# Chapter 15 Epigenetics, Stress, and Their Potential Impact on Brain Network Function

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# References

1.[McEwen BS. Effects of adverse experiences for brain structure and function.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink1rf0010) *[Biol Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink1rf0010)*[. 2000;48(8):721–731.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink1rf0010)

2.[Irwin MR, Cole SW. Reciprocal regulation of the neural and innate immune systems.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink2rf0015) *[Nat Rev Immunol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink2rf0015)*[. 2011;11 (9):625–632.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink2rf0015)

3.[Goldstein DS. Adrenal responses to stress.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink3rf0020) *[Cell Mol Neurobiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink3rf0020)*[. 2010;30(8):1433–1440.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink3rf0020)

4.[Teixeira RR, Diaz MM, Santos TV, et al. Chronic stress induces a hyporeactivity of the autonomic nervous system in response to acute mental stressor and impairs cognitive performance in business executives. *PLoS One*. 2015;10(3): e0119025.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink4rf0025)

5.[von Dawans B, Fischbacher U, Kirschbaum C, Fehr E, Heinrichs M. The social dimension of stress reactivity: acute stress increases prosocial behavior in humans. *Psychol Sci*. 2012;23(6):651–660.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink5rf0030)

6.Park HJ, Friston K. Structural and functional brain networks: from connections to cognition. *Science (New York, NY)*. 2013;342(6158).[http://dx.doi.org/10.1126/science.1238411](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#tsLink6).

7.[Waddington CH. The epigenotype. 1942.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink7rf0040) *[Int J Epidemiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink7rf0040)*[. 2012;41(1):10–13.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink7rf0040)

8.[Davila-Velderrain J, Martinez-Garcia JC, Alvarez-Buylla ER. Modeling the epigenetic attractors landscape: toward a post-genomic mechanistic understanding of development.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink8rf0045) *[Front Genet](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink8rf0045)*[. 2015;6:160.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink8rf0045)

9.[Van Speybroeck L. From epigenesis to epigenetics: the case of C. H. Waddington.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink9rf0050) *[Ann N Y Acad Sci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink9rf0050)*[. 2002;981:61–81.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink9rf0050)

10.[Weaver IC. Integrating early life experience, gene expression, brain development, and emergent phenotypes: unraveling the thread of nature via nurture.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink10rf0055) *[Adv Genet](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink10rf0055)*[. 2014;86:277–307.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink10rf0055)

11.[Klengel T, Mehta D, Anacker C, et al. Allele-specific FKBP5 DNA demethylation mediates gene-childhood trauma interactions. *Nat Neurosci*. 2013;16(1):33–41.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink11rf0060)

12.[Yang X, Ewald ER, Huo Y, et al. Glucocorticoid-induced loss of DNA methylation in non-neuronal cells and potential involvement of DNMT1 in epigenetic regulation of Fkbp5. *Biochem Biophys Res Commun*. 2012;420(3):570–575.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink12rf0065)

13.[Lee RS, Tamashiro KL, Yang X, et al. Chronic corticosterone exposure increases expression and decreases deoxyribonucleic acid methylation of Fkbp5 in mice. *Endocrinology*. 2010;151(9):4332–4343.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink13rf0070)

14.[Lee RS, Tamashiro KL, Yang X, et al. A measure of glucocorticoid load provided by DNA methylation of Fkbp5 in mice.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink14rf0075) *[Psychopharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink14rf0075)*[. 2011;218(1):303–312.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink14rf0075)

15.[Mehta D, Binder EB. Gene x environment vulnerability factors for PTSD: the HPA-axis.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink15rf0080) *[Neuropharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink15rf0080)*[. 2012;62 (2):654–662.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink15rf0080)

16.[Spiga F, Walker JJ, Terry JR, Lightman SL. HPA axis-rhythms.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink16rf0085) *[Compr Physiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink16rf0085)*[. 2014;4(3):1273–1298.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink16rf0085)

17.[Windle RJ, Wood SA, Lightman SL, Ingram CD. The pulsatile characteristics of hypothalamo-pituitary-adrenal activity in female Lewis and Fischer 344 rats and its relationship to differential stress responses.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink17rf0090) *[Endocrinology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink17rf0090)*[. 1998;139(10):4044–4052.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink17rf0090)

18.[Windle RJ, Wood SA, Shanks N, Lightman SL, Ingram CD. Ultradian rhythm of basal corticosterone release in the female rat: dynamic interaction with the response to acute stress.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink18rf0095) *[Endocrinology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink18rf0095)*[. 1998;139(2):443–450.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink18rf0095)

19.[Shirazi SN, Friedman AR, Kaufer D, Sakhai SA. Glucocorticoids and the brain: neural mechanisms regulating the stress response.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink19rf0100) *[Adv Exp Med Biol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink19rf0100)*[. 2015;872:235–252.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink19rf0100)

20.[LeDoux J. The emotional brain, fear, and the amygdala.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink20rf0105) *[Cell Mol Neurobiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink20rf0105)*[. 2003;23(4–5):727–738.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink20rf0105)

21.[Bremner JD. Long-term effects of childhood abuse on brain and neurobiology.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink21rf0110) *[Child Adolesc Psychiatr Clin N Am](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink21rf0110)*[. 2003;12(2):  
271–292.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink21rf0110)

22.[Pariante CM. Pituitary volume in psychosis: the first review of the evidence.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink22rf0115) *[J Psychopharmacol (Oxford, England)](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink22rf0115)*[. 2008;22(suppl 2): 76–81.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink22rf0115)

23.[Mondelli V, Dazzan P, Gabilondo A, et al. Pituitary volume in unaffected relatives of patients with schizophrenia and bipolar disorder. *Psychoneuroendocrinology*. 2008;33(7):1004–1012.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink23rf0120)

24.[Nordholm D, Krogh J, Mondelli V, Dazzan P, Pariante C, Nordentoft M. Pituitary gland volume in patients with schizophrenia, subjects at ultra high-risk of developing psychosis and healthy controls: a systematic review and meta-analysis.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink24rf0125) *[Psychoneuroendocrinology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink24rf0125)*[. 2013;38(11):2394–2404.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink24rf0125)

25.[Pariante CM, Vassilopoulou K, Velakoulis D, et al. Pituitary volume in psychosis. *Br J Psychiatry*. 2004;185:5–10.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink25rf0130)

26.[Walker EF, Diforio D, Baum K. Developmental neuropathology and the precursors of schizophrenia.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink26rf0135) *[Acta Psychiatr Scand Suppl](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink26rf0135)*[. 1999;395:12–19.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink26rf0135)

27.[Masillo A, Day F, Laing J, et al. Interpersonal sensitivity in the at-risk mental state for psychosis. *Psychol Med*. 2012;42(9):1835–1845.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink27rf0140)

28.[Bechdolf A, Thompson A, Nelson B, et al. Experience of trauma and conversion to psychosis in an ultra-high-risk (prodromal) group.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink28rf0145) *[Acta Psychiatr Scand](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink28rf0145)*[. 2010;121(5):377–384.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink28rf0145)

29.[Howes OD, Bose SK, Turkheimer F, et al. Dopamine synthesis capacity before onset of psychosis: a prospective [18F]-DOPA PET imaging study. *Am J Psychiatry*. 2011;168(12):1311–1317.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink29rf0150)

30.[Howes OD, Murray RM. Schizophrenia: an integrated sociodevelopmental-cognitive model.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink30rf0155) *[Lancet](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink30rf0155)*[. 2014;383 (9929):  
1677–1687.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink30rf0155)

31.[Howes OD, Kapur S. The dopamine hypothesis of schizophrenia: version III—the final common pathway.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink31rf0160) *[Schizophr Bull](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink31rf0160)*[. 2009;35(3): 549–562.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink31rf0160)

32.[Sheynikhovich D, Otani S, Arleo A. Dopaminergic control of long-term depression/long-term potentiation threshold in prefrontal cortex.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink32rf0165) *[J Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink32rf0165)*[. 2013;33(34):13914–13926.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink32rf0165)

33.[Otani S, Daniel H, Roisin MP, Crepel F. Dopaminergic modulation of long-term synaptic plasticity in rat prefrontal neurons. *Cereb Cortex*. 2003;13(11):1251–1256.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink33rf0170)

34.[Lewis DA, Gonzalez-Burgos G. Neuroplasticity of neocortical circuits in schizophrenia.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink34rf0175) *[Neuropsychopharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink34rf0175)*[. 2008;33(1):141–165.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink34rf0175)

35.[Pruessner JC, Champagne F, Meaney MJ, Dagher A. Dopamine release in response to a psychological stress in humans and its relationship to early life maternal care: a positron emission tomography study using [11C]raclopride.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink35rf0180) *[J Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink35rf0180)*[. 2004;24(11):2825–2831.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink35rf0180)

36.[Arnsten AF. Prefrontal cortical network connections: key site of vulnerability in stress and schizophrenia.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink36rf0185) *[Int J Dev Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink36rf0185)*[. 2011;29(3):215–223.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink36rf0185)

37.[Arnsten AF, Paspalas CD, Gamo NJ, Yang Y, Wang M. Dynamic network connectivity: a new form of neuroplasticity.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink37rf0190) *[Trends Cogn Sci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink37rf0190)*[. 2010;14(8):365–375.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink37rf0190)

38.[Goto Y, Yang CR, Otani S. Functional and dysfunctional synaptic plasticity in prefrontal cortex: roles in psychiatric disorders.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink38rf0195) *[Biol Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink38rf0195)*[. 2010;67(3):199–207.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink38rf0195)

39.[Hains AB, Arnsten AF. Molecular mechanisms of stress-induced prefrontal cortical impairment: implications for mental illness.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink39rf0200) *[Learn Mem](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink39rf0200)*[. 2008;15(8):551–564.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink39rf0200)

40.[Mizrahi R, Addington J, Rusjan PM, et al. Increased stress-induced dopamine release in psychosis.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink40rf0205) *[Biol Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink40rf0205)*[. 2012;71(6): 561–567.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink40rf0205)

41.[Diwadkar VA, Bustamante A, Rai H, Uddin M. Epigenetics, stress, and their potential impact on brain network function: a focus on the schizophrenia diatheses.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink41rf0210) *[Front Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink41rf0210)*[. 2014;5:71.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink41rf0210)

42.[McEwen BS. Stress, adaptation, and disease. Allostasis and allostatic load.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink42rf0215) *[Ann N Y Acad Sci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink42rf0215)*[. 1998;840:33–44.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink42rf0215)

43.[Wang D, Szyf M, Benkelfat C, et al. Peripheral SLC6A4 DNA methylation is associated with in vivo measures of human brain serotonin synthesis and childhood physical aggression. *PLoS One*. 2012; 7(6):e39501.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink43rf0220)

44.[Shumay E, Logan J, Volkow ND, Fowler JS. Evidence that the methylation state of the monoamine oxidase A (MAOA) gene predicts brain activity of MAO A enzyme in healthy men.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink44rf0225) *[Epigenetics](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink44rf0225)*[. 2012;7(10):1151–1160.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink44rf0225)

45.[Brown ES, Jeon-Slaughter H, Lu H, et al. Hippocampal volume in healthy controls given 3-day stress doses of hydrocortisone.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink45rf0230) *[Neuropsychopharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink45rf0230)*[. 2015;40(5):1216–1221.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink45rf0230)

46.[Ursini G, Bollati V, Fazio L, et al. Stress-related methylation of the catechol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink46rf0235)*[-O](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink46rf0235)*[-methyltransferase Val 158 allele predicts human prefrontal cognition and activity.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink46rf0235) *[J Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink46rf0235)*[. 2011; 31(18):6692–6698.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink46rf0235)

47.[Carpenter PA, Just MA. Modeling the mind: very-high-field functional magnetic resonance imaging activation during cognition.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink47rf0240) *[Top Magn Reson Imaging](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink47rf0240)*[. 1999;10(1):16–36.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink47rf0240)

48.[Toepper M, Gebhardt H, Bauer E, et al. The impact of age on load-related dorsolateral prefrontal cortex activation.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink48rf0245) *[Front Aging Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink48rf0245)*[. 2014;6:9.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink48rf0245)

49.[Engstrom M, Landtblom AM, Karlsson T. Brain and effort: brain activation and effort-related working memory in healthy participants and patients with working memory deficits.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink49rf0250) *[Front Hum Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink49rf0250)*[. 2013;7:140.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink49rf0250)

50.[Bakshi N, Pruitt P, Radwan J, et al. Inefficiently increased anterior cingulate modulation of cortical systems during working memory in young offspring of schizophrenia patients. *J Psychiatr Res*. 2011;45(8):1067–1076.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink50rf0255)

51.[Bock J, Wainstock T, Braun K, Segal M. Stress in utero: prenatal programming of brain plasticity and cognition.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink51rf0260) *[Biol Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink51rf0260)*[. 2015;78(5):315–326.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink51rf0260)

52.[Provencal N, Binder EB. The effects of early life stress on the epigenome: from the womb to adulthood and even before.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink52rf0265) *[Exp Neurol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink52rf0265)*[. 2015;268:10–20.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink52rf0265)

53.[Avital A, Segal M, Richter-Levin G. Contrasting roles of corticosteroid receptors in hippocampal plasticity.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink53rf0270) *[J Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink53rf0270)*[. 2006;26(36):9130–9134.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink53rf0270)

54.[Stephan KE, Friston KJ, Frith CD. Dysconnection in schizophrenia: from abnormal synaptic plasticity to failures of self-monitoring.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink54rf0275) *[Schizophr Bull](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink54rf0275)*[. 2009;35(3):509–527.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink54rf0275)

55.[Silva AJ. Molecular and cellular cognitive studies of the role of synaptic plasticity in memory.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink55rf0280) *[J Neurobiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink55rf0280)*[. 2003;54 (1):224–237.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink55rf0280)

56.[Kandel ER, Tauc L. Mechanism of prolonged heterosynaptic facilitation.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink56rf0285) *[Nature](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink56rf0285)*[. 1964;202:145–147.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink56rf0285)

57.[Buchel C, Coull JT, Friston KJ. The predictive value of changes in effective connectivity for human learning.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink57rf0290) *[Science (New York, NY)](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink57rf0290)*[. 1999;283:1538–1541.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink57rf0290)

58.[Banyai M, Diwadkar VA, Erdi P. Model-based dynamical analysis of functional disconnection in schizophrenia.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink58rf0295) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink58rf0295)*[. 2011; 58(3):870–877.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink58rf0295)

59.[Diwadkar VA, Flaugher B, Jones T, et al. Impaired associative learning in schizophrenia: behavioral and computational studies.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink59rf0300) *[Cogn Neurodyn](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink59rf0300)*[. 2008;2(3):207–219.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink59rf0300)

60.[Levenson JM, Sweatt JD. Epigenetic mechanisms: a common theme in vertebrate and invertebrate memory formation.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink60rf0305) *[Cell Mol Life Sci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink60rf0305)*[. 2006;63(9):1009–1016.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink60rf0305)

61.[Avital A, Ram E, Maayan R, Weizman A, Richter-Levin G. Effects of early-life stress on behavior and neurosteroid levels in the rat hypothalamus and entorhinal cortex.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink61rf0310) *[Brain Res Bull](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink61rf0310)*[. 2006;68(6): 419–424.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink61rf0310)

62.[Bohacek J, Farinelli M, Mirante O, et al. Pathological brain plasticity and cognition in the offspring of males subjected to postnatal traumatic stress.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink62rf0315) *[Mol Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink62rf0315)*[. 2015;20(5):621–631.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink62rf0315)

63.[Ekstrom AD, Meltzer J, McNaughton BL, Barnes CA. NMDA receptor antagonism blocks experience-dependent expansion of hippocampal “place fields”](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink63rf0320) *[Neuron](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink63rf0320)*[. 2001;31(4):631–638.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink63rf0320)

64.[Bliss TV, Collingridge GL. A synaptic model of memory: long-term potentiation in the hippocampus.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink64rf0325) *[Nature](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink64rf0325)*[. 1993;361(6407):31–39.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink64rf0325)

65.[Levenson JM, O'Riordan KJ, Brown KD, Trinh MA, Molfese DL, Sweatt JD. Regulation of histone acetylation during memory formation in the hippocampus.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink65rf0330) *[J Biol Chem](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink65rf0330)*[. 2004;279(39):40545–40559.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink65rf0330)

66.[Guzman-Karlsson MC, Meadows JP, Gavin CF, Hablitz JJ, Sweatt JD. Transcriptional and epigenetic regulation of Hebbian and non-Hebbian plasticity.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink66rf0335) *[Neuropharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink66rf0335)*[. 2014;80:3–17.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink66rf0335)

67.[Rahn EJ, Guzman-Karlsson MC, Sweatt David J. Cellular, molecular, and epigenetic mechanisms in non-associative conditioning: implications for pain and memory.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink67rf0340) *[Neurobiol Learn Mem](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink67rf0340)*[. 2013;105:133–150.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink67rf0340)

68.[Puckett RE, Lubin FD. Epigenetic mechanisms in experience-driven memory formation and behavior.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink68rf0345) *[Epigenomics](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink68rf0345)*[. 2011;3(5):649–664.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink68rf0345)

69.[Oberlander TF, Weinberg J, Papsdorf M, Grunau R, Misri S, Devlin AM. Prenatal exposure to maternal depression, neonatal methylation of human glucocorticoid receptor gene (NR3C1) and infant cortisol stress responses. *Epigenetics*. 2008;3(2):97–106.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink69rf0350)

70.[Millan MJ. An epigenetic framework for neurodevelopmental disorders: from pathogenesis to potential therapy.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink70rf0355) *[Neuropharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink70rf0355)*[. 2013;68:2–82.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink70rf0355)

71.[McEwen BS. Plasticity of the hippocampus: adaptation to chronic stress and allostatic load.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink71rf0360) *[Ann N Y Acad Sci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink71rf0360)*[. 2001;933:265–277.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink71rf0360)

72.[Friston KJ. Models of brain function in neuroimaging.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink72rf0365) *[Annu Rev Psychol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink72rf0365)*[. 2005;56:57–87.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink72rf0365)

73.[Friston KJ, Li B, Daunizeau J, Stephan KE. Network discovery with DCM.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink73rf0370) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink73rf0370)*[. 2012;56(3):1202–1221.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink73rf0370)

74.[Noppeney U, Friston KJ, Price CJ. Degenerate neuronal systems sustaining cognitive functions.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink74rf0375) *[J Anat](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink74rf0375)*[. 2004;205 (6):433–442.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink74rf0375)

75.[Friston KJ. Functional and effective connectivity: a review.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink75rf0380) *[Brain Connect](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink75rf0380)*[. 2011;1(1):13–36.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink75rf0380)

76.[Singh KD. Which “neural activity” do you mean? fMRI, MEG, oscillations and neurotransmitters.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink76rf0385) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink76rf0385)*[. 2012;62(2):1121–1130.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink76rf0385)

77.[Price CJ, Friston KJ. Functional ontologies for cognition: the systematic definition of structure and function.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink77rf0390) *[Cogn Neuropsychol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink77rf0390)*[. 2005; 22(3):262–275.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink77rf0390)

78.[Singer W. Coherence as an organizing principle of cortical functions.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink78rf0395) *[Int Rev Neurobiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink78rf0395)*[. 1994;37:153–183. discussion 203–207.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink78rf0395)

79.[Hipp JF, Engel AK, Siegel M. Oscillatory synchronization in large-scale cortical networks predicts perception.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink79rf0400) *[Neuron](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink79rf0400)*[. 2011;69(2):387–396.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink79rf0400)

80.[Uhlhaas PJ, Roux F, Rodriguez E, Rotarska-Jagiela A, Singer W. Neural synchrony and the development of cortical networks. *Trends Cogn Sci*. 2010;14(2):72–80.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink80rf0405)

81.[Kitanishi T, Ujita S, Fallahnezhad M, Kitanishi N, Ikegaya Y, Tashiro A. Novelty-induced phase-locked firing to slow gamma oscillations in the hippocampus: requirement of synaptic plasticity.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink81rf0410) *[Neuron](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink81rf0410)*[. 2015;86(5):1265–1276.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink81rf0410)

82.[Stepp N, Plenz D, Srinivasa N. Synaptic plasticity enables adaptive self-tuning critical networks.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink82rf0415) *[PLoS Comput Biol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink82rf0415)*[. 2015; 11(1):e1004043.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink82rf0415)

83.[Papo D, Buldu JM, Boccaletti S, Bullmore ET. Complex network theory and the brain.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink83rf0420) *[Philos Trans R Soc Lond](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink83rf0420)*[. 2014;369(1653).](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink83rf0420)

84.[Ogawa S, Lee TM, Kay AR, Tank DW. Brain magnetic resonance imaging with contrast dependent on blood oxygenation.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink84rf0425) *[Proc Natl Acad Sci U S A](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink84rf0425)*[. 1990;87:9868–9872.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink84rf0425)

85.[Logothetis NK. What we can do and what we cannot do with fMRI.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink85rf0430) *[Nature](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink85rf0430)*[. 2008;453(7197):869–878.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink85rf0430)

86.[Stephan KE, Roebroeck A. A short history of causal modeling of fMRI data.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink86rf0435) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink86rf0435)*[. 2012;62(2):856–863.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink86rf0435)

87.[Diwadkar VA. Adolescent risk pathways toward schizophrenia: sustained attention and the brain.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink87rf0440) *[Curr Top Med Chem](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink87rf0440)*[. 2012;12:2339–2347.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink87rf0440)

88.[Diwadkar VA, Bakshi N, Gupta G, Pruitt P, White R, Eickhoff SB. Dysfunction and dysconnection in cortical-striatal networks during sustained attention: genetic risk for schizophrenia or bipolar disorder and its impact on brain network function.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink88rf0445) *[Front Psychiatry](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink88rf0445)*[. 2014;5:50.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink88rf0445)

89.[Diwadkar VA, Burgess A, Hong E, et al. Dysfunctional activation and brain network profiles in youth with obsessive-compulsive disorder: a focus on the dorsal anterior cingulate during working memory.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink89rf0450) *[Front Hum Neurosci](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink89rf0450)*[. 2015;9:149.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink89rf0450)

90.[Diwadkar VA, Ofen N. Disordered brain network function in adolescence: impact on thought, language and vulnerability for schizophrenia. In: Brambilla P, Marini A, eds.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink90rf0455) *[Brain Evolution, Language and Psychopathology in Schizophrenia](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink90rf0455)*[. Oxford: Taylor and Francis Group; 2014:73–95.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink90rf0455)

91.[Helbing WA, Luijnenburg SE, Moelker A, Robbers-Visser D. Cardiac stress testing after surgery for congenital heart disease.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink91rf0460) *[Curr Opin Pediatr](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink91rf0460)*[. 2010;22(5):579–586.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink91rf0460)

92.[Bressler SL, Seth AK. Wiener-Granger causality: a well established methodology.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink92rf0465) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink92rf0465)*[. 2011;58(2):323–329.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink92rf0465)

93.[Friston K, Moran R, Seth AK. Analysing connectivity with Granger causality and dynamic causal modelling.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink93rf0470) *[Curr Opin Neurobiol](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink93rf0470)*[. 2013;23(2):172–178.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink93rf0470)

94.[Biswal BB, Mennes M, Zuo XN, et al. Toward discovery science of human brain function.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink94rf0475) *[Proc Natl Acad Sci U S A](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink94rf0475)*[. 2010;107(10):4734–4739.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink94rf0475)

95.[Muehlhan M, Kirschbaum C, Wittchen HU, Alexander N. Epigenetic variation in the serotonin transporter gene predicts resting state functional connectivity strength within the salience-network.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink95rf0480) *[Hum Brain Mapp](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink95rf0480)*[. 2015;36 (11):4361–4371.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink95rf0480)

96.[Soares JM, Sampaio A, Ferreira LM, et al. Stress impact on resting state brain networks.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink96rf0485) *[PLoS One](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink96rf0485)*[. 2013;8(6): e66500.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink96rf0485)

97.[Zhang Y, Liu F, Chen H, et al. Intranetwork and internetwork functional connectivity alterations in post-traumatic stress disorder. *J Affect Disord*. 2015;187:114–121.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink97rf0490)

98.[Brown VM, LaBar KS, Haswell CC, et al. Altered resting-state functional connectivity of basolateral and centromedial amygdala complexes in posttraumatic stress disorder.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink98rf0495) *[Neuropsychopharmacology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink98rf0495)*[. 2014;39(2):351–359.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink98rf0495)

99.[Hall BS, Moda RN, Liston C. Glucocorticoid mechanisms of functional connectivity changes in stress-related neuropsychiatric disorders.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink99rf0500) *[Neurobiol Stress](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink99rf0500)*[. 2015;1:174–183.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink99rf0500)

100.[Henckens MJ, van der Marel K, van der Toorn A, et al. Stress-induced alterations in large-scale functional networks of the rodent brain.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink100rf0505) *[Neuroimage](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink100rf0505)*[. 2015;105:312–322.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink100rf0505)

101.[Cisler JM, Steele JS, Lenow JK, et al. Functional reorganization of neural networks during repeated exposure to the traumatic memory in posttraumatic stress disorder: an exploratory fMRI study.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink101rf0510) *[J Psychiatr Res](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink101rf0510)*[. 2014;48(1):47–55.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink101rf0510)

102.[Kiem SA, Andrade KC, Spoormaker VI, Holsboer F, Czisch M, Samann PG. Resting state functional MRI connectivity predicts hypothalamus-pituitary-axis status in healthy males.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink102rf0515) *[Psychoneuroendocrinology](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink102rf0515)*[. 2013;38 (8):1338–1348.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink102rf0515)

103.[Schmidt A, Walter M, Gerber H, et al. Normalizing effect of heroin maintenance treatment on stress-induced brain connectivity. *Brain*. 2015;138(Pt 1):217–228.](file:///D:\womat-filecopy\Ed-Reference\0002627050.html#rfLink103rf0520)

104.[Sweatt JD. The emerging field of neuroepigenetics.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink104rf0525) *[Neuron](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink104rf0525)*[. 2013; 80(3):624–632.](file:///D:\\womat-filecopy\\Ed-Reference\\0002627050.html" \l "rfLink104rf0525)