

PEER-REVIEWED JOURNAL ARTICLES:

1. Stein, B. E. Random versus constant presentation of S-R pairs: Effects of associative value and test rate. J. Exp. Psychol., 80: 401-402, 1969.
2. Stein, B.E., Dodich, N. and Kruger, L. A stimulus apparatus for the presentation of moving visual stimuli. Vision Res., 12: 333-336, 1972.
3. Stein, B.E. and Arigbede, M.O. Unimodal and multimodal response properties of neurons in the cat's superior colliculus. Exp.Neurol., 36: 179-196, 1972.
4. Stein, B.E. and Arigbede, M.O. A parametric study of movement detection properties of neurons in the cat's superior colliculus. Brain Res., 45: 437-454, 1972.
5. Stein, B.E. and Schuckman, H. Effects of sensory restriction upon responses to cortical stimulation in rats. J. Comp. Physiol.Psychol., 82: 182-197, 1973.
6. Stein, B.E., Labos, E. and Kruger, L. Sequence of changes in properties of neurons of superior colliculus of the kitten during maturation. J. Neurophysiol., 36: 667-679, 1973.
7. Stein, B.E., Labos, E. and Kruger, L. Determinants of response latency in neurons of superior colliculus in kittens. J. Neurophysiol., 36: 680-689, 1973.
8. Stein, B.E., Labos, E. and Kruger, L. Long-lasting discharge properties of neurons in the kitten midbrain. Vision Res., 13: 2615-2619, 1973.
9. Stein, B.E. and Magalhaes-Castro, B. Effects of neonatal cortical lesions upon the cat superior colliculus. Brain Res., 83:480-485, 1975.
10. Stein, B.E., Magalhaes-Castro, B. and Kruger, L. Superior colliculus: Visuotopic-somatotopic overlap. Science 189: 224-226, 1975.
11. Stein, B.E., Magalhaes-Castro, B. and Kruger, L. The relationship between visual and tactile representations in the cat superior colliculus. J. Neurophysiol., 39: 401-419, 1976.
12. Stein, B.E., Goldberg, S.J. and Clamann, H.P. The control of eye movements by the superior colliculus in the alert cat. Brain Res., 118: 469-474, 1976.
13. Stein, B.E. and Edwards, S.B. Hysteresis and multimodal convergence in cells of mesencephalic V. Exp. Neurol., 59: 393-403, 1978.
14. Stein, B.E. Nonequivalent visual, auditory, and somatic corticotectal influences in cat. J. Neurophysiol., 41: 55-64, 1978.
15. Stein, B.E. Development and organization of multimodal representation in cat superior colliculus. Fed. Proc., 37: 2240-2245, 1978.
16. Stein, B.E. and Dixon, J.P. Superior colliculus cells respond to noxious stimuli. Brain Res., 158: 65-73, 1978.
17. Stein, B.E. and Dixon, J.P. Properties of superior colliculus neurons in the golden hamster. J. Comp. Neurol., 183: 269-284, 1979.
18. Stein, B.E. and Edwards, S.B. Corticotectal and other corticofugal projections in neonatal cat. Brain Res., 161: 399-409, 1979.
19. Edwards, S.B., Ginsburgh, C.L., Henkel, C.K. and Stein, B.E. Sources of subcortical projections to the superior colliculus in the cat. J. Comp. Neurol., 184: 309-330, 1979.
20. Gaither, N.S. and Stein, B.E. Reptiles and mammals use similar sensory organizations in the midbrain. Science, 205: 595-598, 1979.

21. Stein, B.E., Clamann, H.P. and Goldberg, S.J. Superior colliculus: Control of eye movements in neonatal kittens. Science 210: 78-80, 1980.
22. Stein, B.E. Organization of the rodent superior colliculus: Some comparisons with other mammals. Behav. Brain Res. 3: 175-188, 1981.
23. Golovchinsky, V., Kruger, L., Saporta, S.A., Stein, B.E. and Young, D.W. Properties of velocity-mechanosensitive neurons of the cat ventrobasal thalamic nucleus with special reference to the concept of convergence. Brain Res. 209: 355-374, 1981.
24. Stein, B.E. and Gaither, N.S. Sensory representation in reptilian optic tectum: Some comparisons with mammals. J. Comp. Neurol. 202: 69-87, 1981.
25. Stein, B.E. and Gallagher, H.L. Maturation of cortical control over superior colliculus cells in cat. Brain Res., 223: 429-435, 1981.
26. Stein, B.E. and Clamann, H.P. Control of pinna movements and sensorimotor register in cat superior colliculus. Brain Behav. Evol., 19: 180-192, 1981.
27. Stein, B.E., Spencer, R.F. and Edwards, S.B. Efferent projections of the neonatal superior colliculus: Extraoculomotor-related brain stem structures. Brain Res., 239: 17-28, 1982.
28. Clemo, H.R. and Stein, B.E. Somatosensory cortex: A 'new' somatotopic representation. Brain Res. 235: 162-168, 1982.
29. McHaffie, J.G. and Stein, B.E. Eye movements evoked by electrical stimulation in the rodent superior colliculus. Brain Res., 247: 243-253, 1982.
30. McHaffie, J.G. and Stein, B.E. A chronic headholder minimizing facial obstructions. Brain Res. Bull. 10: 859-860, 1983.
31. Stein, B.E. and Gaither, N.S. Receptive-field properties in reptilian optic tectum: Some comparisons with mammals. J. Neurophysiol. 50: 102-124, 1983.
32. Stein, B.E., Spencer, R.F. and Edwards, S.B. Corticotectal and corticothalamic efferent projections of SIV somatosensory cortex in cat. J. Neurophysiol. 50: 896-909, 1983.
33. Clemo, H.R. and Stein, B.E. The organization of a fourth somatosensory area of cortex (SIV) in cat. J. Neurophysiol., 50: 910-925, 1983.
34. Meredith, M.A. and Stein, B.E. Interactions among converging sensory inputs in the superior colliculus. Science. 221:389-391, 1983.
35. Frenk, H. and Stein, B.E. Endogenous opioids mediate ECS-induced catalepsy at supraspinal levels. Brain Res., 303: 109-112, 1984.
36. Clemo, H.R. and Stein, B.E. Topographic organization of somatosensory corticotectal influences in cat. J. Neurophysiol. 51: 843-858, 1984.
37. Larson, M. and Stein, B.E. The use of tactile and olfactory cues in neonatal orientation and localization of the nipple. Dev. Psychobiol. 17: 423-436, 1984.
38. Ogasawara, K., McHaffie, J.G. and Stein, B.E. Two visual corticotectal systems in cat. J. Neurophysiol. 52: 1226-1245, 1984.
39. Stein, B.E., Spencer, R.F. and Edwards, S.B. Efferent projections of the neonatal cat superior colliculus: Facial and cerebellum-related brainstem structures. J. Comp. Neurol. 230: 47-54, 1984.
40. Meredith, M.A. and Stein, B.E. Descending efferents from the superior colliculus relay integrated multisensory information. Science, 227: 657-659, 1985.
41. Stein, B.E., McHaffie, J.G., Harting, J.K., Huerta, M.F. and Hashikawa, T. Transient tectogeniculate

- projections in neonatal kittens: An autoradiographic study. J. Comp. Neurol., 239: 402-412, 1985.
42. Meredith, M.A. and Stein, B.E. Spatial factors determine the activity of multisensory neurons in cat superior colliculus. Brain Res., 365:350-354, 1986.
43. Clemo, H.R. and Stein, B.E. Effects of cooling somatosensory cortex on response properties of tactile cells in the superior colliculus. J. Neurophysiol., 55: 1352-1368, 1986.
44. McHaffie, J.G., Ogasawara, K., and Stein, B.E. Trigeminotectal and other trigeminofugal projections in neonatal kittens: An anatomical demonstration with horseradish peroxidase and tritiated leucine. J. Comp. Neurol., 249: 411-427, 1986.
45. Meredith, M.A. and Stein, B.E. Visual, auditory and somatosensory convergence on cells in the superior colliculus results in cross-sensory integration. J. Neurophysiol., 56: 640-662, 1986.
46. Clemo, H.R. and Stein, B.E. Responses to direction of stimulus movement are different for somatosensory and visual cells in cat superior colliculus. Brain Res., 405: 313-319, 1987.
47. Larson, M., McHaffie, J.G. and Stein, B.E. Response properties of nociceptive and low-threshold mechanoreceptive neurons in the hamster superior colliculus. J. Neurosci., 7: 547-564, 1987.
48. Stein, B.E. Hippocampus and superior colliculus: Interdependence or independence? Behav. & Brain Sci., 10: 131, 1987.
49. Bruce, L.L., McHaffie, J.G. and Stein, B.E. The organization of trigeminotectal and trigeminothalamic neurons in rodents: A double-labeling study with fluorescent dyes. J. Comp. Neurol., 262: 315-330, 1987.
50. Meredith, M.A., Nemitz, J.W. and Stein, B.E. Determinants of multisensory integration in superior colliculus neurons. I. Temporal factors. J. Neurosci., 10: 3215-3229, 1987.
51. Stein, B.E. Huneycutt, W.S. and Meredith, M.A. Neurons and behavior: The same rules of multisensory integration apply. Brain Res. 448:355-358, 1988.
52. Stein, B.E. Concepts of brain evolution. Behav. Brain Sci., 11:100-101, 1988.
53. Hardy, S.C. and Stein, B.E. Small lateral suprasylvian cortex lesions produce visual neglect and decreased visual activity in the superior colliculus. J. Comp. Neurol. 273: 527-542, 1988.
54. McHaffie, J.G., Kruger, L., Clemo, H.R. and Stein, B.E. Corticothalamic and corticotectal somatosensory projections from the anterior ectosylvian sulcus (SIV cortex) in neonatal cats: An anatomical demonstration with horseradish peroxidase and tritiated leucine. J. Comp. Neurol. 274: 115-126, 1988.
55. Bruce, L.L. and Stein, B.E. Transient projections from the lateral geniculate to the posteromedial lateral suprasylvian visual cortex in kittens. J. Comp. Neurol. 278:287-302, 1988.
56. Stein, B.E., Meredith, M.A., Huneycutt, W.S. and McDade, L. Behavioral indices of multisensory integration: orientation to visual cues is affected by auditory stimuli. J. Cogn. Neurosci., 1:12-24, 1989.
57. Stein B.E., Price, D.D. and Gazzaniga, M.S. Pain perception in a man with total corpus callosum transection. Pain., 38:51-56, 1989.
58. Nelson, J.S., Meredith, M.A. and Stein, B.E. Does an extraocular proprioceptive signal reach the superior colliculus? J. Neurophysiol., 62:1360-1374, 1989.
59. McHaffie, J.G., Kao, C.Q. and Stein, B.E. Nociceptive neurons in the rat superior colliculus: Response properties, topography and functional implications. J. Neurophysiol., 62:510-525, 1989.
60. Meredith, M.A. and Stein, B.E. The visuotopic component of the multisensory map in the deep laminae of the cat superior colliculus. J. Neurosci., 10:3727-3742, 1990.

61. Norita, M., McHaffie, J.G., and Stein, B.E. The corticostriatal and corticotectal projections of the feline lateral suprasylvian cortex demonstrated with anterograde biocytin and retrograde fluorescent techniques. *Neurosci Res.*, 10:149-155, 1991.
62. Meredith, M.A., Clemo, H.R. and Stein, B.E. The Somatotopic component of the multisensory map in the deep laminae of the cat superior colliculus. *J. Comp. Neurol.*, 312:353-370, 1991.
63. McHaffie, J.G., Beninato, M., Stein, B.E., and Spencer, R.F., Postnatal development of acetylcholinesterase in, and cholinergic projections to, the cat superior colliculus. *J. Comp. Neurol.*, 313:113-131, 1991.
64. Clemo, H.R. and Stein, B.E. Receptive field properties of somatosensory neurons in the cat superior colliculus. *J. Comp. Neurol.*, 314:534-544, 1991.
65. Meredith, M.A., Wallace, M.T. and Stein, B.E. Visual, auditory and somatosensory convergence in output neurons of the cat superior colliculus: multisensory properties of the tecto-reticulo-spinal projection. *Exp. Brain Res.*, 88:181-186, 1992.
66. Price, D.D., McHaffie, J.G. and Stein, B.E. The psychophysical attributes of heat-induced pain and their relationships to neural mechanisms. *J. Cogn. Neurosci.*, 4:1-14, 1992.
67. Wallace, M.T., Meredith, M.A. and Stein, B.E. Integration of multiple sensory inputs in cat cortex. *Exp. Brain Res.* 91:484-488, 1992.
68. Stein, B.E., Meredith, M.A. and Wallace, M.T. The visually responsive neuron and beyond: Multisensory integration in cat and monkey. *Prog. Brain Res.*, 95:79-90, 1993.
69. McHaffie, J.G., Norita, M., Dunning, D.D. and Stein, B.E. Corticotectal relationships: Direct and "indirect" corticotectal pathways. *Prog. Brain Res.*, 95:139-150, 1993.
70. Wallace, M.T., Meredith, M.A. and Stein, B.E. Converging influences from visual, auditory and somatosensory cortices onto output neurons of the superior colliculus. *J. Neurophysiol.*, 69:1797-1809, 1993.
71. Wallace, M.T., and Stein, B.E. Cross-Modal synthesis in the midbrain depends on input from association cortex. *J. Neurophysiol.*, 71:429-432, 1994.
72. Kao, C.-Q., McHaffie, J.G., Meredith, M.A., and Stein, B.E. Functional development of a central visual map in the cat. *J. Neurophysiol.* 72:266-272, 1994.
73. McHaffie, J.G., Larson, M.A. and Stein, B.E. Response properties of nociceptive and low-threshold neurons in rat trigeminal pars caudalis. *J. Comp. Neurol.* 347:409-425, 1994.
74. Redgrave, P., McHaffie, J.G. and Stein, B.E. Nociceptive neurons in rat superior colliculus I: Antidromic activation from the contralateral predorsal bundle. *Exp. Brain Res.* 109:185-196, 1996.
75. Redgrave, P., Simkins, M., McHaffie, J.G. and Stein, B.E. Nociceptive neurons in rat superior colliculus II: Effects of lesions to contralateral descending output pathway on nocifensive behaviors. *Exp. Brain Res.* 109:197-208, 1996
76. Meredith, M.A. and Stein, B.E. Spatial determinants of multisensory integration in cat superior colliculus. *J. Neurophysiol.* 75:1843-1857, 1996.
77. Redgrave, P., Telford, S., Wang, S., McHaffie, J.G., and Stein, B.E. Functional anatomy of nociceptive neurones in rat superior colliculus. *Prog. Brain Res.* 107:403-415, 1996.
78. Wallace, M.T., Wilkinson, L.K. and Stein, B.E. Representation and integration of multiple sensory inputs in primate superior colliculus. *J. Neurophysiol.* 76(2):1246-1266, 1996.
79. Stein, B.E. and Wallace, M.T. Comparisons of cross-modality integration in midbrain and cortex. *Prog. Brain Res.* 112:289-299, 1996.

80. Wallace, M.T. and Stein, B.E. Sensory organization of the superior colliculus in cat and monkey. Prog. Brain Res. 112:301-311, 1996.
81. Wilkinson, L.K., Meredith, M.A., and Stein, B.E. The role of anterior ectosylvian cortex in cross-modality orientation behavior. Exp. Brain Res. 112:1-10, 1996.
82. Stein, B.E., London, N., Wilkinson, L.K., and Price, D.D. Enhancement of perceived visual intensity by auditory stimuli: A psychophysical analysis. J. Cogn. Neurosci. 8:497-506, 1996
83. Wallace, M.T. and Stein, B.E. Development of multisensory neurons and multisensory integration in cat superior colliculus. J. Neurosci. 17:2429-2444, 1997.
84. Dunning, D.D., McHaffie, J.G., and Stein, B.E. A simple enzyme histochemical method for the simultaneous demonstration of acetylcholinesterase and monoamine oxidase in fixed-frozen sections. J. Histochem. Cytochem. 45: 895-902, 1997.
85. Niida, T., Stein, B.E., and McHaffie, J.G. Response properties of corticotectal and corticostriatal neurons in the posterior lateral suprasylvian cortex of the cat. J. Neurosci. 17(21): 8550-8565, 1997.
86. Wallace, M.T., McHaffie, J.G., and Stein, B.E. Visual response properties and visuotopic representation in the newborn monkey superior colliculus. J. Neurophysiol. 78: 2732-2741, 1997.
87. Kadunce, D.C., Vaughan, J.W., Wallace, M.T., Benedek, G., and Stein, B.E. Mechanisms of within- and cross-modality suppression in the superior colliculus. J. Neurophysiol. 78: 2834-2847, 1997.
88. Wallace, M.T., Meredith, M.A., and Stein, B.E. Multisensory integration in the superior colliculus of the alert cat. J. Neurophysiol. 80: 1006-1010, 1998.
89. Stein, B.E. Neural mechanisms for synthesizing sensory information and producing adaptive behaviors. Exp. Brain Res. 123: 124-135, 1998.
90. Stein, B.E., Wallace, M.T., and Stanford, T.R. Development of multisensory integration: transforming sensory input into motor output. Mental Retardation and Developmental Disabilities Research Reviews, 5(1): 72-85, 1999.
91. Wallace, M.T. and Stein, B.E. Onset of cross-modal synthesis in the neonatal superior colliculus is gated by the development of cortical influences. J. Neurophysiol. 83(6): 3578-3582, 2000.
92. Wang, S., Wang, H., Niemi-Junkola, U., Westby, G.W.M., McHaffie, J.G., Stein B.E., and Redgrave, P. Parallel analyses of nociceptive neurones in rat superior colliculus by using c-fos immunohistochemistry and electrophysiology under different conditions of anaesthesia. J. Comp. Neurol. 425: 599-615, 2000.
93. Jiang, W., Wallace, M.T., Jiang, H., Vaughan, J.W., and Stein, B.E. Two cortical areas mediate multisensory integration in superior colliculus neurons. J. Neurophysiol. 85: 506-522, 2001.
94. McHaffie, J.G., Thomson, C.M. and Stein, B.E. Corticotectal and corticostriatal projections from the frontal eye fields of the cat: An anatomical examination using WGA-HRP. Somatosensory Motor Res. 18(2): 119-132, 2001.
95. Kadunce, D.C., Vaughan, J.W., Wallace, M.T., and Stein, B.E. The influence of visual and auditory receptive field organization on multisensory integration in the superior colliculus. Exp. Brain Res., 139: 303-310, 2001.
96. McHaffie, J.G., Anstrom, K., Gabriele, M.L., and Stein, B.E. Distribution of the calcium binding proteins calbindin-D-28k and parvalbumin in the superior colliculus of adult and newborn cat and Rhesus monkey. Exp. Brain Res., 141: 460-470, 2001.
97. Stein, B.E., Jiang, W., Wallace, M.T., and Stanford, T.R. Nonvisual influences on visual information processing in the superior colliculus. Prog. Brain Res., 134: 143-156, 2001.
98. Wallace, M.T. and Stein, B.E. Sensory and multisensory responses in the newborn monkey's superior colliculus. J. Neurosci., 21(22): 8886-8894, 2001.

99. McHaffie, J.G., Wang, S., Walton, N., Stein, B.E., and Redgrave, P. Covariant maturation of nocifensive oral behaviour and c-fos expression in rat superior colliculus. *Neuroscience*, 109(3): 597-607, 2002.
100. Laurienti, P.J., Burdette, J.H., Wallace, M.T., Yen, Y.-F., Field, A.S. and Stein, B.E. Deactivation of sensory-specific cortex by cross-modal stimuli. *J. Cognitive Neurosci.*, 14(3): 420-429, 2002.
101. Stein, B.E., Wallace, M.T., Stanford, T.R., and Jiang, W. Cortex governs multisensory integration in the midbrain. *The Neuroscientist* 8: 306-314, 2002.
102. Jiang, W., Jiang, H., and Stein, B.E. Two corticotectal areas mediate multisensory orientation behavior. *J. Cognitive Neurosci.*, 4: 1240-1255, 2002.
103. Hairston, D., Wallace, M.T., Vaughan, J.W., Stein, B.E., Norris, J.L., and Schirillo, J.A. Visual localization ability influences cross-modal bias. *J. Cognitive Neurosci.* 15: 20-29, 2003.
104. Laurienti, P.J., Wallace, M.T., Maldjian, J.A., Susi, C.M., Stein, B.E., and Burdette, J.H. Cross-modal sensory processing in the anterior cingulate and medial prefrontal cortices. *Human Brain Mapping* 19: 213-223, 2003.
105. Jiang, H., Stein, B.E. and McHaffie, J.G. Opposing basal ganglia processes shape midbrain visuomotor activity bilaterally. *Nature* 423: 982-986, 2003.
106. Lovelace, C.T., Stein, B.E. and Wallace, M.T. An irrelevant light enhances auditory detection in humans: A psychophysical analysis of multisensory integration in stimulus detection. *Cognitive Brain Research* 17: 447-453, 2003.
107. Jiang, W. and Stein, B.E. Cortex controls multisensory depression in superior colliculus. *J. Neurophysiol.* 90: 2123-2135, 2003.
108. Perrault, T.P., Vaughan, J. W., Stein, B.E. and Wallace, M.T. Neuron-specific response characteristics predict the magnitude of multisensory integration. *J. Neurophysiol.* 90: 4022-4026, 2003.
109. Burnett, L.R., Stein, B.E., Chaponis, D., and Wallace, M.T. Superior colliculus (SC) lesions preferentially disrupt multisensory orientation. *Neuroscience* 124: 535-547, 2004.
110. Wallace, M.T., Ramachandran, R. and Stein, B.E. A revised view of sensory cortical parcellation. *Proc. Natl. Acad. Sci. (PNAS)* 101(7): 2167-2172, 2004.
111. Wallace, M.T., Roberson, G., Hairston, W.D., Stein, B.E. and Schirillo, J.A. Unifying multisensory signals across time and space. *Exp. Brain Res.* 158: 252-258, 2004.
112. Wallace, M.T., Perrault, T.P., Hairston, W.D., and Stein, B.E. Visual experience is necessary for the development of multisensory integration. *J. Neurosci.* 24: 9580-9584, 2004.
113. Perrault, T.P., Vaughan, J.W., Stein, B.E., and Wallace, M.T. Superior colliculus neurons use distinct operational modes in the integration of multisensory stimuli. *J. Neurophysiol.* 93: 2575-2586, 2005.
114. Laurienti, P., Perrault, T., Jr., Stanford, T.R., Wallace, M.T., and Stein, B.E. On the use of superadditivity as a metric for characterizing multisensory integration in functional neuroimaging studies. *Exp. Brain Res.* 166: 289-297, 2005.
115. Stein, B.E. The development of a dialogue between cortex and midbrain to integrate multisensory information. *Exp. Brain Res.* 166: 305-315, 2005.
116. Stanford, T.R., Quessy, S., and Stein, B.E. Evaluating the operations underlying multisensory integration in cat superior colliculus. *J. Neurosci.* 25(28): 6499-6508, 2005.
117. McHaffie JG, TR Stanford, BE Stein, V Coizet, and P Redgrave. Subcortical loops through the basal ganglia? *Trends Neurosci.* 28(8): 401-407, 2005.

118. Gabriele, M.L., Smoot, J.E., Jiang, H., Stein, B.E., and McHaffie, J.G. Early establishment of adult-like nigroretinal architecture in the neonatal cat: A double-labeling study using carbocyanine dyes. *Neuroscience* 137(4): 1309-1319, 2006.
119. Fuentes-Santamaria, V., Stein, B.E., and McHaffie, J.G. Neurofilament proteins are preferentially expressed in descending output neurons of the cat superior colliculus: A study using SMI-32. *Neuroscience* 138(1): 55-68, 2006.
120. McHaffie, J.G., Jiang, H., May, P.J., Coizet, V., Overton, P.G., Stein, B.E., and Redgrave, P. A direct projection from the superior colliculus to substantia nigra pars compacta in the cat. *Neuroscience* 138(1): 221-234, 2006.
121. Jiang, W., Jiang, H. and Stein, B.E. Neonatal cortical ablation disrupts multisensory development in the superior colliculus. *J. Neurophysiol.* 95: 1380-1396, 2006.
122. Wallace, M.T., Carriere, B.N., Perrault Jr, T.J., Vaughan, J.W., and Stein, B.E. The development of cortical multisensory integration. *J. Neurosci.* 26(46): 11844-11849, 2006.
123. Wallace, M.T. and Stein, B.E. Early experience determines how the senses will interact. *J. Neurophysiol.* 97: 921-926, 2007.
124. Alvarado, J.C., Vaughan, J.W., Stanford, T.R., and Stein, B.E. Multisensory versus unisensory integration: contrasting modes in the superior colliculus. *J. Neurophysiol.* 97: 3193-3205, 2007.
125. Stanford, T.R., and Stein, B.E. Superadditivity in multisensory integration: putting the computation in context. *Neuroreport* 18: 787-792, 2007.
126. Rowland, B.A., Quessy, S., Stanford, T.R., and Stein, B.E. Multisensory integration shortens physiological response latencies. *J. Neurosci.* 27: 5879-5884, 2007.
127. Burnett, L.R., Stein, B.E., Perrault, T.J., and Wallace, M.T. Excitotoxic lesions of the superior colliculus preferentially impact multisensory neurons and multisensory integration. *Exp. Brain Res.* 179(2): 325-338, 2007.
128. Rowland, B., Stanford, T., and Stein, B. A Bayesian model unifies multisensory spatial localization with the physiological properties of the superior colliculus. *Exp. Brain Res.* 180: 153-161, 2007.
129. Jiang, W., Jiang, H., Rowland, B.A., and Stein, B.E. Multisensory orientation behavior is disrupted by neonatal cortical ablation. *J. Neurophysiol.* 97(1): 557-562, 2007.
130. Rowland, B.A., Stanford, T.R., and Stein, B.E. A model of the neural mechanisms underlying multisensory integration in the superior colliculus. *Perception* [Special Issue on Multisensory Integration] 36: 1431-1443, 2007.
131. Bolognini, N., Fabrizio, L., Passamonti, C., Stein, B.E., and Ladavas, E. Multisensory-mediated auditory localization. *Perception* [Special Issue on Multisensory Integration] 36: 1477-1485, 2007.
132. Carriere, B., Royal, D., Perrault, T., Morrison, P., Vaughan, J.W., Stein, B.E., and Wallace, M.T. Visual deprivation alters the development of cortical multisensory integration. *J. Neurophysiol.* 98: 2858-2867, 2007.
133. Alvarado, J.C., Stanford, T.R., Vaughan, J.W., and Stein, B.E. Cortex mediates multisensory but not unisensory integration in superior colliculus. *J. Neurosci.* 27(47): 12775-12786, 2007.
134. Rowland, B.A. and Stein, B.E. Multisensory integration produces an initial response enhancement. *Frontiers in Integrative Neuroscience* 1(4): 1-8, 2007.
135. Fuentes-Santamaria, V., Alvarado, J.C., Stein, B.E., and McHaffie, J.G. Cortex contacts both output neurons and nitroergic interneurons in the superior colliculus: Direct and indirect routes for multisensory integration. *Cerebral Cortex* 18: 1640-1652, 2008.
136. Stein, B.E. and Stanford, T.R. Multisensory integration: current issues from the perspective of the single neuron. *Nature Rev. Neurosci.* 9(4): 255-266, 2008.

137. Leo, F., Bolognini, N., Passamonti, C., Stein, B.E., and Ladavas, E. Cross-modal localization in hemianopia: new insights on multisensory integration. *Brain* 131(3): 855-865, 2008.
138. Fuentes-Santamaria, V., McHaffie, J.G., and Stein, B.E. Maturation of multisensory integration in the superior colliculus: Expression of nitric oxide synthase and neurofilament SMI-32. *Brain Res.* [Special Issue on Multisensory Integration] 1242: 45-53, 2008.
139. Alvarado, J.C., Rowland, B.A., Stanford, T.R., and Stein, B.E. A neural network model of multisensory integration also accounts for unisensory integration in superior colliculus. *Brain Res.* [Special Issue on Multisensory Integration] 1242: 13-23, 2008.
140. Rowland, B.A. and Stein, B.E. Temporal profiles of response enhancement in multisensory integration. *Frontiers in Neuroscience* 2(2): 218-224, 2008.
141. Fuentes-Santamaria, V., Alvarado, J.C., McHaffie, J.G., and Stein, B.E. Axon morphologies and convergence patterns of projections from different sensory-specific cortices of the anterior ectosylvian sulcus onto multisensory neurons in the cat superior colliculus. *Cerebral Cortex* [April - Epub ahead of print], 2009.
142. Gingras, G., Rowland, B.A., and Stein, B.E. The differing impact of multisensory and unisensory integration on behavior. *J. Neurosci.* 29(15): 4897-4902, 2009.
143. Jiang, H., Stein, B.E., and McHaffie, J.G. Cortical lesion-induced visual hemineglect is prevented by NMDA antagonist pretreatment. *J. Neurosci.* 29(21): 6917-6925, 2009.
144. Alvarado, J.C., Stanford, T.R., Rowland, B.A., Vaughan, J.W., and Stein, B.E. Multisensory integration in the superior colliculus requires synergy among corticocollicular inputs. *J. Neurosci.* 29(20): 6580-6592, 2009.
145. Stein, B.E., Stanford, T.R., Ramachandran, R., Perrault Jr., T.J., and Rowland, B.A. Challenges in quantifying multisensory integration: Alternative criteria, models, and inverse effectiveness. *Exp Brain Res.* [Epub ahead of print], 2009.
146. Stein, B.E., Stanford, T.R., and Rowland, B.A. The neural basis of multisensory integration in the midbrain: Its organization and maturation. *Hearing Research* [Epub ahead of print], 2009.
147. Stein, B.E., Rowland, B., and Stanford, T.R. Postnatal experiences influence how the brain integrates information from different senses to produce adaptive behavior. *Frontiers in Integrative Neuroscience* [Invited Article] (In Press), 2009.