 2003.
 106. Nadel, L. & Piatelli-Palmarini, M. What is cognitive science? In L. Nadel (Ed) *Encyclopedia of Cognitive Science*, pp. xiii ñ xli, London, Macmillan, 2003.
 107. Nadel, L. Down's syndrome: a genetic disorder in biobehavioral perspective. *Genes, Brain and Behavior*, 2: 156-166, 2003.
 108. Laurance, H.E., Learmonth, A.E., Nadel, L. & Jacobs, W.J. Maturation of spatial navigation strategies: Converging findings from computerized spatial environments and self report. *Journal of Cognition and Development*, 4: 211-238, 2003.
 109. Nadel, L., Ryan, L., Hayes, S., Gilboa, A., & Moscovitch, M. The role of the hippocampal complex in episodic long-term memory. In T. Ono, G. Matsumoto, R.R. Llinas, A. Berthoz, R. Norgren, H. Nishijo & R., Tamura (Eds,) *Cognition and Emotion in the Brain: Selected Topics of the International Symposium on Limbic and Association Cortical Systems*, Toyama, Japan 7-12 October 2002, (Excerpta Medica International Congress Series, 1250, pp. 215-235), Amsterdam, Elsevier Science, 2003.
 110. Payne, J.D., Nadel, L., Britton, W.B. & Jacobs, W.J. The Biopsychology of Trauma and Memory in Humans, in Reisberg, D. & Hertel, P. (Eds.), *Memory and Emotion*, N.Y.: pp. 76-128, Oxford University Press, 2003.
 111. Hayes, S.M., Ryan, L., Schnyer, D., & Nadel, L. An fMRI Study of Episodic Memory: Retrieval of Object, Spatial, and Temporal Information *Behavioral Neuroscience*, 118, 885-896, 2004.

112. Nadel, L. and Hardt, O. The spatial brain. *Neuropsychology*, 18, 473-476, 2004.
113. Payne, J.D. and Nadel, L. Sleep, dreams and memory consolidation: The role of the stress hormone cortisol. *Learning and Memory*, 11: 671-678, 2004.
114. Moscovitch, M., Westmacott, R., Gilboa, A., Addis, D., Rosenbaum, R.S., Viskontas, I., Priselac, S., Svoboda, E., Ziegler, M., Black, S., Gao, F., Grady, C., Freedman, M., Kohler, S., Leach, L., Levine, B., McAndrews, M.P., Nadel, L., Proulx, G., Richards, B., Ryan, L., Stokes, K., and Winocur, W. Hippocampal complex contribution to retention and retrieval of recent and remote episodic and semantic memories: Evidence from behavioral and neuroimaging studies of healthy and brain-damaged people, in Ohta, N., MacLeod, C. M., & Uttl, B. (Eds.) *Dynamic cognitive processes*, pp. 333-380, Tokyo: Springer-Verlag, 2005.
115. Moscovitch, M., Rosenbaum, S., Gilboa, A., Addis, D., Westmacott, R., Grady, C., McAndrews, M.P., Winocur, G. and Nadel, L. Functional neuroanatomy of remote episodic (autobiographical), semantic and spatial memory in humans as determined by lesion and functional neuroimaging studies: A unified account based on Multiple Trace Theory, *Journal of Anatomy*, 207, 35-66, 2005.
116. Samsonovich, A. & Nadel, L. Fundamental principles and mechanisms of the conscious self. *Cortex*, 41, 669-689, 2005.
117. Hupbach, A. and Nadel, L. Reorientation in a rhombic-shaped environment: No evidence for an encapsulated geometric module. *Cognitive Development*, 20, 279-302, 2005
118. Kallai J, Csathó, Nagy, F., Kövér, F., Makány, T., Nemes, J., Horváth, K., Kovács, N., Manning, J. T., Nadel L. & Nagy, F. MRI-assessed volume of left and right hippocampi in females correlates with the relative length of the second and fourth fingers (the 2D:4D ratio). *Psychiatry Research: Neuroimaging* 140: 199-210, 2005.
119. Payne, J.D., Britton, W., Bootzin, R. and Nadel, L. Beyond Acetylcholine: Next Steps for Sleep and Memory Research. *Brain and Behavioral Sciences*, 28, 77, 2005.
120. Payne, J.D., Jackson, E.D., Ryan, L., Hoscheidt, S., Jacobs, W.J. and Nadel, L. The Impact of Stress on Neutral and Emotional Aspects of Episodic Memory. *Memory*, 1, 1-16, 2006.
121. Jackson, E.D., Payne, J.D., Nadel, L. and Jacobs, W.J. Stress differentially modulates fear conditioning in healthy men and women *Biological Psychiatry*, 59, 516-522, 2006.
122. Moscovitch, M., Nadel, L., Winocur, G., Gilboa, A. and Rosenbaum, S. The cognitive neuroscience of remote episodic, semantic and spatial memory. *Current Opinion in Neurobiology*, 16, 179-190, 2006.

123. Nadel, L. and Hupbach, A. Cross-species comparisons in development: The case of the spatial “module”. In M.H. Johnson & Y. Munakata (eds). *Attention and Performance XXI*, pp. 499-511, Oxford, Oxford University Press, 2006.
124. Nadel, L. Neuropsychological Aspects of Down Syndrome, in Rondal, J.A and Perera, J. (Eds.) *Down Syndrome Neurobehavioral Specificity*, pp. 67-83, John Wiley & Sons, London, 2006.
125. Gomez, R.L., Bootzin, R.R. and Nadel, L. Naps promote language learning in infants, *Psychological Science*, 17, 670-674, 2006.
126. Hupbach, A., Gomez, R., Nadel, L. & Hardt, O. Reconsolidation of episodic memories: A subtle reminder triggers integration of new information *Learning and Memory*, 14, 47-53, 2007.
127. Kallai, J., Karádi, K., Bereczkei, T., Rózsa, S., Jacobs, W. J. & Nadel, L. Spatial exploration behaviour in an extended labyrinth in patients with panic disorder with agoraphobia. *Psychiatry Research*, 149, 223-230, 2007.
128. Kallai, J., Makány, T., Csathó, A., Karádi, K., Horváth, D., Kovacs-Labadi, B., Jarai, R., Nadel, L. and Jacobs, W.J. Cognitive and affective aspects of thigmotaxis strategy in humans. *Behavioral Neuroscience*, 121, 21-30, 2007.
129. Nadel, L. Consolidation: The demise of the fixed trace. In *Science of Memory: Concepts*, Roediger, H.L., Dudai, Y. and Fitzpatrick, S. (Eds.), pp. 177-181, Oxford University Press, 2007.
130. Nadel, L., Winocur, G., Ryan, L. and Moscovitch, M. Systems Consolidation and Hippocampus: Two Views. *Debates in Neuroscience*, online. 2007.
131. Hupbach, A., Bohbot, V., Hardt, O. and Nadel, L. Spatial reorientation: Effects of verbal and spatial shadowing. *Journal of Spatial Cognition and Computation*, 7, 213-226, 2007.
132. Hayes, S. M., Nadel, L. and Ryan, L. The Effect of Scene Context on Episodic Object Recognition: Parahippocampal Cortex Mediates Memory Encoding and Retrieval Success, *Hippocampus*, 17, 873-889, 2007.
133. Payne, J.D., Jackson, E., Hoscheidt, S., Ryan, L., Jacobs, W.J. and Nadel, L. Stress Impairs Neutral but Enhances Emotional Episodic Memories, *Learning and Memory*, 14, 861-868, 2007.
134. Nadel, L., Campbell, J. & Ryan, L. Autobiographical memory retrieval and hippocampal activation as a function of repetition and the passage of time. *Neural Plasticity*, Volume 2007, Article ID 90472, 14 pages, doi:10.1155/2007/90472.
135. Fidler, D. J. and Nadel, L. Education and Children with Down syndrome:

- Neuroscience, Development, and Intervention, *Mental Retardation Developmental Disabilities Research Reviews*, **13**, 262-271, 2007.
136. Nadel, L. Hippocampus and context revisited. In S.J.Y. Mizumori (Ed.) *Hippocampal place fields: Relevance to learning and memory.*, pp. 3-15, New York, Oxford University Press, 2008.
137. Nadel, L. and Hupbach, A. Hippocampus, in *Encyclopedia of Infant and Early Childhood Development*, Haith, M.M. and Benson, J.B. (Eds), Vol.2, pp. 89-96, Elsevier, 2008.
138. Ryan, L., Cox, C., Hayes, S. & Nadel, L. Hippocampal Activation during Episodic and Semantic Memory Retrieval: Comparing Category Production and Category Cued Recall, *Neuropsychologia*, **46**, 2109-2121, 2008.
139. Nadel, L. Multiple memory systems: A new view. In H.L. Roediger, III (Ed.), *Cognitive Psychology of Memory. Vol. [1] of Learning and Memory: A Comprehensive Reference*, 4 vols. (J.Byrne Editor). Pp. 41-52, Oxford: 2008, Elsevier.
140. Hupbach, A., Hardt, O., Gomez, R. & Nadel, L. The Dynamics of Memory: Context-Dependent Updating, *Learning and Memory*, **15**, 574-579, 2008.
141. Ellmore, T.M., Stouffer, K. & Nadel, L. Divergence of explicit and implicit processing speed during associative memory retrieval, *Brain Research*, **1229**, 155-166, 2008.
142. Eaton, D.L., Daroff, R.B., Autrup, H., Bridges, J., Buffler, P., Costa, L.G., Coyle, J., McKhann, G., Mobley, W.C., Nadel, L., Neubert, D., Schulte-Hermann, R. and Spencer, P.S. Review of the Toxicology of Chlorpyrifos with an Emphasis on Human Exposure and Neurodevelopment, *Critical Reviews in Toxicology*, published online, **DOI**: 10.1080/10408440802272158, 2008.
143. Nadel, L., Hupbach, A., Hardt, O. and Gomez, R. Episodic Memory: Reconsolidation, in Dere, E., Huston, J.P., Easton, A. and Nadel, L. (Eds) *Handbook of Episodic Memory Research.*, pp. 43-56, Elsevier B.V., Oxford, U.K., 2008.
144. Ryan, L., Hoscheidt, S. & Nadel, L. Perspectives on Episodic and Semantic Memory Retrieval, in Dere, E., Huston, J.P., Easton, A. and Nadel, L. (Eds) *Handbook of Episodic Memory Research.*, pp. 5-18, Elsevier B.V., Oxford, U.K., 2008.
145. Moscovitch, M., Winocur, G., Ryan, L. & Nadel, L. Functional Neuroanatomy of Remote, Episodic Memory, in Dere, E., Huston, J.P., Easton, A. and Nadel, L. (Eds) *Handbook of Episodic Memory Research.*, pp. 239-270, Elsevier B.V., Oxford, U.K., 2008.

146. Moskowitz, A., Nadel, L., Watts, P. & Jacobs, W.J. Delusional atmosphere, the psychotic prodrome, and de-contextualised memories, in A. Moskowitz, I. Schafer & M. Dorahy (Eds.), Psychosis, trauma, and dissociation: Emerging perspectives on severe psychopathology, pp. 65-78, Wiley & Sons, Ltd., London, UK, 2008.
147. Hardt, O., Hupbach, A. & Nadel, L. Factors moderating blocking in human place learning: The role of task instructions. *Learning and Behavior*, **37**, 42-59, 2009.
148. Tommasi, L., Nadel, L. and Peterson, M.A. Cognitive biology: the new cognitive sciences. In L. Tommasi, M.A. Peterson & L. Nadel (Eds.), *Cognitive Biology: Evolutionary and Developmental Perspectives on Mind, Brain and Behavior*, pp. 3-13, MIT Press, London, UK, 2009.
149. Hupbach, A., Gomez, R., & Nadel, L. Episodic memory reconsolidation: Updating or source confusion? *Memory*, **17**, 502-510, 2009.
150. Hupbach, A., Gomez, R.L., Bootzin, R.R. & Nadel, L. Nap-dependent learning in infants. *Developmental Science*, **12**, 1007-1012, 2009.
151. Hardt, O. & Nadel, L. Cognitive maps and attention. In S. Narayanan (Ed.) *Progress in Brain Research: Perception and Attention*, Elsevier, Vol. 176, pp. 181-194, 2009.
152. Ryan, L., Lin, C.-Y., Ketcham, K. & Nadel, L. The role of medial temporal lobe in retrieving spatial and nonspatial relations from episodic and semantic memory. *Hippocampus*, **20**, 11-18, 2010
153. Thomas, K.G.F., Laurance, H.E., Nadel, L. & Jacobs, W.J. Stress induced impairment of spatial navigation in females. *South African Journal of Psychology*, **40**, 32-43, 2010.
154. Hoscheidt, S.M., Nadel, L., Payne, J. & Ryan, L. Hippocampal Activation during Retrieval of Spatial Context from Episodic and Semantic Memory. *Behavioural Brain Research*, **212**, 121-132, 2010.
155. Edgin, J.O., Mason, G., Allman, M.J., Capone, G., DeLeon, I., Maslen, C.L., Reeves, R.H., Sherman, S.L., and & Nadel, L. Development and Validation of the Arizona Cognitive Test Battery for Down Syndrome. *Journal of Neurodevelopmental Disorders* **2**, 149-164, 2010.
156. Nadel, L. & Hardt, O. An update on memory systems. *Neuropsychopharmacology Reviews* **36**, 251-273, 2011.
157. Sinnott-Armstrong, W. and Nadel, L. Introduction to "Conscious Will and Responsibility: A Tribute to Benjamin Libet. Pp. XX – XX, W. Sinnott-Armstrong and L. Nadel (Eds.), Oxford University Press, 2011.

158. Edgin, J.O., Spano, G. and Nadel, L. Advances in Clinical Endpoints for Neurocognitive Rehabilitation in Down Syndrome. In J.A. Rondal, J. Perera and D. Spiker [eds], *Neurocognitive Rehabilitation in Down Syndrome: The Early Years*, pp. 36-51, Cambridge University Press, Cambridge, UK, 2011.
159. Breslin, J.H., Edgin, J.O., Bootzin, R.R., Goodwin, J.L., & Nadel, L. Parental report of sleep problems in Down Syndrome, *Journal of Intellectual Disability Research*, 55, 1086-1091, 2011.
160. Hupbach, A., Gomez, R.G. and Nadel, L. Episodic memory reconsolidation: the role of context familiarity. *Psychological Bulletin and Review*, 18, 787-797, 2011.
161. Campbell, J., Nadel, L., Devin, D. & Ryan, L. Remembering all that and then some: Recollection of autobiographical memories after a one-year delay. *Memory*, 19, 406-415, 2011.
162. Edgin, J.O., Kumar, A., Spano, G. & Nadel L. Is learning two languages too much? Neuropsychological effects of second language exposure in children with Down Syndrome. *Journal of Intellectual Disability Research*, 55, 351-356, 2011.
163. Jones, B., Bukoski, E., Nadel, L. & Fellous, J.-M. Re-making memories: reconsolidation updates positively-motivated spatial memory in rats. *Learning and Memory*, 19, 91-98, 2012.
164. Nadel, L., Hupbach, A., Gomez, R. & Newman-Smith, K. Memory formation, consolidation and transformation. *Neuroscience and Biobehavioral Reviews*, 36, 1640-1645, 2012.
165. Edgin, J.O., Mason, G.M., Spanò, G., Fernández, A. & Nadel, L. Human and mouse model cognitive phenotypes in Down syndrome: Implications for assessment. In M. Dierssen & R. de la Torre (Eds.), *Down Syndrome: From Understanding the Neurobiology to Therapy*, Progress in Brain Research, 197, 123-151, 2012.
166. Nadel, L. and Sinnott-Armstrong, W. Memory in the legal context. In Nadel, L. & Sinnott-Armstrong, W., (Eds.), 2012. *Memory and Law*. New York: Oxford University Press.
167. Nadel, L., Hoscheidt, S. & Ryan, L.R. Spatial Cognition and the Hippocampus: the Anterior-Posterior Axis. *Journal of Cognitive Neuroscience*, 25, 22-28, 2013.
168. Fawcett, J.M., Taylor, T.L. & Nadel, L. Intentional forgetting diminishes memory for continuous events. *Memory*, 21, 675-694, 2013.
169. Dongaonkar, B., Hupbach, A., Gomez, R. & Nadel, L. Effects of Psychosocial Stress on Episodic Memory Updating. *Psychopharmacology*, 226, 769-779, 2013.

170. Hardt, O., Nader, K. and Nadel, L. Decay happens: The role of active forgetting in memory. *Trends in Cognitive Sciences*, 17, 111-120, 2013.
171. Hoscheidt, S., Dongaonkar, B., Payne, J. & Nadel, L. Emotion, stress, and memory. In Reisberg, D. (Ed.), *Oxford Handbook of Cognitive Psychology*, N.Y., pp. 557-570, Oxford University Press, 2013.
172. Hupbach, A., Gomez, R. & Nadel, L. Episodic memory reconsolidation: An update. In Alberini, C. (Ed) *Memory Reconsolidation*, pp. 233-248, Elsevier, 2013.
173. Poppenk, J., Evensmoen, H., Moscovitch, M. & Nadel, L. Long-axis specialization of the human hippocampus. *Trends in Cognitive Sciences*, 17, 230-240, 2013.
174. Hoscheidt, S.M., LaBar, K., Ryan, L., Jacobs, W.J. and Nadel, L. Encoding negative events under stress: High subjective arousal is related to accurate emotional memory despite misinformation exposure (*Neurobiology of Learning and Memory*, <http://dx.doi.org/10.1016/j.nlm.2013.09.008>)
175. Nadel, L. & Peterson, M.A. The Hippocampus: Part of an Interactive Posterior Representational System Spanning Perception and Memory (*JEP: General*, doi: 10.1037/a0033690)

Papers in Press

- Hupbach, A., Gomez, R. & Nadel, L. Memory Reconsolidation. To appear in Barese, M., Addis, D.R. & Duarte, A. *The Cognitive Neuroscience of Memory*, Wiley-Blackwell (in press)
- Evensmoen, H.R., Lehn, H., Xu, J., Nadel, L., Witter, M.P. and Haberg, A.K. The anterior hippocampus supports a coarse, global environmental representation and the posterior hippocampus supports fine-grained, local environmental representations (*Journal of Cognitive Neuroscience*, in press)
- Fawcett, J.M., Taylor, T.L. & Nadel, L. Event-method directed forgetting: Forgetting a video segment is more effortful than remembering it. (*Acta Psychologica*, in press)

Submitted

- Breslin, J., Spano, G., Bootzin, R., Anand, P., Nadel, L. & Edgin, J. Obstructive Sleep Apnea, Cognition, and Behavior in Down syndrome (*Developmental Medicine & Child Neurology*, submitted)
- Edgin, J.O., Spano, G., Kawa, K. and Nadel, L. Taking things out of context: development matters (*Child Development*, submitted)
- Evensmoen, H.R., Ladstein, J., Hansen, T., Moller, J., Witter, M., Nadel, L., and Haberg, A.K. Variations in the granularity of environmental representations along the human hippocampal anterior-posterior axis (under revision)
- Evensmoen, H.R., Xu, J., Iversen, C., Witter, M., Nadel, L., and Haberg, A. Landmarks

- inside and outside an environment are integrated in the hippocampal head (Journal of Neuroscience, submitted)
- Spano, G., Peterson, M.A., Nadel, L. and Edgin, J.O. Attenuated influence of memory representations on perception in Down Syndrome. (Developmental Science, submitted)

Books

1. O'Keefe, J. and Nadel, L. The hippocampus as a cognitive map. Oxford: The Clarendon Press, 1978.
2. Nadel, L. (Ed.) The psychobiology of Down syndrome. Cambridge, MA: Bradford Books/MIT Press, 1988.
3. Nadel, L., Cooper, L.A.C., Culicover, P. and Harnish, R.M. (Eds.) Neural connections, mental computations. Cambridge, MA: Bradford Books/MIT Press, 1989.
4. Nadel, L. and Stein, D.L. (Eds.), 1990 Lectures in Complex Systems, Santa Fe Institute Studies in the Sciences of Complexity, Volume III, Addison-Wesley, 1991.
5. Nadel, L. and Epstein, C. (Eds.) Down syndrome and Alzheimer's disease. New York, Wiley, 1992.
6. Nadel, L. and Stein, D.L. (Eds.), 1991 Lectures in Complex Systems, Santa Fe Institute Studies in the Sciences of Complexity, Volume IV, Addison-Wesley, 1992.
7. Hechter, M., Nadel, L. and Michod, R.E. (Eds.), The origin of values, Aldine & de Gruyter, 1993.
8. Nadel, L. and Stein, D.L. (Eds.), 1992 Lectures in Complex Systems, Santa Fe Institute Studies in the Sciences of Complexity, Volume V, Addison-Wesley, 1993.
9. Nadel, L. and Rosenthal, D.M. Down syndrome: Living and Learning in the Community, Wiley-Liss, New York, 1994.
10. Nadel, L. and Stein, D.L. (Eds.), 1993 Lectures in Complex Systems, Santa Fe Institute Studies in the Sciences of Complexity, Volume VI, Addison-Wesley, 1994.
11. E. Alleva, H.-P. Lipp, L. Nadel, A. Fasolo and L. Ricceri (Eds.) Behavioural brain research in naturalistic and semi-naturalistic settings: Possibilities and Perspectives, Kluwer Press, 1995.
12. Epstein, C.J., Hassold, T., Lott, I.T., Nadel, L. and Patterson, D. (Eds.) Etiology and pathogenesis of Down syndrome, New York, Wiley-Liss, 1995.
13. Rondal, J.A., Perera, J., Nadel, L. and Comblain, A. (Eds.) Down syndrome: Psychological, psychobiological and socio-educational perspectives. Whurr Publications, London, 1996.
14. P. Bloom, M.A. Peterson, M. Garrett and L. Nadel (Eds.), Language and space, Cambridge, MA., MIT Press, 1996.
15. Nijhout, H.F., Nadel, L. and Stein, D.L. (Eds.) Pattern formation in the physical and biological sciences. Santa Fe Institute Studies in the Sciences of Complexity, Lecture Notes Vol. V. Reading, MA., Addison-Wesley, 1997.
16. Perera, J., Rondal, J. & Nadel, L. (Eds.) Down's Syndrome: A review of Current knowledge, 1999, Whurr Publications: UK.
17. R.D. Lane, L. Nadel, G. Ahern, J.J.B. Allen, A.W. Kaszniak, S. Rapcsak & G. Schwartz (Eds.) The cognitive neuroscience of emotion, Oxford University Press,

- 1999.
18. W.I. Cohen, L. Nadel & M.E. Madnick, (Eds.) *Down Syndrome: Visions for the 21st Century*, J. Wiley & Sons, 2002.
 19. L. Nadel (Ed). *The Encyclopedia of Cognitive Science*, Nature Publishing Group, Macmillan Publishers Ltd., (UK), 2003.
 20. E. Dere, J. Huston, A. Easton & L. Nadel (Eds.) *Handbook of Episodic Memory Research*, Elsevier, London, UK, 2009.
 21. L. Tomassi, M.A. Peterson & L. Nadel (Eds.) *Cognitive Biology: Evolutionary and Developmental Perspectives on Mind, Brain and Behavior*, MIT Press, London, UK, 2009.
 22. W. Sinnott-Armstrong & L. Nadel (Eds.) *Libet, Free Will, and Responsibility*, Oxford University Press, 2011.
 23. Waller, D., & Nadel, L. (Eds.), 2012. *The APA Handbook of Spatial Cognition*. Washington DC: APA.
 24. Nadel, Lynn, and Sinnott-Armstrong, Walter, (Eds.), 2012. *Memory and Law*. New York: Oxford University Press.

Book Reviews

1. Nadel, L. Comparative aspects of memory. *Contemporary Psychology* 29: 696-698, 1984. (A review of *Memory in animals and humans*. edited by A. Mayes)
2. Nadel, L. The thinking animal. *Contemporary Psychology* 30: 265-266, 1985. (A review of *Animal cognition*. edited by H. Roitblat, T. Bever and H. Terrace)
3. Nadel, L. A brain structure. (A review of *The Hippocampus*, Vols. 3 and 4, R.L. Isaacson & K.H. Pribram, Eds.) *Science*, 235, 1682, 1987.
4. Nadel, L. Mind meets brain. *Contemporary Psychology*, 39: 15-16, 1994. (A review of *Wet Mind: The New Cognitive Neuroscience*, by S.M. Kosslyn and O. Koenig)
5. Nadel, L. Review of *Beyond 9 to 5: Your Life in Time* by Sarah Norgate. *Cerebrum*, 2007.
6. Nadel, L. *The Hippocampus Book: a Review*, *Hippocampus*, 17, 1013-1016, 2007.

Invited Addresses

1. O'Keefe, J. and Nadel, L. The psychology of space. Invited address to the Canadian Psychological Association, Quebec City, Canada, 1975.
2. Nadel, L. Cognitive maps: at the choice point again. Invited address to the American Psychological Association, New York City, New York, 1979.
3. Nadel, L. What kind of computer is the hippocampus? Invited address to J. von Neumann Commemorative Symposium, Arizona State University, Tempe, Arizona, 1987.
4. Nadel, L. Hippocampal Networks: PDP or PAP? Invited Address to the Society for Philosophy and Psychology, Chapel Hill, North Carolina, 1988.
5. Nadel, L. Memory Systems: Process and Content. Invited Speaker at Neuropsychology Day, Montreal Neurological Institute, 1994.
6. Nadel, L. Stress and the Brain, SFI Community Lecture, Santa Fe, New Mexico, June, 1997.
7. Nadel, L. Learning and Memory in Down Syndrome, World Congress on Down Syndrome, Madrid, October, 1997.
8. Nadel, L. Cognitive maps and the hippocampus in rats and humans. F.J. McGuigan Lecture on Understanding the Human Mind, American Psychological Association Meetings, San Francisco, August 1998.
9. Patterson, D., Brennan, M., Crnic, L., Davisson, M., Gardiner, K., Korenberg, J., Nadel, L. & Pennington, B. Down syndrome: From genes to possible therapeutic approaches. Plenary Lecture at Chromosome 21 and Down Syndrome Workshop, June 1999, Weizmann Institute, Israel.
10. Nadel, L. and Jacobs, W.J. Trauma, Cognitive Neuroscience, and Mental Disorder. Keynote Address presented at the 9th Australasian Society for Traumatic Stress Studies Conference, Auckland, New Zealand, March 2002.
11. Nadel, L. Battig Memorial Lecture, RMPA, Phoenix, Arizona, April 2005.
12. Nadel, L. Neal Miller Distinguished Lecture, APA, Washington, DC, August 2005.
13. Nadel, L. Hippocampus and memory. D.O. Hebb Lecture Series, McGill University, Montreal, 2006.
14. O'Keefe, J. and Nadel, L. Cognitive maps in the brain. Grawemeyer Prize Public Lecture, Louisville, April 2006.
15. Nadel, L. Does spatial context play by associative rules. Invited Speaker, Associative Learning Symposium (XI), Gregynog Hall, Wales, April 2007.
16. Nadel, L. Hippocampus and memory. Invited Address, WPA, Vancouver, BC, May 2007.
17. Nadel, L. Hippocampus and memory. Hebb Memorial Lecture, Dalhousie University, Halifax, Nova Scotia, September 2008.
18. Nadel, L. Down Syndrome Research: An Agenda. Paper presented at the American Society for Pharmacology and Experimental Therapeutics, New Orleans, April, 2009.
19. Nadel, L. Hippocampus, context and memory, Presidential Lecture, International Society for Behavioral Neuroscience, Hilton Head, SC., May 2009.
20. Nadel, L. Postnatal Development of Hippocampus: Neuropsychological Implications. Birch Lecture to International Neuropsychological Society, Helsinki,

- Finland, July 2009.
21. Nadel, L. Hippocampus, context and memory, Learning and Memory Symposium, University of Washington, Seattle, May 2011.
 22. Nadel, L. Hippocampal Development: Implications for cognitive development and the nature-nurture debate. Presidential Lecture, Cognitive Development Society, Philadelphia, October, 2011.
 23. Nadel, L. What is episodic Memory for? Invited lecture, Summer Institute for Cognitive Neuroscience, Santa Barbara, July, 2012.
 24. Nadel, L. Jan Bures: A Man for all Seasons. Invited Talk, FENS Regional Meeting, Prague, Czech Republic, Set, 2013.

Conference Papers

1. Nadel, L. and O'Keefe, J. The hippocampal syndrome: persistence or something more? Conference on Partial Reinforcement and Persistence Phenomena. Sussex, UK, 1973.
2. Nadel, L. Workshop on hippocampus. Canadian Psychological Association meetings, Quebec City, Canada, 1975.
3. Nadel, L. Amnesia and cognitive mapping in humans. Workshop on the hippocampus as a spatial analyzer. Society for Neuroscience meetings, Anaheim, California, 1977.
4. Barnes, C., Nadel, L. and Honig, W.K. Spatial memory deficits in senescent rats. Psychonomic Society meetings, San Antonio, Texas, 1978.
5. Nadel, L. and Willner, J. The hippocampus and classical conditioning. Workshop on the role of the hippocampus in learning and memory. Williams College, Amherst, Massachusetts, 1979.
6. Squire, L.R., Nadel, L. and Slater, P.C. Anterograde amnesia and memory for contextual information. Society for Neuroscience meetings, Cincinnati, Ohio, 1979.
7. Nadel, L. and Zola-Morgan, S. The role of postnatal hippocampal development in behavioral ontogeny. Symposium on Infant memory. Erindale College, Toronto, Ontario, Canada, 1982.
8. Nadel, L. Cognitive and neural maps. Seminar on Neuroscience, Mathematics and Biophysics: Naturalistic approaches to mind-brain function. Institute for Advanced Studies, Princeton, New Jersey, 1983.
9. Nadel, L. Spatial exploration: ontogenetic and computational implications. Workshop on Computational and Neurophysiological Aspects of Spatial Cognition. Pajaro Dunes, California, 1983.
10. Nadel, L. Representations and Neurobiology. Conference on the representation of knowledge and belief. The University of Arizona, Tucson, Arizona, 1984.
11. Nadel, L. Images: real or realized? Workshop on nonlinguistic representations. M.I.T., Cambridge, Massachusetts, 1984.
12. Merjanian, P.M., Nadel, L., Jans, D.D., Granger, D.A., Lott, I.T. and Kean, M.-L. Involvement of the hippocampus and amygdala in classical autism: a comparative neuropsychological study. Society for Neuroscience meetings, Los Angeles, California, 1984.
13. Nadel, L. Spatial and temporal mapping in the hippocampus. Workshop on hippocampus: spatial mapping, working memory or temporal coding. Winter Conference on Brain Research, Vail, Colorado, 1985.
14. Nadel, L. and Merjanian, P.M. Some neurobiological perspectives on autism. International Neuropsychological Symposium, East Berwick, Scotland, 1985.
15. Nadel, L. Some neurobiological perspectives on cognitive development. NDSS Conference on the Neurobiology of Down syndrome, New York City, New York, 1985.
16. Nadel, L. Critical issues in cognitive neuroscience. Arizona State Psychological Association, Tucson, Arizona, 1986.
17. Nadel, L. Implications of postnatal maturation in hippocampus. Department of Psychology Colloquium, Indiana University, Bloomington, Indiana, 1987.
18. Nadel, L. Hippocampal structure and function. Neural and Behavioral Biology

- Colloquium, University of Illinois, Champaign-Urbana, Illinois, 1987.
19. Nadel, L. Maps in the Brain. Faculty Community Lecture, University of Arizona, 1988.
 20. Nadel, L. Maps in the brain. Santa Fe Institute, June 1988.
 21. Nadel, L. The Neurobiology of Learning: A Historical Review. The Psychonomic Society, Chicago, November, 1988.
 22. Nadel, L. Varieties of spatial cognition: psychobiological considerations. Paper presented at conference on "The Development and Neural Bases of Higher Cognitive Functions", Philadelphia, Pennsylvania, May, 1989.
 23. Mangan, P. and Nadel, L. Spatial memory performance in two-year old human infants. Society for Neuroscience, Phoenix, 1989.
 24. Willner, J. and Nadel, L. Early handling/isolation decreases adult rats' use of place strategies. Soc for Neuroscience, Phoenix, 1989.
 25. Wilson, L.A. and Nadel, L. Early experience affects spatial learning ability. Soc for Neuroscience, St. Louis, 1990.
 26. Warren, S.G., Wilson, L.A. and Nadel, L. Sexually dimorphic spatial abilities in the Morris water task. Soc for Neuroscience, St. Louis, 1990.
 27. Mangan, P. and Nadel, L. Development of spatial memory in the human infant. Psychonomic Society, New Orleans, 1990.
 28. Wilson, L.A., Warren, S.G., Amend, D.L., Nadel, L. and Wenk, G. Early experience alters glucocorticoid receptor concentrations in the hippocampus. Society for Neuroscience, New Orleans, 1991.
 29. Newman, M.C., Nadel, L. Glisky, E.L. and Rosser, R. Implicit and explicit memory of individuals with Down syndrome. American Association for the Advancement of Science Regional Meeting, Southwestern and Rocky Mountain Division, Tucson, Arizona, May 1992.
 30. Mangan, P. and Nadel, L. Spatial memory development and development of the hippocampal formation in Down Syndrome. 25th International Congress of Psychology, Brussels, Belgium, July, 1992. Abstract published in International Journal of Psychology, 27: 129, 1992.
 31. Wilcox, T., Nadel, L. and Rosser, R. Object and location recognition memory in preterm and fullterm infants. Society for Neuroscience, Anaheim, 1992.
 32. McClelland, J.L., McNaughton, B.L., O'Reilly, R. and Nadel, L. Complementary roles of hippocampus and neocortex in learning and memory. Society for Neuroscience, Anaheim, 1992
 33. Wilcox, T. and Nadel, L. Location memory in infants 2.5-6.5 months of age. Society for Research on Child Development, 1993.
 34. Nadel, L. and Uecker, A. Behavioral evidence of hippocampal dysfunction in children with ARBD. Society for Neuroscience, Washington, D.C., 1993.
 35. Wilcox, T., Nadel, L. and Sell, E. Development of prefrontal lobe functions in preterm and fullterm infants. Society for Neuroscience, Washington, D.C., 1993.
 36. Warren, S.G. and Nadel, L. Sex differences in spatial learning: geometry vs. distance. Society for Neuroscience, Washington, D.C., 1993.
 37. Nadel, L. Contents and processes in multiple memory systems. Memory Disorders Research Society meeting, Boston, October, 1993.
 38. Bohbot, V. Thurm, S.L., Nadel, L., McNaughton, B.L. and Barnes, C.A.

Temporally graded retrograde amnesia of spatial learning after medial septal inactivation. Physiological Days, Prague, CZ, 1993.

39. Nadel, L. Contents and processes in multiple memory systems. Cognitive Neuroscience Society, San Francisco, March, 1994.

40. Uecker, A. and Nadel, L. Spatial locations gone awry: Behavioral evidence of hippocampal dysfunction in children with Alcohol Related Brain Defects (ARBD). International Neuropsychological Society, Cincinnati, 1994.

41. Uecker, A. and Nadel, L. Spatial but not object memory deficits in children with Alcohol Related Brain Defects (ARBD). International Neuropsychological Society, Cincinnati, 1994.

42. Bohbot, V., Liu, Z., Bures, J., Herczegh, S. and Nadel, L. Post-training injection of lidocaine or physostigmine prevents retrieval, but does not disrupt a newly encoded spatial memory. European Neuroscience Association, Vienna, 1994.

43. Nadel, L. Where to go and how to find: the psychobiology of spatial behaviour. NATO Advanced Study Institute, Behavioural brain research in naturalistic and semi-naturalistic settings: Possibilities and Perspectives, Acquafredda di Maratea, Italy, September, 1994.

44. Bohbot, V., Jech, R., Ruzicka, E., Klinderov, J., Bures, J., and Nadel, L. Spatial and object memory in myasthenia gravis. 15th International Congress of Slovak and Czech Neurologists, and 22nd Neurovascular Symposium, Bratislava, Slovakia, 1994.

45. Bohbot, V., Liu, Z., Bures, J. and Nadel, L. Are there several different kinds of consolidation in the hippocampus? European Research Conference on the Neural Mechanisms of Learning and Memory, Localization and Formation of the Memory Trace, Il Ciocco, Italy, 1994.

46. Bohbot, V., Jech, R., Ruzicka, E., Bures, J. and Nadel, L. Comparison of rat and human spatial memory performance. Society for Neuroscience, Miami, 1994.

47. Allen, J.J., Dikman, Z.V. and Nadel, L. Scalp distribution of P3 in hippocampus-dependent and hippocampus-independent visual tasks: support for multiple P3 generators. Society for Psychophysiological Research, Atlanta, 1994.

48. Nadel, L. The selective role of the hippocampus in memory. Czech Neuroscience Society, Prague, 1994.

49. Newman, M.C., Kaszniak, A.W., Nadel, L., Davis, N.N., Misiorski, D.R., Nagy, Y., Profiri, T.M., Guzman, J., Farkas, M.E. and Plotz, A. The hippocampal system, spatial memory and aging. 2nd Annual Conference on Psychopathology, Psychopharmacology, Substance Abuse and Culture, Los Angeles, CA, October 1994.

50. Mangan, P., Franklin, A., Tignor, T., Bolling, L. and Nadel, L. Development of spatial memory abilities in young children. Society for Neuroscience, Miami, 1994.

51. Stoehr, J.D., Markus, E.J., Nadel, L. and Wenk, G.L. Effects of post-training intrahippocampal and amygdaloid injections of scopolamine on contextual and cued-fear conditioning. Society for Neuroscience, Miami, 1994.

52. Nadel, L. Consequences of cerebral abnormalities in the learning of persons with Down syndrome. 3rd International Down Syndrome Symposium. Psychology of Down Syndrome: Theory, Intervention and Evaluation. Palma de Mallorca, Spain, February 1995.

53. Nadel, L. Memory in Down syndrome. 3rd International Down Syndrome Symposium. Psychology of Down Syndrome: Theory, Intervention and Evaluation. Palma

de Mallorca, Spain, February 1995.

54. Allen, J.J., Dikman, Z.V., & Nadel, L. Scalp Topography of ERPs in a Hippocampal Task. Presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, California, March, 1995.

55. Nadel, L. and Jacobs, W.J. The neurobiology of traumatic memory: Dissociations among multiple memory systems. International Traumatic Stress Meeting, Paris, May, 1995.

56. Bohbot, V., Liu, Z., Otahal, P., Bures, J. and Nadel, L. Electroconvulsive shock reveals rapid consolidation of spatial working memory in the water task. European Neuroscience Association meeting, August 1995, Amsterdam, the Netherlands.

57. Jacobs, L.F., Schenk F. & Nadel, L. The Evolution of Hippocampal Function, Fourth International Congress of Neuroethology, September 1995, Cambridge, UK.

58. Hermer, L., Spelke, E. and Nadel, L. Conservation of a process for spatial representation and reorientation across human adults, children and adult rats. Society for Neuroscience Abstracts, 21, 1494, 1995.

59. Nadel, L., Bohbot, V. and Bures, J. Rapid consolidation of spatial working memory. Cognitive Neuroscience Society, San Francisco, March 1996.

60. Nadel, L. Spatial cognition: History and Concepts. Invited Paper presented at Spatial Cognition meeting, San Feliu, Spain, April 1996.

61. Moscovitch, M and Nadel, L. Consolidation: The Dynamics of Memory Systems in Humans and Animals. Invited Paper presented at Memory Consolidation meeting, Tel Aviv, Israel, May, 1996.

62. Nadel, L. Neural mechanisms of spatial orientation and wayfinding: An overview. Paper presented at Borchard Conference, Brittany, France, July, 1996.

63. Nadel, L. Memory consolidation and hippocampal function. Paper presented at Central European Cognitive Neuroscience Workshop, Prague, Czech Republic, August, 1996.

64. Czeh, B., Czurko, A., Seress, L., Nadel, L. and Bures, J. Granule cell loss of the dentate gyrus impairs spatial learning in the X-ray irradiated rats. European Neuroscience Association, Strasbourg, France, September, 1996.

65. Bohbot, V., Liu, Z., Thurm, S.L., Nadel, L. and Bures, J. Spatial memory? Never without the hippocampus. Society for Neuroscience Abstracts, 22, 1873, 1996.

66. Terrazas, A., Burton, K., Trouard, T. and Nadel, L. Effects of MRI brain protocols on memory performance in humans. International Society for Magnetic Resonance in Medicine, April, 1997.

67. Nadel, L. Hippocampal Function: Comparisons Between Species. Royal Society/Ciba Foundation Discussion Meeting: Hippocampal Function in Rats, Primates and Humans. London, U.K., March, 1997.

68. Bohbot, V., Kalina, M., Stepankova, K., Spackova, N., Petrides, M. and Nadel, L. Lesions to the right parahippocampal cortex cause navigational memory deficits in humans. Human Brain Mapping Conference, Copenhagen, 1997.

69. Nadel, L., Allen, J.J.B., Bohbot, V.D., Kalina, M. and Stepankova, K. Hippocampal and parahippocampal role in processing spatial configurations in humans: ERP and lesion data. Society for Neuroscience Abstracts, 23, 1997.

70. Laurance, H. E., Thomas, K.G.F., Jacobs, W.J. & Nadel, L. Place learning in real and computer-generated space: performance of younger and older adults. Cognitive

Neuroscience Society, San Francisco, April, 1998.

71. Nadel, L. Hippocampal contributions to cortical plasticity. Satellite Conference on Cortical Plasticity, Berlin, Germany, June, 1998.

72. Czeh, B., Pokorny, J., Seress, L., Nadel, L. & Bures, J. Morphological correlates of the spatial navigation deficit induced by single high dose of neonatal x-ray irradiation in the rat. Satellite Conference on Cortical Plasticity, Berlin, Germany, June, 1998.

73. Nadel, L. Learning and the Brain, Conference on Learning, Tucson, AZ, July 1998.

74. Thomas, K.G.F., Nadel, L., and Jacobs, W.J. Learning and remembering spaces and places. American Psychological Association Meetings, San Francisco, August 1998. Abstract in *The Clinical Neuropsychologist*, 12, 273, 1998.

75. Samsonovich, A., McNaughton, B.L. & Nadel, L. Hierarchical multichart model of the hippocampal cognitive map. *Society for Neuroscience Abstracts*, 24: 1998.

76. Czeh, B., Seress, L., Nadel, L. & Bures, J. Lateralized fascia dentata lesion and blockade of one hippocampus: effect on spatial memory in rats. *European Journal of Neuroscience*, 10 (Suppl. 10): 366, 1998.

77. Samsonovich, A., Nadel, L. and Moscovitch, M. Neural network model of multiple traces in hippocampus and retrograded amnesia. *Society for Neuroscience Abstracts*, 1999.

78. Samsonovich, A., Nadel, L. and Moscovitch, M. Neural network model of multiple traces in hippocampus and retrograded amnesia. *Psychonomic Society Meeting*, Los Angeles, November 1999.

79. Bohbot, V. and Nadel, L. Memory deficits characterized by patterns of lesions to the hippocampus and parahippocampal cortex. Conference on the Parahippocampal Region: Basic Science and Clinical Implications. New York Academy of Sciences, Baltimore, Md., September, 1999.

80. Nadel, L. Jacobs, W.J. and the Arizona ARG. Spatial Cognition in Computer-Generated Space. Paper presented at an NSF Workshop on Spatial Intelligence, Chicago, October 1999.

81. Nadel, L., Samsonovich, A. and Moscovitch, M. Hippocampal-neocortical interactions and memory consolidation: A theory and computer simulation. Conference on Cortical-Hippocampal Interactions, Dublin, Ireland, March 2000.

82. Keil, K., Ryan, L., Putnam, K.H., Nadel, L., Trouard, T. and Moscovitch, M. Hippocampal activation during retrieval of remote and recent memories. Poster presented at Cognitive Neuroscience Society Meeting, San Francisco, April 2000.

83. Samsonovich, A.V. & Nadel, L. Artificial Consciousness Model Inspired by Theory of Mind. Tucson 2000 Conference on Consciousness, April, 2000.

84. Samsonovich, A., Nadel, L. & Moscovitch, M. A Theory-of-Mind Connectionist Model of Episodic Memory Consolidation. 7th Joint Symposium on Neural Computation, University of Southern California, Los Angeles, California.

85. Hsu, M., Ryan, L., Nadel, L., Thomas, K.G.F. & Jacobs, W.J. Functional neuroimaging of place learning in a computer-generated space. Human Brain Mapping Meeting, San Antonio, June, 2000. *NeuroImage*, 11: S441.

86. Ryan, L., Nadel, L., Keil, T., Putnam, K., Schnyer, D., Trouard, T. and Moscovitch, M. Hippocampal activation during retrieval of remote memories. Human Brain Mapping Meeting, San Antonio, June, 2000. *NeuroImage*, 11: S396.

87. Pennington, B.F., Mohr, J., Ogline, J., Stedron, J. & Nadel, L. Neuropsychology of Down syndrome. The 9th International Workshop on the Molecular Biology of Chromosome 21 and Down Syndrome, Bar Harbor, Maine, September 23-26, 2000.
88. Skelton, R.W., Hsu, M., Thomas, K., Nadel, L., Laurance, H., Biggan, S., McLean, S., Ryan, L., Trouard, T. & Jacobs, W.J. Traumatic brain injury and hippocampal function in humans: Initial results from fMRI, virtual environments and neuropsychological tests. Society for Neuroscience Abstracts, 2000.
89. Samsonovich, A., Nadel, L. & Moscovitch, M. A Theory-of-Mind Connectionist Model of Episodic Memory Consolidation. Society for Neuroscience Abstracts, 2000.
90. Payne, J.D., Allen, J.J.B., Nadel, L. & Jacobs, W.J. Stressed subjects show increased false memories. Society for Neuroscience Abstracts, 2000.
91. Hsu, M., Ryan, L., Nadel, L., Thomas, K.G.F. & Jacobs, W.J. Functional neuroimaging of place learning in a computer-generated space. Spatial Cognition, Rome, Italy, 2000.
92. Moon, J., Ogline, J., Stedron, J., Nadel, L. and Pennington, B.F. Long-term memory functions in children with Down syndrome. Poster presented at the 29th Annual Meeting of the International Neuropsychological Society, Chicago, February, 2001.
93. Learmonth, A. & Nadel, L. Geometry, landmarks and different sized spaces. Society for Research on Child Development, Minneapolis, April, 2001.
94. Laurance, H., Learmonth, A., Jacobs, W.J. & Nadel, L. Changes in navigational strategies between ages 3 and 8. Society for Research on Child Development, Minneapolis, April, 2001.
95. Pennington, B.F., Mohr, J., Ogline, J., Stedron, J.M. and Nadel, L. The neuropsychology of Down syndrome. Poster presented at the 7th Annual Meeting of the Cognitive Neuroscience Society, New York, April 2001.
96. Ryan, L. and Nadel, L. A direct comparison of hippocampal activation during semantic and episodic retrieval. Human Brain Mapping, Brighton, UK, June 2001.
97. Laurance, H.E., Hardt, O.M., Nadel, L., & Jacobs, W.J. Stress Effects in Spatiotemporal Processing: Support for a Model of Traumatic Memory, APA meeting, 2001.
98. Nadel, L. Consolidation, reconsolidation and remote memory. Paper presented at European Brain and Behavior Society Meeting, Marseilles, September 2001.
99. Nadel, L., Jacobs, W.J. and Metcalfe, J. Stressing memory. Paper presented at Memory Disorders Research Society Meeting, Boston, October 2001.
100. Nadel, L. and Jacobs, W.J. Trauma, Cognitive Neuroscience, and Mental Disorder. Keynote Address presented at the 9th Australasian Society for Traumatic Stress Studies Conference, Auckland, New Zealand, March 2002.
101. Nadel, L. The hippocampus and remote memory: Content, context and consolidation, Paper presented at International Neuropsychological Symposium, Sitges, Spain, June 2002.
102. Nadel, L. The hippocampal formation and episodic memory. Paper presented at Conference on Cognitive and Neural Systems, Boston, June 2002.
103. Pennington, B.F., Mohr, J., Edgin, J., Stedron, J., and Nadel, L. Cognitive Neuropsychological Studies of Down Syndrome, Paper presented at 10th International Workshop on Molecular Biology of Chromosome 21 and Down Syndrome, Barcelona, Spain, September, 2002.

104. Nadel, L. & Ryan, L. The role of the hippocampal system in episodic memory. Paper presented at the International Symposium on Limbic and Association Cortical Systems – Basic, Clinical and Computational Aspects, Toyama, Japan, October 2002.
105. Nadel, L. How the brain constructs space. Paper presented at Interdisciplinary Workshop on Spatial Thinking in Humanities and Sciences: From Perception to Meaning, Stanford University Oct 2002
106. Nadel, L. Multiple memory systems: Ontogenetic perspectives, Paper presented at International Society for Developmental Psychobiology, Orlando, Florida, October 2002.
107. Nadel, L. Multiple perspectives on spatial cognition. Paper presented at International Meeting of Cognition, Paris, France, December 2002.
108. Edgin, J., Pennington, B.F., Mervis, C.B., Moon, J., Stedron J. and Nadel, L. Executive functions in Down syndrome. Paper presented at the 31st Annual Meeting of the International Neuropsychological Society, Honolulu, Hawaii, February, 2003.
109. Payne, J.D., Jacobs, W.J. , Jackson, E., Hoscheidt, S. & Nadel, L. Stressing memory: The fate of neutral versus emotional information in an episodic memory task. Cognitive Neuroscience Society Meeting, New York City, March 2003.
110. Jackson, E., Jacobs, W.J. and Nadel, L. Sex differences in human fear conditioning following psychological stress. Cognitive Neuroscience Society Meeting, New York City, March 2003.
111. Hupbach, A. and Nadel, L. Geometric information does not predominate spatial re-orientation in young children. Society for Research in Child Development, Tampa, April 2003.
112. Learmonth, A. and Nadel, L. Memory for location in a changing world. Society for Research in Child Development, Tampa, April 2003.
113. Stedron, J., Pennington, B., Moon, J., Edgin, J. and Nadel, L. Long Term Memory Function in Down Syndrome. International Research Conference on Cognition and Behavior in Down Syndrome, Denver, April, 2003.
114. Edgin, J., Moon, J., Stedron, J., Pennington, B., Mervis, C., and Nadel, L. Executive Functions in Down Syndrome. International Research Conference on Cognition and Behavior in Down Syndrome, Denver, April, 2003.
115. O'Keefe, J. & Nadel, L. Twenty-five years of the Cognitive Map: where we're at, how we got here, where we're going. Sixth IBRO World Congress of Neuroscience, Prague, July 2003.
116. Nadel, L. A brief history of cognitive science, Foresight Interaction Conference, Bristol, UK, September 2003.
117. Payne, J.D. & Nadel, L. To sleep perchance to remember: Memory, Dreams and Consolidation. Paper presented at the Memory Disorders Research Society meeting, Chicago, October 2003.
118. Nadel, L. The hippocampus as a cognitive map: Where we are, where we came from, and where we are going. Talk presented to Cognitive Science Program, Northwestern University, October 2003.
119. Nadel, L. & Hardt, O. Is Spatial Learning a Special Case? Paper presented at Psychonomic Society Meeting, Vancouver, B.C., November 2003.
120. Hupbach, A. & Nadel, L. Geometric Information Does Not Dominate Spatial Reorientation in Young Children. Poster presented at Psychonomic Society Meeting, Vancouver, B.C., November 2003.

121. Nadel, L. Understanding normal memory function. Phoenix Memory Symposium, Phoenix, Arizona, January 2004.
122. Nadel, L. The Hippocampus and amnesia: Consensus and Context. Paper presented at International Neuropsychological Society meeting, Baltimore, February 2004.
123. Nadel, L. Down syndrome . Paper presented at American College of Medical Genetics meeting, Orlando, March 2004.
124. Jackson, E.D., Payne, J.D., Schellinger, K., VanDerslice, K., Nadel, L. and Jacobs, W.J. Human sex differences in Pavlovian fear conditioning following hydrocortisone treatment. Poster to be presented at Cognitive Neuroscience Society meetings, April, 2004, San Francisco, California.
125. Payne, J.D., Jackson, E.D., Hoscheidt, S., Jarrell, L., Osborne, M., Jacobs, W.J. and Nadel, L. Stress effects on memory for emotional and neutral information. Poster presented at Cognitive Neuroscience Society meetings, April, 2004, San Francisco, California.
126. Hayes, S.M., Ryan, L., Patterson, D. and Nadel, L. The role of the hippocampal complex in episodic and semantic memory retrieval. Poster presented at Cognitive Neuroscience Society meetings, April, 2004, San Francisco, California.
127. Nadel, L., Payne, J.D., Hardt, O., Jackson, E., Jacobs, W.J. Hippocampus and stress. Paper presented at Spring Hippocampal Meeting, Cayman Islands, May 2004.
128. Hayes, S.M., Ryan, L., Patterson, D.K., & Nadel, L. Does retrieval strategy modulate medial temporal lobe activation during category generation? Poster presented at Human Brain Mapping meeting. Budapest, Hungary, June 2004.
129. Nadel, L. The effects of stress on human memory. Paper presented at the Spring Hippocampal Meeting, Grand Cayman, May 2004.
130. Nadel, L. and Hupbach, A. Cross-species comparisons in development: The case of the spatial module. Invited paper presented at Attention and Performance XXI: Processes of Change in Brain and Cognitive Development, Colorado, July 2004.
131. Nadel, L., Payne, J.D. and Jackson, E.D. The effects of psychosocial stress on neutral and emotional episodic memory. Poster presented at the International Congress of Psychology, Beijing, China, August 2004.
132. Jackson, E.D., Nadel, L. and Jacobs, W.J. Effects of stress and cortisol on Pavlovian fear conditioning in human males and females. Poster presented at Society for Psychophysiological Research, Santa Fe, New Mexico, October 2004.
133. Hayes, S.M., Nadel, L., Ketcham, K., McAllister, C. and Ryan, L. Context-dependent object recognition. Society for Neuroscience Abstracts, 2004.
134. Jackson, E.D., Nadel, L. and Jacobs, W.J. Impact of stress and cortisol on classical fear conditioning in human males and females. Society for Neuroscience Abstracts, 2004.
135. Payne, J.D., Jackson, E.D., Jacobs, W.J., Hoscheidt, S. and Nadel, L. Differential stress effects on memory for emotional and neutral information. Society for Neuroscience Abstracts, 2004.
136. Nadel, L. Donald Olding Hebb at 100. Society for Neuroscience Abstracts, 2004.
137. Nadel, L. Colloquium at Health Science Center at Houston, University of Texas, January 2005.
138. Nadel, L. Talk at Down Syndrome Workshop, "Down Syndrome: Toward Optimal Synaptic Function and Cognition", Washington DC, February 2005.
139. Nadel, L. Hippocampus: When and Where, International Neuropsychological

Society, St. Louis, March 2005.

140. Ryan, L., Cox, C., Patterson, D. and Nadel, L. Comparing fMRI activation of real and imagined autobiographical event memories. Organization for Human Brain Mapping, Toronto, June 2005.

141. Hayes, S., Ryan, L. and Nadel, L. Assessing fMRI activation during encoding and retrieval of spatial contextual components of episodic memory. Organization for Human Brain Mapping, Toronto, June 2005.

142. Jackson, E.D., Spencer, A., Nadel, L. and Jacobs, W.J. Cortisol Inhibits Emotional Memory Consolidation in Humans, American Psychological Society, Los Angeles, July 2005.

143. Thomas, K. G. F., Laurance, H. E., Hancock, T., Nadel, L., & Jacobs, W. J. Exposure to acute stressors disrupts spatial cognition in females but not males. American Psychological Society, Los Angeles, July 2005.

144. Nadel, L. Battig Memorial Lecture, Rocky Mountain Psychological Society, Phoenix, Arizona, April 2005.

145. Gomez, R., Bootzin, R. and Nadel, L. Sleep and memory consolidation in infant learning. Conference on New Approaches to Infant Learning and Cognition. Duke University. May 21-22, 2005.

146. Hoscheidt, S.M., Payne, J.D., Patterson, D. , Nadel, L. and Ryan, L. Varying Spatial Information in Semantic and Episodic Memory Retrieval: An fMRI Study. Organization for Human Brain Mapping, Toronto, June 2005.

147. Nadel, L. Neal Miller Invited Lecture, American Psychological Association, Washington D.C., August 2005.

148. Gomez, R. L., Bootzin, R. R., Nadel, L. (2005). Naps promote abstraction in language learning infants. Presentation given at the meeting of the Cognitive Development Society, San Diego, October 2005.

149. Hupbach, A. and Nadel, L. Spatial reorientation: modular or flexible. Presentation given at the meeting of the Cognitive Development Society, San Diego, October 2005.

150. Jackson, E.D., Nadel, L. and Jacobs, W.J. Glucocorticoids impair the consolidation of emotional memories and fear conditioning in humans. Society for Neuroscience Abstracts, 2005.

151. Cox, C.L., Patterson, D.L., Nadel, L. and Ryan, T. Comparing real and imagined autobiographical event memories with fMRI. Society for Neuroscience Abstracts, 2005.

152. Ketcham, K.M., Ryan, L. and Nadel, L. Hippocampal involvement in processing of spatial and other relational information. Society for Neuroscience Abstracts, 2005.

153. Hoscheidt, S.M., Payne, J.D., Patterson, D., Nadel, L. and Ryan, L. Retrieval of spatial information in semantic and episodic memory: an fMRI study. Society for Neuroscience Abstracts, 2005.

154. Greenleaf, J.L., Nadel, L. and Ryan, L. Hippocampal activation as a function of repeated retrieval of episodic memories: an fMRI study. Society for Neuroscience Abstracts, 2005.

155. Nadel, L. and Hupbach, A. Navigation and the geometric 'module': The case of re-orientation. Presentation given at the Workshop on Evolution and Spatial Cognition, Marseille, France, November, 2005.

156. Nadel, L. Hippocampus and memory. D.O. Hebb Lecture Series, McGill University, Montreal, 2006.

157. Breslin, J.H., Britton, W.B., Smith, L.J., Bootzin, R.R. and Nadel Both arousal and slow-wave sleep facilitate sleep-related memory. Associated Professional Sleep Societies meeting, Salt Lake City, June, 2006.
158. Breslin, J.H., Britton, W.B., Smith, L.J., Bootzin, R.R. and Nadel Both arousal and slow-wave sleep facilitate sleep-related memory. Association for Psychological Science meeting, New York, 2006.
159. Cox, C., Hayes, S., Patterson, D., Nadel, L., & Ryan, L. Precuneus deactivations in a semantic memory retrieval task as measured by fMRI. Society for Neuroscience, Atlanta, 2006.
160. Greenleaf, J.L., Ryan, L., & Nadel, L. Repeated memory retrieval results in schematization and decreased hippocampal activity. Society for Neuroscience, Atlanta, 2006.
161. Ellmore, T.M., Stouffer, K., McNaughton, B.L. & Nadel, L. A measure of decision time changes as a function of the interval between the last successful trial of associative learning and the first successful retrieval attempt. Society for Neuroscience, Atlanta, 2006.
162. Nadel, L. Does spatial context play by associative rules. Invited Speaker, Associative Learning Symposium (XI), Gregynog Hall, Wales, April 2007.
163. Hupbach, A., Gomez, R.L., Hardt, O. and Nadel, L. Reconsolidation of children's episodic memories: A subtle reminder triggers integration of new information. Society for Research in Child Development, Boston, April 2007.
164. Gómez, R. L., Hupbach, A., & Nadel, L. How memory contributes to plasticity. In Scott Johnson (Chair), Origins and Ontogenesis of Human Cognition. Symposium held at the Biennial meeting of the Society on Research on Child Development, Boston, April, 2007.
165. Breslin, J.H., Fridel, K.W., Bootzin, R.R. and Nadel, L. Overnight Sleep-Dependent Visual Discrimination Task Improvement is Associated with Waking and Light Sleep, Associated Professional Sleep Societies, 2007.
166. Nadel, L. Hippocampus and memory. Invited Address, Western Psychological Association, Vancouver, British Columbia, Canada, May 4, 2007.
167. Lin, C-Y., Ketcham, K., Ryan, L. and Nadel, L. Common and differential brain regions associated with retrieving spatial and non-spatial information from episodic and semantic memory. Cognitive Neuroscience Society, New York, May 2007.
168. Hupbach, A., Gomez, R.L., Hardt, O. and Nadel, L. Updating Episodic Memories: A Special Role of Spatial Context, European Cognitive Science Conference, Greece, May 2007.
169. Gomez, R., Hupbach, A., Bootzin, D. and Nadel, L. The contribution of naps to infant learning. Association for Psychological Science Meeting, Washington, D.C., May, 2007.
170. Nadel, L. Stress and human explicit memory: effects on encoding, consolidation and retrieval. Dutch Endo-Neuro-Psycho Meeting, June, 2007.
171. Gomez, R.L., Hupbach, A., Bootzin, R.B. and Nadel, L. The contribution of naps to infant learning and memory consolidation. Memory Disorders Research Society, Cambridge, UK, September, 2007.
172. Nadel, L. and Gomez, R.L. Reconsolidation in human episodic memory. Memory Disorders Research Society, Cambridge, UK, September, 2007.
173. Nadel, L. Stress and human explicit memory: effects on encoding, consolidation

and retrieval. European Brain and Behavior Society Meeting, Trieste, Italy, September 2007.

174. Nadel, L., Hupbach, A., Hardt, O. and Gomez, R. Reconsolidation of episodic memories: A look at the conditions that trigger updating. Society for Neuroscience Abstracts, November 2007.

175. Gómez, R. L., Hupbach, A., Hardt, O., & Nadel, L. Reconsolidation of episodic memories: The conditions that trigger updating. Psychonomics Society Meeting, Long Beach, CA, November 2007.

176. Breslin, J.H., Frank, M.J., Bootzin, R.R., Finley, S.R. & Nadel, L. Probabilistic Reinforcement Learning and Sleep: A Pilot Study, Associated Professional Sleep Societies, 2008.

177. Breslin, J.H., Fridel, K.W., Bootzin, R.R. & Nadel, L. Sleep and Episodic Memory Consolidation, Associated Professional Sleep Societies, 2008.

178. Payne, J.D., Jackson, E.D., Hoscheidt, S.M., Ryan, L., Jacobs, W.J. & Nadel, L. Stress Administered Prior to Encoding Impairs Neutral but Enhances Emotional Long-Term Episodic Memories, Association of Psychological Sciences Meeting, Chicago, May, 2008.

179. Nadel, L., Hupbach, A., Hardt, O. & Gomez, R. Reconsolidation in human episodic memory, International Congress of Psychology, Berlin, July 2008.

180. Campbell, J.L., Woolverton, C, Nadel, L, & Ryan, L. Repeated retrieval of recent and remote autobiographical memories results in increased hippocampal activation: An fMRI study. Society for Neuroscience, November 2008.

181. Hoscheidt, S.M., Jackson, E., Payne, J., Jacobs, W.J. & Nadel, L., The effects of morning stress on encoding versus retrieval of emotional and neutral information. Society for Neuroscience, November 2008.

182. Nadel, L. Edgin, J.O., Allman, M., Capone, G., DeLeon, I., Maslen, C., Rosser, T., Sherman, S., and Reeves, R.H. Preliminary results from the development and validation of a neuropsychological battery for genetic studies in Down Syndrome. Society for Neuroscience, November 2008.

183. Cox, C., Pu, L.-L., Nadel, L. & Ryan, L.. Keeping it in perspective: Precuneus activation to events remembered and imagined from first and third person points of view. Society for Neuroscience, November 2008.

184. Hupbach, A., Nadel, L. & Gomez, R. Episodic Memory Updating in Humans: Boundary Conditions and Temporal Properties. Society for Neuroscience, November 2008.

185. Nadel, L. and Hardt, O. Attention and spatial learning in humans in a virtual maze task. International Conference on Attention, Allahabad, India, December, 2008.

186. Gómez, R. L., Hupbach, A., Bootzin, R., Nadel, L. Sleep and Memory Consolidation in Infant Learning. Invited symposium on Memory Enhancers: Chunking, Feeding and Sleep. XVIth Intl Conference on Infant Studies, Vancouver, March 2008.

187. Nadel, L., Hupbach, A., Hardt, O. and Gomez, R. Episodic Memory Reconsolidation: Role of Spatial Context and Time, Association for Psychological Science, San Francisco, May 2009.

188. Nadel, L. Hippocampus: Reconsolidation and Context, Spring Hippocampal Conference, Verona, Italy, June, 2009.

189. Ryan, L., Pu, L., Hoscheidt, S. & Nadel, L. PPI Analysis: Patterns of frontal and posterior brain activation associated with the hippocampus during episodic and semantic

- spatial memory retrieval. Society for Neuroscience, October, 2009.
190. Jones, B., Nadel, L. & Fellous, J.-M. Re-making memories: Novel paradigm to study memory reconsolidation. Society for Neuroscience, October, 2009.
191. Nadel, L. What really happens to remote episodic memories in humans, *Neurobiology of Learning and Memory*, Park City, January 2010.
192. Nadel, L. Early learning in infants may depend on sleep. AAAS, San Diego, February 2010.
193. Duke, D., Lin, C.-Y., Kawa, K., Nadel, L. & Ryan, L. Distinguishing the roles of parahippocampal cortex and hippocampus during object-scene recognition. Cognitive Neuroscience Society, Montreal, April, 2010.
194. Kawa, K., Duke, D., Parch, J., Cardoza, J., Nadel, L. & Ryan, L. The effects of semantic relatedness on context-specific object recognition. Cognitive Neuroscience Society, Montreal, April, 2010.
195. Dongaonkar, B. & Nadel, L. Influence of stress on recognition memory of emotional faces across the time of day. Cognitive Neuroscience Society, Montreal, April, 2010.
196. Hoscheidt, S., Ryan, L. & Nadel, L. Common brain regions associated with retrieval of spatial relations in episodic and semantic memory. Cognitive Neuroscience Society, Montreal, April, 2010.
197. Hupbach, A., Weiss, M., Gomez, R. & Nadel, L. Effects of overtraining on updating of human episodic memory. Paper presented at Association of Psychological Societies meeting, Boston, May 2010.
198. Breslin, J.H., Mason, G.M., Edgin, J.O., Bootzin, R.R., Goodwin, J.L. and Nadel, L. Sleep Characteristics in Older Children with Down Syndrome, APSS, San Antonio, June 2010.
199. Fawcett, J., Taylor, T.L. & Nadel, L. Event-method directed forgetting: A new paradigm for understanding the intentional forgetting of events and actions. CSBBCS, Halifax, Nova Scotia, June 2010.
200. Fawcett, J., Taylor, T.L. & Nadel, L. Intentionally forgetting a video segment is more effortful than remembering it: A probe study. CSBBCS, Halifax, Nova Scotia, June 2010.
201. Nadel, L. Historical Overview: Where Did All of These Holes Come From? CSBBCS, Halifax, Nova Scotia, June 2010.
202. Jones, B., Bukoski, E., Nadel, L. & Fellous, J.M. The effects of aging on spatial memory reconsolidation in rats. Society for Neuroscience, November, 2010.
203. Breslin, J.H., Edgin, J.O., Bootzin, R.R. & Nadel, L. The importance of sleep in designing clinical trials of cognition-enhancing drugs in Down syndrome. Society for Neuroscience, November, 2010.
204. Spano, G., Edgin, J., Mason, G. and Nadel, L. Executive function in Down syndrome: Cognitive and genetic correlates. Society for Neuroscience, November, 2010.
205. Mason, G.M., Edgin, J.O. and Nadel, L. Genetic contributions to executive function and ADHD symptom variation among individuals with Down syndrome. Society for Neuroscience, November, 2010.
206. Newman-Smith, K.C., Gomez, R., Bootzin, R. and Nadel, L. The role of sleep in the formation and updating of memories. Society for Neuroscience, November, 2010.

207. Edgin, J.O. and Nadel, L. Advances in neurocognitive assessment in intellectual disabilities: Lessons from down syndrome. Society for Neuroscience, November, 2010.
208. Jones, B., Bukoski, E., Nadel, L. and Fellous, J.-M. The effects of aging on spatial memory reconsolidation in rats. Society for Neuroscience, November, 2010.
209. Nadel, L., Gomez, R. and Hupbach, A. Memory consolidation: Transformation. Winter Conference on Neural Plasticity, Tahiti, February 2011.
210. Nadel, L. and Edgin, J. Neuropsychological evaluation tools for diagnosis and evaluation of treatment. International Conference Jerome Lejeune, Paris, March 2011.
211. Nadel, L. Hippocampus: Memory and Context, IGSN Alumni School, Bochum, Germany, April, 2011.
212. Nadel, L. Imaging the unimaginable. 5th International Conference on Memory, York, U.K., August 2011.
213. Dongaonkar, B. & Nadel, L. Effects of stress in episodic memory updating. European Brain and Behavior Society meetings, Seville, Spain, September, 2011.
214. Nadel, L. Multiple Memory Systems: Early History, Memory Disorders Research Society, Barcelona, Spain, September, 2012.
215. Dongaonkar, B. & Nadel, L. Effects of stress in episodic memory updating. Stress Workshop. Ascona, Switzerland, September 2012.
216. Corral-Frías N.S., Nadel, L., Fellous, J.M., & Jacobs, W.J. Recompensa y Resiliencia: Diferencias de Sexo en Respuestas Psicológicas y Fisiológicas al Estrés Psicosocial Experimental. Poster presented at the Congreso Mexico de Psicología, Campeche, Mexico. October, 2012.
217. Newman-Smith, K.C., Scaff, P., Gomez, R.L., Hupbach, A. & Nadel, L. Updating episodic memory: an fMRI reconsolidation study. Society for Neuroscience, News Orleans, October, 2012.
218. Spano, G., Peterson, M.A., Nadel, L. & Edgin, J. Perceptual-mnemonic medial temporal lobe function in individuals with Down syndrome. Society for Neuroscience, News Orleans, October, 2012.
219. Edgin, J., Bresliun, J., Spano, G., Tooley, U., Bootzin, D. and Nadel, L. Sleep and learning in Down syndrome. SRCDD, Seattle, April 2013.
220. Corral-Frias, N.S., Nadel, L., Fellous, J.-M. & Jacobs, W.J. Recompensa y resiliencia: Diferencias de Sexo en Respuestas Psicologicas y Fisiologicas al Estres Psicosocial. Congreso Mexicano de Psicologia, Campeche, Mexico, October, 2012.
221. Hoscheidt, S.M., LaBar, K., Ryan, L., Jacobs, W.J. & Nadel, L. Stress, Arousal and Misinformation: Stress state and high subjective arousal interact to decrease endorsement of misinformation for emotional stimuli. Cognitive Neuroscience Society meeting, San Francisco, April 2013.
222. Newman-Smith, K.C., Gomez, R.L. & Nadel, L. Updating memory with to-be-remembered and to-be-forgotten information, Cognitive Neuroscience Society meeting, San Francisco, April 2013.

Courses Taught

Physiological Psychology (Brain and Behavior)	U.C. London Dalhousie U.C. Irvine	1971-75 1978 1981,1984
Theories of Brain Function	Dalhousie U.C. Irvine	1978 1980,1983
Experimental Neuropsychology	U.C. Irvine	1985
Cognitive Neuroscience (Biological Bases of Behavior)	U.C. Irvine U. Arizona	1983-85 1986-92, 2006
Behavioral Neuroscience	U.C. Irvine U. Arizona	1981-85 1985-87
Theories of Amnesia	U.C. Irvine	1981-84
Topics in Cognitive Science	U.C. Irvine	1981-82
Learning Theory	U.C. Irvine	1981-85
Animal Behaviour	Dalhousie	1977
Environmental Psychology	Nova Scotia Inst. of Technol.	1977
Neurobiology of Freud	U. Arizona	1986
Proseminar in Psychology	U. Arizona	1986-2002 2003 →
Developmental Psychobiology	U. Arizona	1989-90
Connectionism	U. Arizona	1993
The Emotional Brain	U. Arizona	1997
Foundations of Cognition	U. Arizona	2007, 09, 11, 13
Neural Systems and Cognition	U. Arizona	2011 →

Editorial and Professional Service

1. Associate Editor, *The Behavioral and Brain Sciences*, 1982-1985.
2. Editor, *Psychobiology* (formerly *Physiological Psychology*), 1986-89
3. Science Advisory Board, National Down Syndrome Society, 1985 →
4. Exec Committee, Society for Philosophy and Psychology, 1991-92
5. Publications Committee, American Psychological Society, 1991-95.
6. Consulting Editor, *Hippocampus*, 1991-1997; Section Editor for Cognitive and Behavioral Neuroscience, 1998 →
7. Consulting Editor, *Neuropsychology*, 1996-2001
8. Editorial Advisory Board, *Trends in Cognitive Sciences*, 1997 - 2010
9. Editorial Advis Board, *Spatial Cognition and Computation*, 1998 →
10. Associate Editor, *Cahiers de Psychologie Cognitive*, 1998 →
11. Editor-In-Chief, *Encyclopedia of Cognitive Science*, Macmillan, UK, 1998 - 2003
12. Associate Editor, *Psychological Review*, 2000 - 2003, 2006 →
13. Advisor, *Nature Reviews Neuroscience*, 2000 →
14. Editorial Board, *Neuropsychologia*, 2001 →
15. Member, Internal Scientific Advisory Committee, Arizona Alzheimer's Research Consortium, 2002 →
16. North American Representative, Intl Neuropsych Symp, 2004 - 2009
17. Board of Govs, AZ Arts, Sciences and Technology Acad. 2006 - 2009
18. Co-Editor (with Paul Bloom) for *Fundamentals of Cognition*, a series of primers to be published by Oxford University Press, 2006 →
19. Editorial Board, *Neural Plasticity*, 2006 - 2009
20. Chair, Psychology Section, AAAS, 2007-2008
21. Science Adv Board, Down Syndrome Research and Treatment Fdn, 2006 →
22. Editor-in-Chief, *WIREs Cognitive Science*, 2007 →
23. Advisory Board, Natural Learning Research Inst, 2007 →
24. Science, Research and Practice Advisory Board, Down Syndrome Educational Trust, UK → 2007
25. Publications Committee, Society for Neuroscience, 2009 → 2013
26. Governing Board, European Brain and Behaviour Society, 2010 →
27. Advisory Board, LonDowns Research Program, 2013 →

Conferences Organized (or co-organized)

1. Workshop on Spatial Cognition, supported by Sloan Foundation grant to U.C. Irvine Cognitive Sciences Group, Laguna Beach, CA, 1982.
2. Neural Connections and Mental Computations, supported by Sloan Foundation grant to U. Arizona Cognitive Sciences Program, Tucson, AZ, 1986.
3. The Psychobiology of Down Syndrome, supported by the National Down Syndrome Society, New York City, NY, 1987.
4. Neurons, Nodes and Networks, supported by the University of Arizona Center for the Study of Complex Systems and the Office of Naval Research, Tucson, AZ, 1988.
5. Toward an Interdisciplinary Analysis of Value, supported by the Sloan Foundation and the University of Arizona, Tucson, AZ, 1989.
6. Complex Systems Summer School, Santa Fe, NM, 1990-2000.
7. Rhythmic Oscillations in Neural Networks, supported by the University of Arizona Center for the Study of Complex Systems, the NSF-funded Special Year in Biomathematics, the Cognitive Science Program, the Pew-McDonnell Cognitive Neuroscience Center, and the Biophysics Committee, Tucson, AZ April, 1991.
8. Down Syndrome and Alzheimer Disease, supported by the National Down Syndrome Society, New York City, NY, 1992.
9. Conference on Space and Language, Tucson, AZ, March 1994.
10. International Down Syndrome Research Conference, Charleston, SC, April 1994.
11. NATO Advanced Scientific Institute on Behavioural Brain Research in Naturalistic and Semi-Naturalistic Settings: Possibilities and Perspectives, Maratea, Italy, Sept. 1994.
12. Central European Cognitive Neuroscience Workshop, supported by McDonnell Foundation, Prague, Czech Republic, August 1996.
13. Conference on Cognitive Neuroscience of Emotion, Tucson, AZ, December, 1996.
14. Conference on Cognition and Behavior in Down syndrome, Amelia Island, FL November 1997.
15. Memory Disorders Research Society, Annual Meeting, Tucson, AZ, November 1999.
16. Research on Cognition and Behavior in Down Syndrome, supported by the National Down Syndrome Society and the National Institutes of Health, Denver, April 2003.
17. Memory Disorders Research Society, Annual Meeting, Tucson, AZ, September 2005.
18. The New Cognitive Sciences, Konrad Lorenz Institute for Evolution and Cognition Research, Altenberg, Austria, June 2006.
19. Real-Time Consciousness, Volition and Action - A Tribute to Benjamin Libet, Tucson, Arizona, April 2008
20. Memory and Law, Tucson, Arizona, January, 2010.