

REFERENCES

- Abelson, J. L., Curtis, G. C., Sagher, O., Albuscher, R. C., et al. Deep brain stimulation for refractory obsessive-compulsive disorder. *Biological Psychiatry*, 2005, 57, 510–516.
- Adamantidis, A., Carter, M. C., and de Lecea, L. Optogenetic deconstruction of sleep–wake circuitry in the brain. *Frontiers in Molecular Neuroscience*, 2010, 2, 1–9.
- Adams, D. B., Gold, A. R., and Burt, A. D. Rise in female-initiated sexual activity at ovulation and its suppression by oral contraceptives. *New England Journal of Medicine*, 1978, 299, 1145–1150.
- Adey, W. R., Bors, E., and Porter, R. W. EEG sleep patterns after high cervical lesions in man. *Archives of Neurology*, 1968, 19, 377–383.
- Adler, C. M., Malhotra, A. K., Elman, I., Goldberg, T., et al. Comparison of ketamine-induced thought disorder in healthy volunteers and thought disorder in schizophrenia. *American Journal of Psychiatry*, 1999, 156, 1646–1649.
- Adolphs, R., Damasio, H., Tranel, D., Cooper, G., and Damasio, A. R. A role for somatosensory cortices in the visual recognition of emotion as revealed by three-dimensional lesion mapping. *Journal of Neuroscience*, 2000, 20, 2683–2690.
- Adolphs, R., and Tranel, D. Intact recognition of emotional prosody following amygdala damage. *Neuropsychologia*, 1999, 37, 1285–1292.
- Adolphs, R., Tranel, D., Damasio, H., and Damasio, A. Impaired recognition of emotion in facial expressions following bilateral damage to the human amygdala. *Nature*, 1994, 372, 669–672.
- Adolphs, R., Tranel, D., Damasio, H., and Damasio, A. Fear and the human amygdala. *Journal of Neuroscience*, 1995, 15, 5879–5891.
- Advokat, C., and Kutlesic, V. Pharmacotherapy of the eating disorders: A commentary. *Neuroscience and Biobehavioral Reviews*, 1995, 19, 59–66.
- Agarwal, N., Pacher, P., Tegeder, I., Amaya, F., Constantin, C. E., et al. Cannabinoids mediate analgesia largely via peripheral type 1 cannabinoid receptors in nociceptors. *Nature Neuroscience*, 2007, 10, 870–879.
- Aharon, L., Etcoff, N., Arieli, D., Chabris, C. F., et al. Beautiful faces have variable reward value: fMRI and behavioral evidence. *Neuron*, 2001, 32, 537–551.
- Aktas, O., Kieseier, B., and Hartung, H.-P. Neuroprotection, regeneration and immunomodulation: Broadening the therapeutic repertoire in multiple sclerosis. *Trends in Neuroscience*, 2009, 33, 140–152.
- Alain, C., He, Y., and Grady, C. The contribution of the inferior parietal lobe to auditory spatial working memory. *Journal of Cognitive Neuroscience*, 2008, 20, 285–295.
- Alexander, G. M. An evolutionary perspective of sex-typed toy preferences: Pink, blue, and the brain. *Archives of Sexual Behavior*, 2003, 32, 7–14.
- Alexander, G. M., and Hines, M. Sex differences in response to children's toys in nonhuman primates (*Cercopithecus aethiops sabaeus*). *Evolution and Human Behavior*, 2002, 23, 467–479.
- Alexander, M. P., Fischer, R. S., and Friedman, R. Lesion localization in apractic agraphia. *Archives of Neurology*, 1992, 49, 246–251.
- Alirezai, M., Watry, D. D., Flynn, C. F., Kiosses, W. B., et al. Human immunodeficiency virus-1/ surface glycoprotein 120 induces apoptosis through RNA-activated protein kinase signaling in neurons. *Journal of Neuroscience*, 2007, 27, 11047–11055.
- Allebrandt, K. V., Teder-Laving, M., Akylo, M., et al. CLOCK gene variants associate with sleep duration in two independent populations. *Biological Psychiatry*, 2010, 67, 1040–1047.
- Allen L. S., and Gorski, R. A. Sexual orientation and the size of the anterior commissure in the human brain. *Proceedings of the National Academy of Sciences, USA*, 1992, 89, 7199–7202.
- Allison, T., Puce, A., and McCarthy, G. Social perception from visual cues: Role of the STS region. *Trends in Cognitive Science*, 2000, 4, 267–278.
- Altschuler, H. L., Phillips, P. E., and Feinhandler, D. A. Alterations of ethanol self-administration by naltrexone. *Life Sciences*, 1980, 26, 679–688.
- Amano, T., Unal, C. T., and Paré, D. Synaptic correlates of fear extinction in the amygdala. *Nature Neuroscience*, 2010, 13, 489–494.
- Amaral, D. G. The amygdala, social behavior, and danger detection. *Annals of the New York Academy of Sciences*, 2003, 1000, 337–347.
- Amaral, D. G., Price, J. L., Pitkänen, A., and Carmichael, S. T. Anatomical organization of the primate amygdaloid complex. In *The Amygdala: Neurobiological Aspects of Emotion, Memory, and Mental Dysfunction*, edited by J. P. Aggleton. New York: Wiley-Liss, 1992.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. Washington, D.C.: American Psychiatric Association, 1994.
- Amiaz, R., Levy, D., Vainiger, D., et al. Repeated high-frequency transcranial magnetic stimulation over the dorsolateral prefrontal cortex reduces cigarette craving and consumption. *Addiction*, 2009, 104, 653–660.
- Anand, B. K., and Brobeck, J. R. Hypothalamic control of food intake in rats and cats. *Yale Journal of Biology and Medicine*, 1951, 24, 123–140.
- Ancoli-Israel, S., and Roth, T. Characteristics of insomnia in the United States: Results of the 1991 National Sleep Foundation survey. *Sleep*, 1999, 22, S347–S353.
- Andari, E., Duhamel, J. R., Zalla, T., et al. Promoting social behavior with oxytocin in high-functioning autism spectrum disorders. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 4389–4394.
- Anderson, A. K., and Phelps, E. A. Intact recognition of vocal expressions of fear following bilateral lesions of the human amygdala. *Neuroreport*, 1998, 9, 3607–3613.
- Anderson, A. K., and Phelps, E. A. Expression without recognition: Contributions of the human amygdala to emotional communication. *Psychological Science*, 2000, 11, 106–111.
- Anderson, S., Barrash, J., Bechara, A., and Tranel, D. Impairments of emotion and real-world complex behavior following childhood- or adult-onset damage to ventromedial prefrontal cortex. *Journal of the International Neuropsychological Society*, 2006, 12, 224–235.
- Annese, J., Gazzaniga, M. S., and Toga, A. W. Localization of the human cortical visual area MT based on computer aided histological analysis. *Cerebral Cortex*, 2005, 15, 1044–1053.
- Anonymous. Effects of sexual activity on beard growth in man. *Nature*, 1970, 226, 867–870.
- Apkarian, A. V., Sosa, Y., Krauss, B. R., Thomas, P. S., et al. Chronic pain patients are impaired on an emotional decision-making task. *Pain*, 2004a, 108, 129–136.
- Apkarian, A. V., Sosa, Y., Sonty, S., Levy, R. M., et al. Chronic back pain is associated with decreased prefrontal and thalamic gray matter density. *Journal of Neuroscience*, 2004b, 24, 10410–10415.
- Arancio, O., Kandel, E. R., and Hawkins, R. D. Activity-dependent long-term enhancement of transmitter release by presynaptic 3',5'-cyclic GMP in cultured hippocampal neurons. *Nature*, 1995, 376, 74–80.
- Arendt, J., Deacon, S., English, J., Hampton, S., and Morgan, L. Melatonin and adjustment to phase-shift. *Journal of Sleep Research*, 1995, 4, 74–79.
- Ariyasu, H., Takaya, K., Tagami, T., Ogawa, Y., et al. Stomach is a major source of circulating ghrelin, and feeding state determines plasma ghrelin-like immunoreactivity levels in humans. *Journal of Clinical Endocrinology and Metabolism*, 2001, 86, 4753–4758.
- Arnason, B. G. Immunologic therapy of multiple sclerosis. *Annual Review of Medicine*, 1999, 50, 291–302.
- Arnott, S. T., Binns, M. A., Grady, C. L., and Alain, C. Assessing the auditory dual-pathway model in humans. *Neuroimage*, 2004, 22, 401–408.
- Arnsten, A. F. T. Fundamentals of attention-deficit/hyperactivity disorder: Circuits and pathways. *Journal of Clinical Psychiatry*, 2006, 67 (Suppl. 8), 7–12.
- Aron, A. R., Robbins, T. W., and Poldrack, R. A. Inhibition and the right inferior frontal cortex. *Trends in Cognitive Science*, 2004, 8, 170–177.
- Aronson, B. D., Bell-Pedersen, D., Block, G. D., Bos, N. P. A., et al. Circadian rhythms. *Brain Research Reviews*, 1993, 18, 315–333.
- Arora, S., and Anubhuti. Role of neuropeptides in appetite regulation and obesity: A review. *Neuropeptides*, 2006, 40, 375–401.

- Aschoff, J. Circadian rhythms: General features and endocrinological aspects. In *Endocrine Rhythms*, edited by D. T. Krieger. New York: Raven Press, 1979.
- Asnis, G. M., Hameedi, F. A., Goddard, A. W., Potkin, S. G., et al. Fluvoxamine in the treatment of panic disorder: A multi-center, double-blind, placebo-controlled study in outpatients. *Psychiatry Research*, 2001, 103, 1–14.
- Astafiev, S. V., Shulman, G. L., Stanley, C. M., Snyder, A. Z., et al. Functional organization of human intraparietal and frontal cortex for attending, looking, and pointing. *Journal of Neuroscience*, 2003, 23, 4689–4699.
- Aston-Jones, G., and Bloom, F. E. Activity of nor-epinephrine-containing locus coeruleus neurons in behaving rats anticipates fluctuations in the sleep-waking cycle. *Journal of Neuroscience*, 1981, 1, 876–886.
- Aston-Jones, G., Rajkowski, J., Kubiak, P., and Alexinsky, T. Locus coeruleus neurons in monkey are selectively activated by attended cues in a vigilance task. *Journal of Neuroscience*, 1994, 14, 4467–4480.
- Attia, E., Haiman, C., Walsh, T., and Flater, S. T. Does fluoxetine augment the inpatient treatment of anorexia nervosa? *American Journal of Psychiatry*, 1998, 155, 548–551.
- Aurora, R. N., Zak, R. S., Maganti, P. K., et al. Best practice guide for the treatment of REM sleep behavior disorder (RBD). *Journal of Clinical Sleep Medicine*, 2010, 6, 85–95.
- Auyeung, B., Baron-Cohen, S., Ashwin, E., et al. Fetal testosterone predicts sexually differentiated childhood behavior in girls and in boys. *Psychological Science*, 2009, 20, 144–148.
- Avenet, P., and Lindemann, B. Perspectives of taste reception. *Journal of Membrane Biology*, 1989, 112, 1–8.
- Avila, M. T., Weiler, M. A., Lahti, A. C., Tamminga, C. A., and Thaker, G. K. Effects of ketamine on leading saccades during smooth-pursuit eye movements may implicate cerebellar dysfunction in schizophrenia. *American Journal of Psychiatry*, 2002, 159, 1490–1496.
- Aziz-Zadeh, L., Cattaneo, L., Rochat, M., and Rizzolatti, G. Covert speech arrest induced by rTMS over both motor and nonmotor left hemisphere frontal sites. *Journal of Cognitive Neuroscience*, 2005, 17, 928–938.
- Baddeley, A. D. Memory: Verbal and visual subsystems of working memory. *Current Biology*, 1993, 3, 563–565.
- Bagatell, C. J., Heiman, J. R., Rivier, J. E., and Bremner, W. J. Effects of endogenous testosterone and estradiol on sexual behavior in normal young men. *Journal of Clinical Endocrinology and Metabolism*, 1994, 7, 211–216.
- Bagnasco, M., Tulipano, G., Melis, M. R., Argiolas, A., et al. Endogenous ghrelin is an orexigenic peptide acting in the arcuate nucleus in response to fasting. *Regulatory Peptides*, 2003, 28, 161–167.
- Bai, F. L., Yamano, M., Shiotani, Y., Emson, P. C., et al. An arcuate-paraventricular and -dorsomedial hypothalamic neuropeptide Y-containing system which lacks noradrenaline in the rat. *Brain Research*, 1985, 331, 172–175.
- Bailey, A. The biology of autism. *Psychological Medicine*, 1993, 23, 7–11.
- Bailey, C. H., and Kandel, E. T. Synaptic remodeling, synaptic growth and the storage of long-term memory in *Aplysia*. *Progress in Brain Research*, 2008, 169, 179–198.
- Bailey, J. M., and Pillard, R. C. A genetic study of male sexual orientation. *Archives of General Psychiatry*, 1991, 48, 1089–1096.
- Bak, T. H., O'Donovan, D. G., Xuereb, J. H., Boniface, S., and Hodges, J. R. Selective impairment of verb processing associated with pathological changes in Brodmann areas 44 and 45 in the motor neuron disease-dementia-aphasia syndrome. *Brain*, 2001, 124, 103–120.
- Baker, M. Light tools. *Nature Methods*, 2011, 8, 19–22.
- Ballantine, H. T., Bouckoms, A. J., Thomas, E. K., and Giriunas, I. E. Treatment of psychiatric illness by stereotactic cingulotomy. *Biological Psychiatry*, 1987, 22, 807–819.
- Bandell, M., Macpherson, L. J., and Patapoutian, A. From chills to chilis: Mechanisms for thermosensation and chemesthesis via thermoTRPs. *Current Opinion in Neurobiology*, 2007, 17, 490–497.
- Barber, T. X. Responding to “hypnotic” suggestions: An introspective report. *American Journal of Clinical Hypnosis*, 1975, 18, 6–22.
- Barclay, C. D., Cutting, J. E., and Kozlowski, L. T. Temporal and spatial factors in gait perception that influence gender recognition. *Perception and Psychophysics*, 1978, 23, 145–152.
- Bard, F., Cannon, C., Barbour, R., Burke, R. L., et al. Peripherally administered antibodies against amyloid beta-peptide enter the central nervous system and reduce pathology in a mouse model of Alzheimer disease. *Nature Medicine*, 2000, 6, 916–919.
- Baron-Cohen, S. The extreme male brain theory of autism. *Trends in Cognitive Sciences*, 2002, 6, 248–254.
- Bartels, A., and Zeki, S. The neural basis of romantic love. *Neuroreport*, 2000, 27, 3829–3834.
- Bartels, A., and Zeki, S. The neural correlates of maternal and romantic love. *Neuroimage*, 2004, 21, 1155–1166.
- Bartness, T. J., Powers, J. B., Hastings, M. H., Bittman, E. L., and Goldman, B. D. The timed infusion paradigm for melatonin delivery: What has it taught us about the melatonin signal, its reception, and the photoperiodic control of seasonal responses? *Journal of Pineal Research*, 1993, 15, 161–190.
- Basheer, R., Strecker, R. E., Thakkar, M. M., and McCarley, R. W. Adenosine and sleep-wake regulation. *Progress in Neurobiology*, 2004, 73, 379–396.
- Batterham, R. L., Cowley, M. A., Small, C. J., Herzog, H., et al. Gut hormone PYY_{3–36} physiologically inhibits food intake. *Nature*, 2002, 418, 650–654.
- Batterham, R. L., flytche, D. H., Rosenthal, J. M., Zelaya, R. O., et al. PYY modulation of cortical and hypothalamic brain areas predicts feeding behaviour in humans. *Nature*, 2007, 450, 106–109.
- Bautista, D. M., Jordt, S.-E., Nikai, T., Tsuruda, P. R., et al. TRPA1 mediates the inflammatory actions of environmental irritants and proalgesic agents. *Cell*, 2006, 124, 1269–1282.
- Bayley, P. J., Frascino, J. C., and Squire, L. R. Robust habit learning in the absence of awareness and independent of the medial temporal lobe. *Nature*, 2005, 436, 550–553.
- Beamer, W., Bermant, G., and Clegg, M. T. Copulatory behaviour of the ram, *Ovis aries*. II: Factors affecting copulatory satiation. *Animal Behavior*, 1969, 17, 706–711.
- Bear, O., and Fedio, P. Qualitative analysis of interictal behavior in temporal lobe epilepsy. *Archives of Neurology*, 1977, 34, 454–467.
- Beauvois, M. F., and Dérœuesné, J. Phonological alexia: Three dissociations. *Journal of Neurology, Neurosurgery and Psychiatry*, 1979, 42, 1115–1124.
- Beauvois, M. F., and Dérœuesné, J. Lexical or orthographic dysgraphia. *Brain*, 1981, 104, 21–45.
- Bechara, A., Tranel, D., Damasio, H., Adolphs, R., Rockland, C., and Damasio, A. R. Double dissociation of conditioning and declarative knowledge relative to the amygdala and hippocampus in humans. *Science*, 1995, 269, 1115–1118.
- Beckstead, R. M., Morse, J. R., and Norgren, R. The nucleus of the solitary tract in the monkey: Projections to the thalamus and brainstem nuclei. *Journal of Comparative Neurology*, 1980, 190, 259–282.
- Behrman, M., Avidan, G., Gao, F., and Black, S. Structural imaging reveals anatomical alterations in inferotemporal cortex in congenital prosopagnosia. *Cerebral Cortex*, 2007, 17, 2354–2363.
- Beidler, L. M. Physiological properties of mammalian taste receptors. In *Taste and Smell in Vertebrates*, edited by G. E. W. Wolstenholme. London: J. & A. Churchill, 1970.
- Belichenko, N. P., Belichenko, P. V., Kleschevnikov, A. M., et al. The “Down syndrome critical region” is sufficient in the mouse model to confer behavioral, neurophysiological, and synaptic phenotypes characteristic of Down syndrome. *Journal of Neuroscience*, 2010, 29, 5938–5948.
- Belin, P., Fecteau, S., and Bédard, C. Thinking the voice: Neural correlates of voice perception. *Trends in Cognitive Sciences*, 2004, 8, 129–135.
- Bell, A. P., and Weinberg, M. S. *Homosexualities: A Study of Diversity Among Men and Women*. New York: Simon and Schuster, 1978.
- Bell, A. P., Weinberg, M. S., and Hammersmith, S. K. *Sexual Preference: Its Development in Men and Women*. Bloomington: Indiana University Press, 1981.
- Belloccchio, L., Lafenêtre, P., Cannich, A., et al. Bimodal control of stimulated food intake by the endocannabinoid system. *Nature Neuroscience*, 2010, 13, 281–283.
- Belnoue, L., Grosjean, N., Abrous, D. N., and Koehl, M. A critical time window for the recruitment of bulbar newborn neurons by olfactory discrimination learning. *Journal of Neuroscience*, 2011, 31, 1010–1016.
- Benchenane, K., López-Atalaya, J. P., Fernández-Monreal, M., Touzani, O., and Vivien, D. Equivocal roles of tissue-type plasminogen activator in stroke-induced injury. *Trends in Neuroscience*, 2004, 27, 155–160.
- Benedetti, F., Arduino, C., and Amanzio, M. Somatotopic activation of opioid systems by target-directed expectations of analgesia. *Journal of Neuroscience*, 1999, 19, 3639–3648.
- Benington, J. H., Kodali, S. K., and Heller, H. C. Mono-aminergic and cholinergic modulation of REM-sleep timing in rats. *Brain Research*, 1995, 681, 141–146.
- Bennett, D. A., Wilson, R. S., Schneider, J. A., Evans, D. A., et al. Education modifies the relation of AD pathology to level of cognitive function in older persons. *Neurology*, 2003, 60, 1909–1915.

- Ben-Tovim, D. I. Eating disorders: Outcome, prevention, and treatment of eating disorders. *Current Opinion in Psychiatry*, 2003, 16, 65–69.
- Berglund, H., Lindström, P., and Savic, I. Brain response to putative pheromones in lesbian women. *Proceedings of the National Academy of Sciences, USA*, 2006, 103, 8269–8274.
- Berkovic, S. F., Mulley, J. C., Scheffer, I. E., and Petrou, S. Human epilepsies: Interaction of genetic and acquired factors. *Trends in Neurosciences*, 2006, 29, 391–397.
- Bermant, G., and Davidson, J. M. *Biological Bases of Sexual Behavior*. New York: Harper & Row, 1974.
- Berson, D. M., Dunn, F. A., and Takao, M. Phototransduction by retinal ganglion cells that set the circadian clock. *Science*, 2002, 295, 1070–1073.
- Berthier, M., Kulisevsky, J., Gironell, A., and Heras, J. A. Obsessive-compulsive disorder associated with brain lesions: Clinical phenomenology, cognitive function, and anatomic correlates. *Neurology*, 1996, 47, 353–361.
- Berthoud, H.-R., Shin, A. C., and Zheng, H. Obesity surgery and gut-brain communication. *Physiology and Behavior*, 2011, 105, 106–119.
- Bertolini, A., Ferrari, A., Ottani, A., Guerzoni, S., Racchi, R., and Leone, S. Paracetamol: New vistas of an old drug. *CNS Drug Review*, 2006, 12, 250–275.
- Best, P. J., White, A. M., and Minai, A. Spatial processing in the brain: The activity of hippocampal place cells. *Annual Review of Neuroscience*, 2001, 24, 459–486.
- Betancur, C., Sakurai, T., and Buxbaum, J. D. The emerging role of synaptic cell-adhesion pathways in the pathogenesis of autism spectrum disorders. *Trends in Neuroscience*, 2009, 32, 402–412.
- Bettelheim, B. *The Empty Fortress*. New York: Free Press, 1967.
- Beyersdorf, D. Q., Ratcliffe, N. R., Rhodes, C. H., and Reeves, A. G. Pure alexia: Clinical-pathologic evidence for a lateralized visual language association cortex. *Clinical Neuropathology*, 1997, 16, 328–331.
- Bewernick, B. H., Hurlmann, R., Matusch, A., et al. Nucleus accumbens deep brain stimulation decreases ratings of depression and anxiety in treatment-resistant depression. *Biological Psychiatry*, 2010, 67, 110–116.
- Bierut, L. J., Stitzel, J. A., Wang, J. C., et al. Variants in nicotinic receptors and risk for nicotine dependence. *American Journal of Psychiatry*, 2008, 165, 1163–1171.
- Billings, L. M., Green, K. N., McGaugh, J. L., and LaFerla, F. M. Learning decreases $\text{A}\beta^{*56}$ and tau pathology and ameliorates behavioral decline in 3xTg-AD mice. *Journal of Neuroscience*, 2007, 27, 751–761.
- Bisiach, E., and Luzzatti, C. Unilateral neglect of representational space. *Cortex*, 1978, 14, 129–133.
- Bittel, D. C., and Butler, M. G. Prader-Willi syndrome: Clinical genetics, cytogenetics and molecular biology. *Expert Reviews in Molecular Medicine*, 2005, 7, 1–20.
- Blackwood, D. H., Fordyce, A., Walker, M. T., et al. Schizophrenia and affective disorders—Cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: Clinical and P300 findings in a family. *American Journal of Human Genetics*, 2001, 69, 428–433.
- Blanchard, R. Fraternal birth order and the maternal immune hypothesis of male homosexuality. *Hormones and Behavior*, 2001, 40, 105–114.
- Blaustein, J. D., and Olster, D. H. Gonadal steroid hormone receptors and social behaviors. In *Advances in Comparative and Environmental Physiology*, Vol. 3, edited by J. Balthazart. Berlin: Springer-Verlag, 1989.
- Blest, A. D. The function of eyespot patterns in insects. *Behaviour*, 1957, 11, 209–256.
- Bliss, T. V., and Lomo, T. Long-lasting potentiation of synaptic transmission in the dentate area of the anaesthetized rabbit following stimulation of the perforant path. *Journal of Physiology*, 1973, 232, 331–356.
- Blundell, J. E., and Halford, J. C. G. Serotonin and appetite regulation: Implications for the pharmacological treatment of obesity. *CNS Drugs*, 1998, 9, 473–495.
- Bodner, S. M., Morshed, S. A., and Peterson, B. S. The question of PANDAS in adults. *Biological Psychiatry*, 2001, 49, 807–810.
- Boeve, B. F., Silber, M. H., Saper, C. B., Ferman, T. J., et al. Pathophysiology of REM sleep behaviour disorder and relevance to neurodegenerative disease. *Brain*, 2007, 130, 2770–2788.
- Bogaert, A. F. Biological versus nonbiological older brothers and men's sexual orientation. *Proceedings of the National Academy of Sciences, USA*, 2006, 103, 10771–10774.
- Boggio, P. S., Rocha, M., Oliveira, M. O., et al. Noninvasive brain stimulation with high-frequency and low-intensity repetitive transcranial magnetic stimulation treatment for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 2010, 71, 992–999.
- Bohbot, V. D., Lerch, J., Thorndyck, B., Iaria, G., and Zijdenbos, A. P. Gray matter differences correlate with spontaneous strategies in a human virtual navigation task. *Journal of Neuroscience*, 2007, 27, 10078–10083.
- Bolla, K., Ernst, M., Kiehl, K., Mouratidis, M., et al. Prefrontal cortical dysfunction in abstinent cocaine abusers. *Journal of Neuropsychiatry and Clinical Neuroscience*, 2004, 16, 456–464.
- Bolwig, T. G. How does electroconvulsive therapy work? Theories on its mechanism. *Canadian Journal of Psychiatry*, 2011, 56, 13–18.
- Boodman, S. G. Hungry in the dark: Some sleepers don't wake up for their strange nighttime binges. *Washington Post*, Sept. 7, 2004, HE01.
- Born, R. T., and Tootell, R. B. H. Spatial frequency tuning of single units in macaque supragranular striate cortex. *Proceedings of the National Academy of Sciences, USA*, 1991, 88, 7066–7070.
- Borod, J. C., Koff, E., Yecker, S., Santschi, C., and Schmidt, J. M. Facial asymmetry during emotional expression: Gender, valence, and measurement technique. *Neuropsychologia*, 1998, 36, 1209–1215.
- Bosny-Wetzel, E., Schwarzenbacher, R., and Lipton, S. A. Molecular pathways to neurodegeneration. *Nature Medicine*, 2004, 10, S2–S9.
- Bouchard, C., Tremblay, A., Despres, J. P., Nadeau, A., et al. The response to long-term overfeeding in identical twins. *New England Journal of Medicine*, 1990, 322, 1477–1482.
- Boulos, Z., Campbell, S. S., Lewy, A. J., Terman, M., et al. Light treatment for sleep disorders: Consensus report. 7: Jet-lag. *Journal of Biological Rhythms*, 1995, 10, 167–176.
- Bourne, J., and Harris, K. M. Do thin spines learn to be mushroom spines that remember? *Current Opinion in Neurobiology*, 2007, 17, 381–386.
- Bourque, C. W. Central mechanisms of osmosensation and systemic osmoregulation. *Nature Reviews: Neuroscience*, 2008, 9, 519–531.
- Bouvier, S. E., and Engel, S. A. Behavioral deficits and cortical damage loci in cerebral achromatopsia. *Cerebral Cortex*, 2006, 16, 183–191.
- Boyden, E. S., Zhang, F., Bamberg, E., Nagel, G., and Deisseroth, K. Millisecond-timescale, genetically targeted optical control of neural activity. *Nature Neuroscience*, 2005, 8, 1263–1268.
- Boynton, R. M. *Human Color Vision*. New York: Holt, Rinehart and Winston, 1979.
- Bozarth, M. A., and Wise, R. A. Toxicity associated with long-term intravenous heroin and cocaine self-administration in the rat. *Journal of the American Medical Association*, 1985, 254, 81–83.
- Bradbury, M. W. B. *The Concept of a Blood-Brain Barrier*. New York: John Wiley & Sons, 1979.
- Brady, K. T., and Sinha, R. Co-occurring mental and substance use disorders: The neurobiological effects of chronic stress. *American Journal of Psychiatry*, 2005, 162, 1483–1493.
- Brandon, N. J., Millar, J. K., Korth, C., et al. Understanding the role of DISC1 in psychiatric disease and during normal development. *Journal of Neuroscience*, 2009, 29, 12768–12775.
- Bray, G. A. Drug treatment of obesity. *American Journal of Clinical Nutrition*, 1992, 55, 538S–544S.
- Bray, G. A., Nielsen, S. J., and Popkin, B. M. Consumption of high-fructose corn syrup in beverages may play a role in the epidemic of obesity. *American Journal of Clinical Nutrition*, 2004, 79, 537–543.
- Breedlove, S. M. Sexual differentiation of the brain and behavior. In *Behavioral Endocrinology*, edited by J. B. Becker, S. M. Breedlove, and D. Crews. Cambridge, Mass.: MIT Press, 1992.
- Breedlove, S. M. Sexual differentiation of the human nervous system. *Annual Review of Psychology*, 1994, 45, 389–418.
- Brem, S., Bach, S., Kucian, K., et al. Brain sensitivity to print emerges when children learn letter-speech sound correspondences. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 7939–7964.
- Brennan, P. A., and Keverne, E. B. Something in the air? New insights into mammalian pheromones. *Current Biology*, 2004, 14, R81–R89.
- Brickner, R. M. *The Intellectual Functions of the Frontal Lobe: A Study Based Upon Observations of a Man After Partial Frontal Lobectomy*. New York: Macmillan, 1936.
- Bridges, R. S., DiBiase, R., Loundes, D. D., and Doherty, P. C. Prolactin stimulation of maternal behavior in female rats. *Science*, 1985, 227, 782–784.
- Britten, K. H., and van Wezel, R. J. Electrical microstimulation of cortical area MST biases heading perception in monkeys. *Nature Neuroscience*, 1998, 1, 59–63.
- Britton, D. R., Koob, G. F., Rivier, J., and Vale, W. Intraventricular corticotropin-releasing factor enhances behavioral effects of novelty. *Life Sciences*, 1982, 31, 363–367.
- Broberger, C., de Lecea, L., Sutcliffe, J. G., and Hökfelt, T. Hypocretin/orexin- and melanin-concentrating hormone-expressing cells form distinct populations in the rodent lateral hypothalamus: Relationship to the neuropeptide Y and agouti gene-related protein systems. *Journal of Comparative Neurology*, 1998, 402, 460–474.

- Broca, P. Remarques sur le siège de la faculté du langage articulé, suivies d'une observation d'aphémie (perte de la parole). *Bulletin de la Société Anatomique (Paris)*, 1861, 36, 330–357.
- Brody, A. L., Mandelkern, M. A., Lee, G., Smith, E., et al. Attenuation of cue-induced cigarette craving and anterior cingulate cortex activation in bupropion-treated smokers: A preliminary study. *Psychiatry Research*, 2004, 130, 269–281.
- Brolin, R. E. Bariatric surgery and long-term control of morbid obesity. *Journal of the American Medical Association*, 2002, 288, 2793–2796.
- Brown, A. M., Tekkök, S. B., and Ransom, B. R. Energy transfer from astrocytes to axons: The role of CNS glycogen. *Neurochemistry International*, 2004, 45, 529–536.
- Brown, A. S. Prenatal infection as a risk factor for schizophrenia. *Schizophrenia bulletin*, 2006, 32, 200–202.
- Brown, A. S., and Derkits, E. J. Prenatal infection and schizophrenia: A review of epidemiologic and translational studies. *American Journal of Psychiatry*, 2010, 167, 261–280.
- Brown, A. S., Hooton, J., Schaefer, C. A., Zhang, H., et al. Elevated maternal interleukin-8 levels and risk of schizophrenia in adult offspring. *American Journal of Psychiatry*, 2004, 161, 889–895.
- Brown, R. E., Stevens, D. R., and Haas, H. L. The physiology of brain histamine. *Progress in Neurobiology*, 2001, 63, 637–672.
- Brown, S., Ingham, R. J., Ingham, J. C., Laird, A. R., and Fox, P. T. Stuttered and fluent speech production: An ALE meta-analysis of functional neuroimaging studies. *Human Brain Mapping*, 2005, 25, 105–117.
- Brown, T. H., Ganong, A. H., Kairiss, E. W., Keenan, C. L., and Kelso, S. R. Long-term potentiation in two synaptic systems of the hippocampal brain slice. In *Neural Models of Plasticity: Experimental and Theoretical Approaches*, edited by J. H. Byrne and W. O. Berry. San Diego: Academic Press, 1989.
- Brownell, H. H., Michel, D., Powelson, J., and Gardner, H. Surprise but not coherence: Sensitivity to verbal humor in right-hemisphere patients. *Brain and Language*, 1983, 18, 20–27.
- Brownell, H. H., Simpson, T. L., Bihrl, A. M., Potter, H. H., and Gardner, H. Appreciation of metaphoric alternative word meanings by left and right brain-damaged patients. *Neuropsychologia*, 1990, 28, 173–184.
- Brownell, W. E., Bader, C. R., Bertrand, D., and de-Ribaupierre, Y. Evoked mechanical responses of isolated cochlear outer hair cells. *Science*, 1985, 227, 194–196.
- Bruce, H. M. A block to pregnancy in the mouse caused by proximity of strange males. *Journal of Reproduction and Fertility*, 1960a, 1, 96–103.
- Bruce, H. M. Further observations of pregnancy block in mice caused by proximity of strange males. *Journal of Reproduction and Fertility*, 1960b, 2, 311–312.
- Brüning, J. C., Gautam, D., Burks, D. J., Gillette, J., et al. Role of brain insulin receptor in control of body weight and reproduction. *Science*, 2000, 289, 2122–2125.
- Brunson, K. L., Kramer, E., Lin, B., Chen, Y., et al. Mechanisms of late-onset cognitive decline after early-life stress. *Journal of Neuroscience*, 2005, 25, 9328–9338.
- Bu, G. Apolipoprotein E and its receptors in Alzheimer's disease: Pathways, pathogenesis and therapy. *Nature Reviews: Neuroscience*, 2010, 10, 333–344.
- Buccino, G., Riggio, L., Melli, G., Binkofski, F., et al. Listening to action-related sentences modulates the activity of the motor system: A combined TMS and behavioral study. *Cognitive Brain Research*, 2005, 24, 355–363.
- Buchsbaum, M. S., Gillin, J. C., Wu, J., Hazlett, E., et al. Regional cerebral glucose metabolic rate in human sleep assessed by positron emission tomography. *Life Sciences*, 1989, 45, 1349–1356.
- Buck, L. Information coding in the vertebrate olfactory system. *Annual Review of Neuroscience*, 1996, 19, 517–544.
- Buck, L., and Axel, R. A novel multigene family may encode odorant receptors: A molecular basis for odor recognition. *Cell*, 1991, 65, 175–187.
- Buggy, J., Hoffman, W. E., Phillips, M. I., et al. Osmosensitivity of rat third ventricle and interactions with angiotensin. *American Journal of Physiology*, 1979, 236, R75–R82.
- Bullivant, S. B., Sellergren, S. A., Stern, K., Spencer, N. A., et al. Women's sexual experience during the menstrual cycle: Identification of the sexual phase by noninvasive measurement of luteinizing hormone. *Journal of Sex Research*, 2004, 41, 82–93.
- Bunyard, L. B., Katzell, L. I., Busby-Whitehead, M. J., Wu, Z., and Goldberg, A. P. Energy requirements of middle-aged men are modifiable by physical activity. *American Journal of Clinical Nutrition*, 1998, 68, 1136–1142.
- Burt, R. K., Loh, Y., Cohen, B., et al. Autologous non-myeloablative haemopoietic stem cell transplantation in relapsing-remitting multiple sclerosis: A phase I/II study. *Lancet Neurology*, 2009, 8, 244–253.
- Busskamp, V., Duebel, J., Balya, D., et al. Genetic reactivation of cone photoreceptors restores visual responses in retinitis pigmentosa. *Science*, 2010, 329, 413–417.
- Buxbaum, L. J., Glosser, G., and Coslett, H. B. Impaired face and word recognition without object agnosia. *Neuropsychologia*, 1999, 37, 41–50.
- Byne, W., Tobet, S., Mattiace, L. A., Lasco, M. S., et al. The interstitial nuclei of the human anterior hypothalamus: An investigation of variation with sex, sexual orientation, and HIV status. *Hormones and Behavior*, 2001, 40, 85–92.
- Cabanac, M., and Lafrance, L. Facial consummatory responses in rats support the ponderostat hypothesis. *Physiology and Behavior*, 1991, 50, 179–183.
- Cadet, J. L., Jayanthi, S., and Deng, X. Speed kills: Cellular and molecular bases of methamphetamine-induced nerve terminal degeneration and neuronal apoptosis. *FASEB Journal*, 2003, 17, 1775–1788.
- Caine, S. B., Heinrichs, S. C., Coffin, V. L., and Koob, G. F. Effects of the dopamine D-1 antagonist SCH 23390 microinjected into the accumbens, amygdala or striatum on cocaine self-administration in the rat. *Brain Research*, 1995, 692, 47–56.
- Caine, S. B., and Koob, G. F. Effects of mesolimbic dopamine depletion on responding maintained by cocaine and food. *Journal of the Experimental Analysis of Behavior*, 1994, 61, 213–221.
- Calder, A. J., Young, A. W., Rowland, D., Perrett, D. I., et al. Facial emotion recognition after bilateral amygdala damage: Differentially severe impairment of fear. *Cognitive Neuropsychology*, 1996, 13, 699–745.
- Campeau, S., Hayward, M. D., Hope, B. T., Rosen, J. B., Nestler, E. J., and Davis, M. Induction of the c-fos proto-oncogene in rat amygdala during unconditioned and conditioned fear. *Brain Research*, 1991, 565, 349–352.
- Camperio-Ciani, A., Corna, F., and Capiluppi, C. Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity. *Proceedings of the Royal Society of London B*, 2004, 271, 2217–2221.
- Campfield, L. A., Smith, F. J., Guisez, Y., Devos, R., and Burn, P. Recombinant mouse ob protein: Evidence for a peripheral signal linking adiposity and central neural networks. *Science*, 1995, 269, 546–549.
- Cannon, M., Jones, P., Gilvarry, C., et al. Premorbid social functioning in schizophrenia and bipolar disorder: Similarities and differences. *American Journal of Psychiatry*, 1997, 154, 1544–1550.
- Cannon, M., Jones, P. B., and Murray, R. M. Obstetric complications and schizophrenia: Historical and meta-analytic review. *American Journal of Psychiatry*, 2002, 159, 1080–1092.
- Cape, E. G., and Jones, B. E. Effects of glutamate agonist versus procaine microinjections into the basal forebrain cholinergic cell area upon gamma and theta EEG activity and sleep-wake state. *European Journal of Neuroscience*, 2000, 12, 2166–2184.
- Carleton, A., Accolla, R., and Simon, S. A. Coding in the mammalian gustatory system. *Trends in Neuroscience*, 2010, 33, 326–334.
- Carr, L., Iacoboni, M., Dubeau, M. C., Mazziotta, J. C., and Lenzi, G. L. Neural mechanisms of empathy in humans: A relay from neural systems for imitation to limbic areas. *Proceedings of the National Academy of Sciences, USA*, 2003, 100, 5497–5502.
- Carrera, M. R., Ashley, J. A., Parsons, L. H., Wirsching, P., et al. Suppression of psychoactive effects of cocaine by active immunization. *Nature*, 1995, 378, 727–730.
- Carroll, F. L., Blouch, B. E., Pidaparthi, R. R., et al. Synthesis of mercapto-(+)-methamphetamine haptens and their use for obtaining improved epitope density on (+)-methamphetamine conjugate vaccines. *Journal of Medical Chemistry*, 2011, 54, 5221–5228.
- Carroll, R. C., Lissin, D. V., von Zastrow, M., Nicolol, R. A., and Malenka, R. C. Rapid redistribution of glutamate receptors contributes to long-term depression in hippocampal cultures. *Nature Neuroscience*, 1999, 2, 454–460.
- Carter, C. S. Hormonal influences on human sexual behavior. In *Behavioral Endocrinology*, edited by J. B. Becker, S. M. Breedlove, and D. Crews. Cambridge, Mass.: MIT Press, 1992.
- Carter, M. E., Yizhar, O., Chikahisa, S., et al. Tuning arousal with optogenetic modulation of locus coeruleus neurons. *Nature Neuroscience*, 2010, 13, 1526–1533.
- Cartoni, C., Yasumatsu, K., Ohkuri, T., et al. Taste preference for fatty acids is mediated by GPR40 and GPR120. *Journal of Neuroscience*, 2010, 30, 8376–8382.
- Cash, S. S., Halgren, E., Dehghani, N., et al. The human K-complex represents an isolated cortical down-state. *Science*, 2009, 324, 1084–1087.

- Castelli, F., Frith, C., Happé, F., and Frith, U. Autism, Asperger syndrome and brain mechanisms for the attribution of mental states to animated shapes. *Brain*, 2002, 125, 1839–1849.
- Catani, M., Jones, D. K., and ffytche, D. H. Perisylvian language networks of the human brain. *Annals of Neurology*, 2005, 57, 8–16.
- Caterina, M. J., Leffler, A., Malmberg, A. B., Martin, W. J., et al. Impaired nociception and pain sensation in mice lacking the capsaicin receptor. *Science*, 2000, 288, 306–313.
- Cavaco, S., Anderson, S. W., Allen, J. S., Castro-Caldas, A., and Damasio, H. The scope of preserved procedural memory in amnesia. *Brain*, 2004, 127, 1863–1867.
- Cenci, M. A., Kalen, P., Mandel, R. J., and Bjoerklund, A. Regional differences in the regulation of dopamine and noradrenaline release in medial frontal cortex, nucleus accumbens and caudate-putamen: A microdialysis study in the rat. *Brain Research*, 1992, 581, 217–228.
- Cerletti, U., and Bini, L. Electric shock treatment. *Bollettino ed Atti della Accademia Medica di Roma*, 1938, 64, 36.
- Cerny, E. H., and Cerny, T. Vaccines against nicotine. *Human Vaccines*, 2009, 5, 200–205.
- Chan, J. L., Mun, E. C., Stoyneva, V., Mantzoros, C. S., and Goldfine, A. B. Peptide YY levels are elevated after gastric bypass surgery. *Obesity*, 2006, 14, 194–198.
- Chandler, L. J., Harris, R. A., and Crews, F. T. Ethanol tolerance and synaptic plasticity. *Trends in Pharmacological Science*, 1998, 19, 491–495.
- Changizi, M. A., Zhang, Q., Ye, H., and Shimojo, S. The structures of letters and symbols throughout human history are selected to match those found in objects in natural scenes. *American Naturalist*, 2006, 167, E117–E139.
- Chatterjee, S., and Callaway, E. M. Parallel colour-opponent pathways to primary visual cortex. *Nature*, 2003, 426, 668–671.
- Chemelli, R. M., Willie, J. T., Sinton, C. M., Elmquist, J. K., et al. Narcolepsy in orexin knockout mice: Molecular genetics of sleep regulation. *Cell*, 1999, 98, 437–451.
- Chen, A. J.-W., and D'Esposito, M. Traumatic brain injury: From bench to bedside to society. *Neuron*, 2010, 66, 11–14.
- Chen, G., Henter, I. D., and Manji, H. K. Presynaptic glutamatergic function in bipolar disorder. *Biological Psychiatry*, 2010, 67, 1007–1009.
- Chen, J., Paredes, W., Li, J., Smith, D., Lowinson, J., and Gardner, E. L. Delta9-tetrahydrocannabinol produces naloxone-blockable enhancement of presynaptic basal dopamine efflux in nucleus accumbens of conscious, freely moving rats as measured by intracerebral microdialysis. *Psychopharmacology*, 1990, 102, 156–162.
- Chen, Y. W., and Dilsaver, S. C. Lifetime rates of suicide attempts among subjects with bipolar and unipolar disorders relative to subjects with other axis I disorders. *Biological Psychiatry*, 1996, 39, 896–899.
- Cho, M. M., DeVries, A. C., Williams, J. R., and Carter, C. S. The effects of oxytocin and vasopressin on partner preferences in male and female prairie voles (*Microtus ochrogaster*). *Behavioral Neuroscience*, 1999, 113, 1071–1079.
- Chou, I.-H., and Narasimhan, K. Neurobiology of addiction. *Nature Neuroscience*, 2005, 8, 1427.
- Chou, T. C., Bjorkum, A. A., Gaus, S. E., Lu, J., Scammell, T. E., and Saper, C. B. Afferents to the ventrolateral preoptic nucleus. *Journal of Neuroscience*, 2002, 22, 977–990.
- Christensen, R., Kristensen, P. K., Bartels, E. M., et al. Efficacy and safety of the weight-loss drug rimona-bant: a meta-analysis of randomised trials. *Lancet*, 2007, 370, 1706–1713.
- Chubb, J. E., Bradshaw, N. J., Soares, D. C., Porteous, D. J., and Millar, J. K. The DISC locus in psychiatric illness. *Molecular Psychiatry*, 2008, 13, 36–64.
- Ciocchi, S., Herry, C., Grenier, F., et al. Encoding of conditioned fear in central amygdala inhibitory circuits. *Nature*, 2010, 468, 277–282.
- Clark, J. T., Kalra, P. S., Crowley, W. R., and Kalra, S. P. Neuropeptide Y and human pancreatic polypeptide stimulates feeding behavior in rats. *Endocrinology*, 1984, 115, 427–429.
- Cnattingius, S., Hultman, C. M., Dahl, M., and Sparen, P. Very preterm birth, birth trauma, and the risk of anorexia nervosa among girls. *Archives of General Psychiatry*, 1999, 56, 634–638.
- Cobb, S., and Rose, R. M. Hypertension, peptic ulcer, and diabetes in air traffic controllers. *Journal of the American Medical Association*, 1973, 224, 489–492.
- Coccaro, E. F., and Kavoussi, R. J. Fluoxetine and impulsive aggressive behavior in personality-disordered subjects. *Archives of General Psychiatry*, 1997, 54, 1081–1088.
- Cohen, C., Kodas, E., and Griebel, G. CB₁ receptor antagonists for the treatment of nicotine addiction. *Pharmacology, Biochemistry and Behavior*, 2005, 81, 387–395.
- Cohen, E. A. *Human Behavior in the Concentration Camp*. New York: W. W. Norton, 1953.
- Cohen, S., Tyrrell, D. A. J., and Smith, A. P. Psychological stress and susceptibility to the common cold. *New England Journal of Medicine*, 1991, 325, 606–612.
- Cohen-Bendahan, C. C., van de Beek, C., and Berenbaum, S. A. Prenatal sex hormone effects on child and adult sex-typed behavior: Methods and findings. *Neuroscience and Biobehavioral Reviews*, 2005, 29, 353–384.
- Colapinto, J. *As Nature Made Him: The Boy Who Was Raised as a Girl*. New York: HarperCollins, 2000.
- Cole, B. J., and Koob, G. F. Propranolol antagonizes the enhanced conditioned fear produced by corticotropin releasing factor. *Journal of Pharmacology and Experimental Therapeutics*, 1988, 247, 901–910.
- Cole, J. Empathy needs a face. *Journal of Consciousness Studies*, 2001, 8, 51–68.
- Collaborative Research Group. A novel gene containing a trinucleotide repeat that is expanded and unstable on Huntington's disease chromosomes. *Cell*, 1993, 72, 971–983.
- Connellan, J., Baron-Cohen, S., Wheelwright, S., Batki, A., et al. Sex differences in human neonatal social perception. *Infant Behavior and Development*, 2000, 23, 113–118.
- Conway, B. R., Moeller, S., and Tsao, D. Y. Specialized color modules in macaque extrastriate cortex. *Neuron*, 2007, 56, 560–573.
- Coolen, L. M. Neural control of ejaculation. *Journal of Comparative Neurology*, 2005, 493, 39–45.
- Coolen, L. M., Allard, J., Truitt, W. A., and McKenna, K. E. Central regulation of ejaculation. *Physiology and Behavior*, 2004, 83, 203–215.
- Coolen, L. M., and Wood, R. I. Testosterone stimulation of the medial preoptic area and medial amygdala in the control of male hamster sexual behavior: Redundancy without amplification. *Behavioural Brain Research*, 1999, 98, 143–153.
- Cooper, J. A. A mechanism for inside-out lamination in the neocortex. *Trends in Neurosciences*, 2008, 32, 113–119.
- Coover, G. D., Murison, R., and Jellestad, F. K. Subtotal lesions of the amygdala: The rostral central nucleus in passive avoidance and ulceration. *Physiology and Behavior*, 1992, 51, 795–803.
- Copeland, B. J., and Pillsbury, H. C. Cochlear implantation for the treatment of deafness. *Annual Review of Medicine*, 2004, 55, 157–167.
- Corkin, S., Amaral, D. G., González, R. G., Johnson, K. A., and Hyman, B. R. H. M.'s medial temporal lobe lesion: Findings from magnetic resonance imaging. *Journal of Neuroscience*, 1997, 17, 3964–3979.
- Corkin, S., Sullivan, E. V., Twitchell, T. E., and Grove, E. The amnesic patient H. M.: Clinical observations and test performance 28 years after operation. *Society for Neuroscience Abstracts*, 1981, 7, 235.
- Cossu, G., Ledent, C., Fattore, L., Imperato, A., et al. Cannabinoid CB₁ receptor knockout mice fail to self-administer morphine but not other drugs of abuse. *Behavioural Brain Research*, 2001, 118, 61–65.
- Cotman, C. W., Berchtold, N. C., and Christie, L.-A. Exercise builds brain health: Key roles of growth factor cascades and inflammation. *Trends in Neuroscience*, 2007, 30, 464–472.
- Cottingham, S. L., and Pfaff, D. Interconnectedness of steroid hormone-binding neurons: Existence and implications. *Current Topics in Neuroendocrinology*, 1986, 7, 223–249.
- Courchesne, E., Pierce, K., Schumann, C. M., Redcay, E., et al. Mapping early brain development in autism. *Neuron*, 2007, 56, 399–413.
- Courchesne, E., Redcay, E., Morgan, J. T., and Kennedy, D. P. Autism at the beginning: Microstructural and growth abnormalities underlying the cognitive and behavioral phenotype of autism. *Development and Psychopathology*, 2005, 17, 577–597.
- Court, J., Bergh, C., and Södersten, P. Mandometer treatment of Australian patients with eating disorders. *Medical Journal of Australia*, 2008, 288, 120–121.
- Covington, H. E., and Miczek, K. A. Repeated social-defeat stress, cocaine or morphine: Effects on behavioral sensitization and intravenous cocaine self-administration “binges.” *Psychopharmacology*, 2001, 158, 388–398.
- Cowley, M. A., Smith, R. G., Diano, S., Tschöp, M., et al. The distribution and mechanism of action of ghrelin in the CNS demonstrates a novel hypothalamic circuit regulating energy homeostasis. *Neuron*, 2003, 37, 649–661.
- Cox, A., Rutter, M., Newman, S., and Bartak, L. A comparative study of infantile autism and specific developmental language disorders. I: Parental characteristics. *British Journal of Psychiatry*, 1975, 126, 146–159.
- Cox, J. J., Reimann, F., Nicholas, A. K., Thornton, G., et al. An SCN9A channelopathy causes congenital inability to experience pain. *Nature*, 2006, 444, 894–898.

- Crane, G. E. Iproniazid (Marsilid) phosphate, a therapeutic agent for mental disorders and debilitating diseases. *Psychiatry Research Reports*, 1957, 8, 142–152.
- Creese, I., Burt, D. R., and Snyder, S. H. Dopamine receptor binding predicts clinical and pharmacological potencies of antischizophrenic drugs. *Science*, 1976, 192, 481–483.
- Crockett, M. J., Clark, L., Hauser, M. D., and Robbins, T. W. Serotonin selectively influences moral judgment and behavior through effects on harm aversion. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 17433–17438.
- Crow, T. J. How and why genetic linkage has not solved the problem of psychosis: Review and hypothesis. *American Journal of Psychiatry*, 2007, 164, 13–21.
- Cubelli, R. A selective deficit for writing vowels in acquired dysgraphia. *Nature*, 1991, 353, 258–260.
- Culham, J. C., and Kanwisher, N. Neuroimaging of cognitive functions in human parietal cortex. *Current Opinion in Neurobiology*, 2001, 11, 157–163.
- Culotta, E., and Koshland, D. E. NO news is good news. *Science*, 1992, 258, 1862–1865.
- Daban, C., Martinez-Aran, A., Cruz, N., and Vieta, E. Safety and efficacy of vagus nerve stimulation in treatment-resistant depression: A systematic review. *Journal of Affective Disorders*, 2008, 110, 1–15.
- Dai, S.-S., Zhou, Y.-G., Li, W., et al. Local glutamate level dictates adenosine A2A receptor regulation of neuroinflammation and traumatic brain injury. *Journal of Neuroscience*, 2010, 30, 5802–5810.
- Damasio, A. R., and Damasio, H. The anatomic basis of pure alexia. *Neurology*, 1983, 33, 1573–1583.
- Damasio, A. R., and Damasio, H. Hemianopia, hemiachromatopsia, and the mechanisms of alexia. *Cortex*, 1986, 22, 161–169.
- Damasio, A. R., Grabowski, T. J., Bechara, A., Damasio, H., et al. Subcortical and cortical brain activity during the feeling of self-generated emotions. *Nature Neuroscience*, 2000, 3, 1049–1056.
- Damasio, A. R., and Tranel, D. Nouns and verbs are retrieved with differentially distributed neural systems. *Proceedings of the National Academy of Sciences, USA*, 1993, 90, 4957–4960.
- Damasio, A. R., Yamada, T., Damasio, H., Corbett, J., and McKee, J. Central achromatopsia: Behavioral, anatomic, and physiologic aspects. *Neurology*, 1980, 30, 1064–1071.
- Damasio, H. Neuroimaging contributions to the understanding of aphasia. In *Handbook of Neuropsychology*, Vol. 2, edited by F. Boller and J. Grafman. Amsterdam: Elsevier, 1989.
- Damasio, H., and Damasio, A. R. The anatomical basis of conduction aphasia. *Brain*, 1980, 103, 337–350.
- Damasio, H., Eslinger, P., and Adams, H. P. Aphasia following basal ganglia lesions: New evidence. *Seminars in Neurology*, 1984, 4, 151–161.
- Damasio, H., Grabowski, T., Frank, R., Galaburda, A. M., and Damasio, A. R. The return of Phineas Gage: Clues about the brain from the skull of a famous patient. *Science*, 1994, 264, 1102–1105.
- Damsma, G., Day, J., and Fibiger, H. C. Lack of tolerance to nicotine-induced dopamine release in the nucleus accumbens. *European Journal of Pharmacology*, 1989, 168, 363–368.
- Dani, J. A., and Harris, R. A. Nicotine addiction and comorbidity with alcohol abuse and mental illness. *Nature Neuroscience*, 2005, 8, 1465–1470.
- Daniele, A., Giustolisi, L., Silveri, M. C., Colosimo, C., and Gainotti, G. Evidence for a possible neuroanatomical basis for lexical processing of nouns and verbs. *Neuropsychologia*, 1994, 32, 1325–1341.
- Daniels, D., Miselis, R. R., and Flanagan-Cato, L. M. Central neuronal circuit innervating the lordosis-producing muscles defined by transneuronal transport of pseudorabies virus. *Journal of Neuroscience*, 1999, 19, 2823–2833.
- Darwin, C. *The Expression of the Emotions in Man and Animals*. Chicago: University of Chicago Press, 1872/1965.
- Davidson, D., Swift, R., and Fitz, E. Naltrexone increases the latency to drink alcohol in social drinkers. *Alcoholism: Clinical and Experimental Research*, 1996, 20, 732–739.
- Davis, J. O., Phelps, J. A., and Bracha, H. S. Prenatal development of monozygotic twins and concordance for schizophrenia. *Schizophrenia Bulletin*, 1995, 21, 357–366.
- Davis, M. The role of the amygdala in fear-potentiated startle: Implications for animal models of anxiety. *Trends in Pharmacological Sciences*, 1992, 13, 35–41.
- Daw, N. W. Colour-coded ganglion cells in the goldfish retina: Extension of their receptive fields by means of new stimuli. *Journal of Physiology (London)*, 1968, 197, 567–592.
- Dawson, T. M., and Dawson, V. L. Molecular pathways of neurodegeneration in Parkinson's disease. *Science*, 2003, 302, 819–822.
- de Gelder, B. Towards the neurobiology of emotional body language. *Nature Reviews: Neuroscience*, 2006, 7, 242–249.
- De Jonge, F. H., Louwerse, A. L., Ooms, M. P., Evers, P., et al. Lesions of the SDN-POA inhibit sexual behavior of male Wistar rats. *Brain Research Bulletin*, 1989, 23, 483–492.
- de Kloet, E. R., Joëls, M., and Holsboer, F. Stress and the brain: From adaptation to disease. *Nature Reviews: Neuroscience*, 2005, 6, 463–475.
- De Ocampo, J., Foldvary, N., Dinner, D. S., and Golish, J. *Sleep Medicine*, 2002, 3, 525–526.
- de Ruiter, M. B., Oosterlaan, J., Veltman, D. J., et al. Similar hyposensitiveness of the dorsomedial prefrontal cortex in problem gamblers and heavy smokers during an inhibitory control task. *Drug and Alcohol Dependence*, 2011, Epub ahead of print.
- De Strooper, B. Aph-1, Pen-2, and nicastrin with presenilin generate an active γ -secretase complex. *Neuron*, 2003, 38, 9–12.
- De Valois, R. L., Albrecht, D. G., and Thorell, L. Cortical cells: Bar detectors or spatial frequency filters? In *Frontiers in Visual Science*, edited by S. J. Cool and E. L. Smith. Berlin: Springer-Verlag, 1978.
- De Valois, R. L., and De Valois, K. K. *Spatial Vision*. New York: Oxford University Press, 1988.
- De Vries, T. J., and Schoffelmeer, A. N. M. Cannabinoid CB₁ receptors control conditioned drug seeking. *Trends in Pharmacological Sciences*, 2005, 26, 420–426.
- Deacon, S., and Arendt, J. Adapting to phase shifts. I: An experimental model for jet lag and shift work. *Physiology and Behavior*, 1996, 59, 665–673.
- Dealberto, M. J. Why are immigrants at increased risk for psychosis? Vitamin D insufficiency, epigenetic mechanisms, or both? *Medical Hypotheses*, 2007, 68, 259–267.
- Dean, P. Effects of inferotemporal lesions on the behavior of monkeys. *Psychological Bulletin*, 1976, 83, 41–71.
- Debanne, D., Gähwiler, B. H., and Thompson, S. M. Asynchronous pre- and postsynaptic activity induces associative long-term depression in area CA1 of the rat hippocampus in vitro. *Proceedings of the National Academy of Sciences, USA*, 1994, 91, 1148–1152.
- Debiec, J., LeDoux, J. E., and Nader, K. Cellular and systems reconsolidation in the hippocampus. *Neuron*, 2002, 36, 527–538.
- Dehaene, S., Nakamura, K., Jobert, A., et al. Why do children make mirror errors in reading? Neural correlates of mirror invariance in the visual word form area. *NeuroImage*, 2010, 49, 1837–1848.
- Dejerine, J. Contribution à l'étude anatomopathologique et clinique des différentes variétés de cécité verbale. *Comptes Rendus des Séances de la Société de Biologie et de Ses Filiales*, 1892, 4, 61–90.
- Del Cerro, M. C. R., Izquierdo, M. A. P., Rosenblatt, J. S., Johnson, B. M., et al. Brain 2-deoxyglucose levels related to maternal behavior-inducing stimuli in the rat. *Brain Research*, 1995, 696, 213–220.
- Delgado, P. L., Charney, D. S., Price, L. H., Aghajanian, G. K., et al. Serotonin function and the mechanism of antidepressant action: Reversal of antidepressant induced remission by rapid depletion of plasma tryptophan. *Archives of General Psychiatry*, 1990, 47, 411–418.
- DeLoache, J. S., Uttal, D. H., and Rosengren, K. S. Scale errors offer evidence for a perception-action dissociation early in life. *Science*, 2004, 304, 1027–1029.
- DeLong, G. R. Autism: New data suggest a new hypothesis. *Neurology*, 1999, 52, 911–916.
- Dement, W. C. The effect of dream deprivation. *Science*, 1960, 131, 1705–1707.
- Démonet, J.-F., Taylor, M. J., and Chaux, Y. Developmental dyslexia. *Lancet*, 2004, 363, 1451–1460.
- Deol, M. S., and Gluecksohn-Waelsch, S. The role of inner hair cells in hearing. *Nature*, 1979, 278, 250–252.
- Derdikman, D., and Moser, E. I. A manifold of spatial maps in the brain. *Trends in Cognitive Science*, 2010, 14, 561–568.
- Déroutens, J., and Beauvois, M. F. Phonological processing in reading: Data from alexia. *Journal of Neurology, Neurosurgery, and Psychiatry*, 1979, 42, 1125–1132.
- Deutsch, J. A., and Gonzalez, M. F. Gastric nutrient content signals satiety. *Behavioral and Neural Biology*, 1980, 30, 113–116.
- Devane, W. A., Hanus, L., Breuer, A., Pertwee, R. G., et al. Isolation and structure of a brain constituent that binds to the cannabinoid receptor. *Science*, 1992, 258, 1946–1949.
- Devliss, D. M., and Berridge, C. W. Cognition-enhancing doses of methylphenidate preferentially increase prefrontal cortex neuronal responsiveness. *Biological Psychiatry*, 2008, 64, 626–635.
- Devine, D. P., and Wise, R. A. Self-administration of morphine, DAMGO, and DPDPE into the ventral tegmental area of rats. *Journal of Neuroscience*, 1994, 14, 1978–1984.

- Dhaka, A., Uzzell, V., Dubin, A. E., et al. TRPV1 is activated by both acidic and basic pH. *Journal of Neuroscience*, 2009, 29, 153–158.
- Di Chiara, G. The role of dopamine in drug abuse viewed from the perspective of its role in motivation. *Drug and Alcohol Dependency*, 1995, 38, 95–137.
- Di Marzo, V., and Matias, I. Endocannabinoid control of food intake and energy balance. *Nature Neuroscience*, 2005, 8, 585–589.
- di Tomaso, E., Beltramo, M., and Piomelli, D. Brain cannabinoids in chocolate. *Nature*, 1996, 382, 677–678.
- Diamond, M., and Sigmundson, H. K. Sex reassignment at birth: Long-term review and clinical implications. *Archives of Pediatric and Adolescent Medicine*, 1997, 151, 298–304.
- Diba, K., and Buzsáki, G. Forward and reverse hippocampal place-cell sequences during ripples. *Nature Neuroscience*, 2007, 10, 1241–1242.
- DiFiglia, M., Sena-Esteves, M., Chase, K., Sapp, E., et al. Therapeutic silencing of mutant huntingtin with siRNA attenuates striatal and cortical neuropathology and behavioral deficits. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 17204–17209.
- Dijk, D. J., Boulos, Z., Eastman, C. I., Lewy, A. J., Campbell, S. S., and Terman, M. Light treatment for sleep disorders: Consensus report. 2: Basic properties of circadian physiology and sleep regulation. *Journal of Biological Rhythms*, 1995, 10, 113–125.
- Doetsch, F., and Hen, R. Young and excitable: The function of new neurons in the adult mammalian brain. *Current Opinion in Neuroscience*, 2005, 15, 121–128.
- Döme, P., Kapitány, B., Ignits, G., and Rihmer, Z. Season of birth is significantly associated with the risk of completed suicide. *Biological Psychiatry*, 2010, 68, 148–155.
- Dominguez, J. M., Gil, M., and Hull, E. M. Preoptic glutamate facilitates male sexual behavior. *Journal of Neuroscience*, 2006, 26, 1699–1703.
- Donny, E. C., Caggiula, A. R., Knopf, S., and Brown, C. Nicotine self-administration in rats. *Psychopharmacology*, 1995, 122, 390–394.
- Dorries, K. M., Adkins, R. E., and Halpern, B. P. Sensitivity and behavioral responses to the pheromone androsteneone are not mediated by the vomeronasal organ in domestic pigs. *Brain, Behavior, and Evolution*, 1997, 49, 53–62.
- Doty, R. L. Olfaction. *Annual Review of Psychology*, 2001, 52, 423–452.
- Dougherty, D. D., Baie, L., Gosgrove, G. R., Cassem, E. H., et al. Prospective long-term follow-up of 44 patients who received cingulotomy for treatment-refractory obsessive-compulsive disorder. *American Journal of Psychiatry*, 2002, 159, 269–275.
- Douglass, J., McKinzie, A. A., and Couceyro, P. PCR differential display identifies a rat brain mRNA that is transcriptionally regulated by cocaine and amphetamine. *Journal of Neuroscience*, 1995, 15, 2471–2481.
- Downing, P. E., Jiang, Y., Shuman, M., Kanwisher, N. A cortical area selective for visual processing of the human body. *Science*, 2001, 293, 2470–2473.
- Drake, C. L., Roehrs, T., Richardson, G., Walsh, J. K., and Roth, T. Shift work sleep disorder: Prevalence and consequences beyond that of symptomatic day workers. *Sleep*, 2004, 27, 1453–1462.
- Dube, M. G., Kalra, S. P., and Kalra, P. S. Food intake elicited by central administration of orexins/hypocretins: Identification of hypothalamic sites of action. *Brain Research*, 1999, 842, 473–477.
- Duchenne, G.-B. *The Mechanism of Human Facial Expression*. Translated by R. A. Cuthbertson. Cambridge, England: Cambridge University Press, 1990. (Original work published 1862.)
- Dukelow, S. P., DeSouza, J. F., Culham, J. C., van den Berg, A. V., et al. Distinguishing subregions of the human MT+ complex using visual fields and pursuit eye movements. *Journal of Neurophysiology*, 2001, 86, 1991–2000.
- Dunn, A. L., Trivedi, M. H., Kampert, J. B., Clark, C. G., and Chambliss, H. O. Exercise treatment for depression: Efficacy and dose response. *American Journal of Preventive Medicine*, 2005, 28, 1–8.
- Dupret, D., O'Niell, J., Pleydell-Bouverie, B., and Csicsvari, J. The organization and reactivation of hippocampal maps predict spatial memory performance. *Nature Neuroscience*, 2010, 13, 995–1002.
- Durie, D. J. Sleep in animals. In *Psychopharmacology of Sleep*, edited by D. Wheatley. New York: Raven Press, 1981.
- Duvarci, S., Popa, D., and Paré, D. Central amygdala activity during fear conditioning. *Journal of Neuroscience*, 2011, 31, 289–294.
- Dwyer, C. *Lancet* retracts MMR paper after GMC finds Andrew Wakefield guilty of dishonesty. *British Medical Journal*, 2010, 340, c696.
- Eastman, C. I., Boulos, Z., Terman, M., et al. Light treatment for sleep disorders: Consensus report. VI. Shift work. *Journal of Biological Rhythms*, 1995, 10, 157–164.
- Eaton, W. W., Mortensen, P. B., and Frydenberg, M. Obstetric factors, urbanization and psychosis. *Schizophrenia Research*, 2000, 43, 117–123.
- Ebisawa, T., Uchiyama, M., Kajimura, N., Mishima, K., et al. Association of structural polymorphisms in the human *period3* gene with delayed sleep phase syndrome. *EMBO Reports*, 2001, 2, 342–346.
- Eden, G. F., and Zeffiro, T. A. Neural systems affected in developmental dyslexia revealed by functional neuroimaging. *Neuron*, 1998, 21, 279–282.
- Edwards, D. P., Purpura, K. P., and Kaplan, E. Contrast sensitivity and spatial-frequency response of primate cortical neurons in and around the cytochrome oxidase blobs. *Vision Research*, 1995, 35, 1501–1523.
- Egan, G., Silk, T., Zamarripa, F., Williams, J., et al. Neural correlates of the emergence of consciousness of thirst. *Proceedings of the National Academy of Sciences, USA*, 2003, 100, 15241–15246.
- Ehrsson, H. H., Spence, C., and Passingham, R. E. That's my hand! Activity in premotor cortex reflects feeling of ownership of a limb. *Science*, 2004, 305, 875–877.
- Ehrsson, H. H., Wiech, K., Weiskopf, N., Dolan, R. J., and Passingham, R. E. Threatening a rubber hand that you feel is yours elicits a cortical anxiety response. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 9828–9833.
- Eichenbaum, H., Otto, T., and Cohen, N. J. The hippocampus: What does it do? *Behavioral and Neural Biology*, 1992, 57, 2–36.
- Eichenbaum, H., Stewart, C., and Morris, R. G. M. Hippocampal representation in spatial learning. *Journal of Neuroscience*, 1990, 10, 331–339.
- Eisele, Y. S., Bolmont, T., Heikenwalder, M., et al. Induction of cerebral-amyloidosis: Intracerebral versus systemic A β inoculation. *Proceedings of the National Academy of Sciences, USA*, 2009, 106, 12926–12931.
- Ekman, P. *The Face of Man: Expressions of Universal Emotions in a New Guinea Village*. New York: Garland STPM Press, 1980.
- Ekman, P. Facial expressions of emotion: An old controversy and new findings. *Philosophical Transactions of the Royal Society of London B*, 1992, 335, 63–69.
- Ekman, P., and Davidson, R. J. Voluntary smiling changes regional brain activity. *Psychological Science*, 1993, 4, 342–345.
- Ekman, P., and Friesen, W. V. Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology*, 1971, 17, 124–129.
- Ekman, P., Levenson, R. W., and Friesen, W. V. Autonomic nervous system activity distinguished between emotions. *Science*, 1983, 221, 1208–1210.
- El Mansari, M., and Blier, P. In vivo electrophysiological characterization of 5-HT receptors in the guinea pig head of caudate nucleus and orbitofrontal cortex. *Neuropharmacology*, 1997, 36, 577–588.
- El Mansari, M., Sakai, K., and Jouvet, M. Unitary characteristics of presumptive cholinergic tegmental neurons during the sleep-waking cycle in freely moving cats. *Experimental Brain Research*, 1989, 76, 519–529.
- Elbert, T., Pantev, C., Wienbruch, C., Rockstroh, B., and Taub, E. Increased cortical representation of the fingers of the left hand in string players. *Science*, 1995, 270, 305–307.
- Elias, C. F., Saper, C. B., Maratos-Flier, E., Tritos, N. A., et al. Chemically defined projections linking the mediobasal hypothalamus and the lateral hypothalamic area. *Journal of Comparative Neurology*, 1998a, 402, 442–459.
- Elias, C. F., Lee, C., Kelly, J., Aschkenasi, C., et al. Leptin activates hypothalamic CART neurons projecting to the spinal cord. *Neuron*, 1998b, 21, 1375–1385.
- Elmqvist, J. K., Elias, C. F., and Saper, C. B. From lesions to leptin: Hypothalamic control of food intake and body weight. *Neuron*, 1999, 22, 221–232.
- Elsworth, J. D., Jentsch, J. D., Morrow, B. A., Redmond, D. E., and Roth, R. H. Clozapine normalizes prefrontal cortex dopamine transmission in monkeys subchronically exposed to phencyclidine. *Neuropsychopharmacology*, 2008, 33, 491–496.
- Endoh, M., Maiese, K., and Wagner, J. A. Expression of the neural form of nitric oxide synthase by CA1 hippocampal neurons and other central nervous system neurons. *Neuroscience*, 1994, 63, 679–689.
- Ersche, K. D., Barnes, A., Jones, P. S., et al. Abnormal structure of frontostriatal brain systems is associated with aspects of impulsivity and compulsivity in cocaine dependence. *Brain*, 2011, 134, 2013–2024.
- Eslinger, P. J., and Damasio, A. R. Severe disturbance of higher cognition after bilateral frontal lobe ablation: Patient EVR. *Neurology*, 1985, 35, 1731–1741.

- Esselink, R. A., de Bie, R. M., de Haan, R. J., et al. Longterm superiority of subthalamic nucleus stimulation over pallidotomy in Parkinson disease. *Neurology*, 2009, 73, 151–153.
- Farina, C., Weber, M. S., Meinl, E., Wekerle, H., and Hohlfeld, R. Glatiramer acetate in multiple sclerosis: Update on potential mechanisms of action. *Lancet Neurology*, 2005, 4, 567–575.
- Farlow, M., Murrell, J., Ghetti, B., Unverzagt, F., et al. Clinical characteristics in a kindred with early-onset Alzheimers-disease and their linkage to a G→T change at position-2149 of amyloid precursor protein gene. *Neurology*, 1994, 44, 105–111.
- Farooqi, I. S., and O'Rahilly, S. Monogenic obesity in humans. *Annual Review of Medicine*, 2005, 56, 443–458.
- Farrell, M. J., Egan, G. F., Zamarripa, F., Shade, R., et al. Unique, common, and interacting cortical correlates of thirst and pain. *Proceedings of the National Academy of Sciences, USA*, 2006, 103, 2416–2421.
- Feder, H. H. Estrous cyclicity in mammals. In *Neuroendocrinology of Reproduction*, edited by N. T. Adler. New York: Plenum Press, 1981.
- Feinle, C., Grundy, D., and Read, N. W. Effects of duodenal nutrients on sensory and motor responses of the human stomach to distension. *American Journal of Physiology*, 1997, 273, G721–G726.
- Fenoglio, K. A., Chen, Y., and Baram, T. Z. Neuroplasticity of the hypothalamic-pituitary-adrenal axis early in life requires recurrent recruitment of stress-regulation brain regions. *Journal of Neuroscience*, 2006, 26, 2434–2442.
- Fernandez-Ruiz, J., Wang, J., Aigner, T. G., and Mishkin, M. Visual habit formation in monkeys with neurotoxic lesions of the ventrocaudal neostriatum. *Proceedings of the National Academy of Sciences, USA*, 2001, 98, 4196–4201.
- Ferris, C. F., Kulkarni, P., Sullivan, J. M., Harder, J. A., et al. Pup suckling is more rewarding than cocaine: Evidence from functional magnetic resonance imaging and three-dimensional computational analysis. *Journal of Neuroscience*, 2005, 25, 149–156.
- Fettiplace, R., and Hackney, C. M. The sensory and motor roles of auditory hair cells. *Nature Reviews: Neuroscience*, 2006, 7, 19–29.
- Fibiger, H. C. The dopamine hypothesis of schizophrenia and mood disorders: Contradictions and speculations. In *The Mesolimbic Dopamine System: From Motivation to Action*, edited by P. Willner and J. Scheel-Krüger. Chichester, England: John Wiley & Sons, 1991.
- Field, T., Woodson, R., Greenberg, R., and Cohen, D. Discrimination and imitation of facial expressions in neonates. *Science*, 1982, 218, 179–181.
- Fieve, R. R. The clinical effects of lithium treatment. *Trends in Neurosciences*, 1979, 2, 66–68.
- Finger, S. *Origins of Neuroscience: A History of Explorations into Brain Function*. New York: Oxford University Press, 1994.
- Fisher, C., Gross, J., and Zuch, J. Cycle of penile erection synchronous with dreaming (REM) sleep: Preliminary report. *Archives of General Psychiatry*, 1965, 12, 29–45.
- Fisher, S. E. Genetic susceptibility to stuttering. *New England Journal of Medicine*, 2010, 362, 750–752.
- Fiske, A. P., and Haslam, N. Is obsessive-compulsive disorder a pathology of the human disposition to perform socially meaningful rituals? Evidence of similar content. *Journal of Nervous and Mental Disease*, 1997, 185, 211–222.
- Fitzgerald, P. Repetitive transcranial magnetic stimulation and electroconvulsive therapy: Complementary or competitive therapeutic options in depression? *Australas Psychiatry*, 2004, 12, 234–238.
- Fitzpatrick, D., Itoh, K., and Diamond, I. T. The laminar organization of the lateral geniculate body and the striate cortex in the squirrel monkey (*Saimiri sciureus*). *Journal of Neuroscience*, 1983, 3, 673–702.
- Flaum, M., and Andreasen, N. C. Diagnostic criteria for schizophrenia and related disorders: Options for DNS-IV. *Schizophrenia Bulletin*, 1990, 17, 27–49.
- Fleming, A. S., Corter, C., Stallings, J., and Steiner, M. Testosterone and prolactin are associated with emotional responses to infant cries in new fathers. *Hormones and Behavior*, 2002, 542, 399–413.
- Flier, J. S. What's in a name? In search of leptin's physiologic role. *Journal of Clinical Endocrinology and Metabolism*, 1998, 83, 1407–1413.
- Flock, A. Physiological properties of sensory hairs in the ear. In *Psychophysics and Physiology of Hearing*, edited by E. F. Evans and J. P. Wilson. London: Academic Press, 1977.
- Flores, R., Hirota, Y., Armstrong, B., et al. DISC1 regulates synaptic vesicle transport via a lithium-sensitive pathway. *Neuroscience Research*, 2011, 71, 71–77.
- Flynn, F. W., and Grill, H. J. Insulin elicits ingestion in decerebrate rats. *Science*, 1983, 221, 188–190.
- Fogel, S. M., and Smith, C. T. The function of the sleep spindle: A physiological index of intelligence and a mechanism for sleep-dependent memory consolidation. *Neuroscience and Biobehavioral Reviews*, 2011, 35, 1154–1165.
- Fombonne, E. Epidemiology of autistic disorder and other pervasive developmental disorders. *Journal of Clinical Psychiatry*, 2005, 66 (Suppl. 10), 3–8.
- Fontana, A., Gast, H., Reigh, W., et al. Narcolepsy: Autoimmunity, effector T cell activation due to infection, or T cell independent, major histocompatibility complex class II induced neuronal loss? *Brain*, 2010, 133, 1300–1311.
- Forget, B., Pushparaj, A., and Le Foll, B. Granular insular cortex inactivation as a novel therapeutic strategy for nicotine addiction. *Biological Psychiatry*, 2010, 68, 265–271.
- Forno, L. S. Neuropathology of Parkinson's disease. *Journal of Neuropathology and Experimental Neurology*, 1996, 55, 259–272.
- Fort, O., Bassetti, C. L., and Luppi, P. H. Alternating vigilance states: New insights regarding neuronal networks and mechanisms. *European Journal of Neuroscience*, 2009, 29, 1741–1753.
- Foundas, A. L., Bollich, A. M., Feldman, J., Corey, D. M., Hurley, M., Lemen, L. C., and Heilman, K. M. Aberrant auditory processing and atypical planum temporale in developmental stuttering. *Neurology*, 2004, 63, 1640–1646.
- Franklin, T. R., Acton, P. D., Maldjian, J. A., Gray, J. D., et al. Decreased gray matter concentration in the insular, orbitofrontal, cingulate, and temporal cortices of cocaine patients. *Biological Psychiatry*, 2002, 51, 134–142.
- Freed, C. R. Will embryonic stem cells be a useful source of dopamine neurons for transplant into patients with Parkinson's disease? *Proceedings of the National Academy of Sciences, USA*, 2002, 99, 1755–1757.
- Freedman, M. S., Lucas, R. J., Soni, B., von Schantz, M., Muñoz, M., David-Gray, Z., and Foster, R. Regulation of mammalian circadian behavior by non-rod, non-cone, ocular photoreceptors. *Science*, 1999, 284, 502–504.
- Freundl, A., and Csiba, L. Pharmacological and non-pharmacological recanalization strategies in acute ischemic stroke. *Frontiers in Neurology*, 2011, 2, 1–11.
- Frenette, E. REM sleep behavior disorder. *Medical Clinics of North America*, 2010, 94, 593–614.
- Frey, S. H., Vinton, D., Norlund, R., and Grafton, S. T. MRI Cortical topography of human anterior intraparietal cortex active during visually guided grasping. *Cognitive Brain Research*, 2005, 23, 397–405.
- Frey, U., Krug, M., Reymann, K. G., and Matthies, H. Anisomycin, an inhibitor of protein synthesis, blocks late phases of LTP phenomena in the hippocampal CA1 region in vitro. *Brain Research*, 1988, 452, 57–65.
- Fridriksson, F., Moss, J., Davis, B., et al. Motor speech perception modulates the cortical language areas. *NeuroImage*, 2008, 41, 605–613.
- Fried, I., Katz, A., McCarthy, G., Sass, K. J., et al. Functional organization of human supplementary motor cortex studied by electrical stimulation. *Journal of Neuroscience*, 1991, 11, 3656–3666.
- Friedman, M. I., and Bruno, J. P. Exchange of water during lactation. *Science*, 1976, 191, 409–410.
- Friedman, M. I., Horn, C. C., and Ji, H. Peripheral signals in the control of feeding behavior. *Chemical Senses*, 2005, 30 (Suppl. 1), i182–i183.
- Fry, J. M. Treatment modalities for narcolepsy. *Neurology*, 1998, 50, S43–S48.
- Fu, H. J., Liu, B., Frost, J. L., and Lemere, C. A. Amyloid-beta immunotherapy for Alzheimer's disease. *CNS and Neurological Disorders: Drug Targets*, 2010, 9, 197–206.
- Fukuwatari, T., Shibata, K., Igushi, K., Saeki, T., et al. Role of gustation in the recognition of oleate and triolein in anomic rats. *Physiology and Behavior*, 2003, 78, 579–583.
- Fullerton, C. S., Ursano, R. J., Epstein, R. S., Crowley, B., et al. Gender differences in posttraumatic stress disorder after motor vehicle accidents. *American Journal of Psychiatry*, 2001, 158, 1485–1491.
- Fulton, J. F. *Functional Localization in Relation to Frontal Lobotomy*. New York: Oxford University Press, 1949.
- Funkiewiez, A., Ardouin, C., Caputo, E., Krack, P., et al. Long term effects of bilateral subthalamic nucleus stimulation on cognitive function, mood, and behaviour in Parkinson's disease. *Journal of Neurology, Neurosurgery, and Psychiatry*, 2004, 75, 834–839.
- Gaillard, R., Naccache, L., Pinel, P., Clémenceau, S., et al. Direct intracranial, fMRI, and lesion evidence for the causal role of left inferotemporal cortex in reading. *Neuron*, 2006, 50, 191–204.
- Gajdusek, D. C. Unconventional viruses and the origin and disappearance of kuru. *Science*, 1977, 197, 943–960.
- Galen. *De Usu Partium*. Translated by M. T. May. Ithaca, New York: Cornell University Press, 1968.

- Gallassi, R., Morreale, A., Montagna, P., Cortelli, P., et al. Fatal familial insomnia: Behavioral and cognitive features. *Neurology*, 1996, 46, 935–939.
- Gallese, V., Fadiga, L., Fogassi, L., and Rizzolatti, G. Action recognition in the premotor cortex. *Brain*, 1996, 119, 593–609.
- Gangestad, S. W., and Thornhill, R. Human oestrus. *Proceedings of the Royal Society B*, 2008, 275, 991–1000.
- Garavan, H., and Stout, J. C. Neurocognitive insights into substance abuse. *Trends in Cognitive Sciences*, 2005, 9, 195–201.
- Garcia-Velasco, J., and Mondragon, M. The incidence of the vomeronasal organ in 1000 human subjects and its possible clinical significance. *Journal of Steroid Biochemistry and Molecular Biology*, 1991, 39, 561–563.
- Gardner, H., Brownell, H. H., Wapner, W., and Michelow, D. Missing the point: The role of the right hemisphere in the processing of complex linguistic materials. In *Cognitive Processing in the Right Hemisphere*, edited by E. Pericman. New York: Academic Press, 1983.
- Gariano, R. F., and Groves, P. M. Burst firing induced in midbrain dopamine neurons by stimulation of the medial prefrontal and anterior cingulate cortices. *Brain Research*, 1988, 462, 194–198.
- Garrido, L., Eisner, F., McGettigan, C., et al. Developmental phonagnosia: A selective deficit of vocal identity recognition. *Neuropsychology*, 2009, 47, 123–131.
- Gazzaniga, M. A. Forty-five years of split-brain research and still going strong. *Nature Reviews: Neuroscience*, 2005, 6, 653–659.
- Gazzaniga, M. S., and LeDoux, J. E. *The Integrated Mind*. New York: Plenum Press, 1978.
- Gentilucci, M. Grasp observation influences speech production. *European Journal of Neuroscience*, 2003, 17, 179–184.
- George, M. S., Parekh, P. I., Rosinsky, N., Ketter, T. A., et al. Understanding emotional prosody activates right hemisphere regions. *Archives of Neurology*, 1996, 53, 665–670.
- Gerashchenko, D., Blanco-Centurion, C., Greco, M. A., and Shiromani, P. J. Effects of lateral hypothalamic lesion with the neurotoxin hypocretin-2-saporin on sleep in Long-Evans rats. *Neuroscience*, 2003, 116, 223–235.
- Gerashchenko, D., Kohls, M. D., Greco, M., Waleh, N. S., et al. Hypocretin-2-saporin lesions of the lateral hypothalamus produce narcoleptic-like sleep behavior in the rat. *Journal of Neuroscience*, 2001, 21, 7273–7283.
- Gerbino, L., Oleshansky, M., and Gershon, S. Clinical use and mode of action of lithium. In *Psychopharmacology: A Generation of Progress*, edited by M. A. Lipton, A. DiMascio, and K. F. Killam. New York: Raven Press, 1978.
- Gerhand, S. Routes to reading: A report of a non-semantic reader with equivalent performance on regular and exception words. *Neuropsychologia*, 2001, 39, 1473–1484.
- Gershon, E. S., Bunney, W. E., Leckman, J., Van Eerdewegh, M., and DeBauche, B. The inheritance of affective disorders: A review of data and hypotheses. *Behavior Genetics*, 1976, 6, 227–261.
- Geschwind, N., Quadfasel, F. A., and Segarra, J. M. Isolation of the speech area. *Neuropsychologia*, 1968, 6, 327–340.
- Gessa, G. L., Muntoni, F., Collu, M., Vargiu, L., and Mereu, G. Low doses of ethanol activate dopaminergic neurons in the ventral tegmental area. *Brain Research*, 1985, 348, 201–204.
- Getchell, T. V., Kwong, K., Saunders, C. P., et al. Leptin regulates olfactory-mediated behavior in *ob/ob* mice. *Physiology and Behavior*, 2006, 87, 848–856.
- Getz, L. L., and Carter, C. S. Prairie-vole partnerships. *American Scientist*, 1996, 84, 55–62.
- Ghilardi, J. R., Röhrich, H., Lindsay, T. H., Sevcik, M. A., et al. Selective blockade of the capsaicin receptor TRPV1 attenuates bone cancer pain. *Journal of Neuroscience*, 2005, 25, 3126–3131.
- Giedd, J. N., Rapoport, J. L., Garvey, M. A., Perlmutter, S., and Swedo, S. E. MRI assessment of children with obsessive-compulsive disorder or tics associated with streptococcal infection. *American Journal of Psychiatry*, 2000, 157, 281–283.
- Giedd, J. N., Rapoport, J. L., Kruesi, M. J. P., Parker, C., et al. Sydenham's chorea: Magnetic resonance imaging of the basal ganglia. *Neurology*, 1995, 45, 2199–2202.
- Gillespie, P. G. Molecular machinery of auditory and vestibular transduction. *Current Opinion in Neurobiology*, 1995, 5, 449–455.
- Gillette, M. U., and McArthur, A. J. Circadian actions of melatonin at the suprachiasmatic nucleus. *Behavioural Brain Research*, 1995, 73, 135–139.
- Glaser, R., Rice, J., Sheridan, J., Post, A., et al. Stress-related immune suppression: Health implications. *Brain, Behavior, and Immunity*, 1987, 1, 7–20.
- Glaum, S. R., Hara, M., Bindokas, V. P., Lee, C. C., Polonsky, K. S., Bell, G. I., and Miller, R. J. Leptin, the obese gene product, rapidly modulates synaptic transmission in the hypothalamus. *Molecular Pharmacology*, 1996, 50, 230–235.
- Gloor, P., Olivier, A., Quesney, L. F., Andermann, F., and Horowitz, S. The role of the limbic system in experiential phenomena of temporal lobe epilepsy. *Annals of Neurology*, 1982, 12, 129–144.
- Goddard, G. V. Development of epileptic seizures through brain stimulation at low intensity. *Nature*, 1967, 214, 1020–1021.
- Godfrey, P. A., Malnic, B., and Buck, L. The mouse olfactory receptor gene family. *Proceedings of the National Academy of Sciences, USA*, 2004, 101, 2156–2161.
- Goeders, N. E., Lane, J. D., and Smith, J. E. Self-administration of methionine enkephalin into the nucleus accumbens. *Pharmacology, Biochemistry, and Behavior*, 1984, 20, 451–455.
- Goedert, M. Alpha-synuclein and neurodegenerative diseases. *Nature Review Neuroscience*, 2001, 2, 492–501.
- Golarai, G., Hong, S., Haas, B. W., et al. The fusiform face area is enlarged in Williams syndrome. *Journal of Neuroscience*, 2010, 30, 6700–6712.
- Goldberg, R. F., Perfetti, C. A., and Schneider, W. Perceptual knowledge retrieval activates sensory brain regions. *Journal of Neuroscience*, 2006, 26, 4917–4921.
- Goldman, D., Oroszi, G., and Ducci, F. The genetics of addictions: Uncovering the genes. *Nature Reviews Genetics*, 2005, 6, 521–532.
- Goldstein, J. M., Seidman, L. J., Horton, N. J., Makris, N., et al. Normal sexual dimorphism of the adult human brain assessed by *in vivo* magnetic resonance imaging. *Cerebral Cortex*, 2001, 11, 490–497.
- Golombek, D. A., and Rosenstein, R. E. Physiology of circadian entrainment. *Physiological Reviews*, 2010, 90, 1063–1102.
- Goodale, M. A., Meenan, J. P., Bühlhoff, H. H., Nicolle, D. A., et al. Separate neural pathways for the visual analysis of object shape in perception and prehension. *Current Biology*, 1994, 4, 604–610.
- Goodale, M. A., and Milner, A. D. Separate visual pathways for perception and action. *Trends in Neuroscience*, 1992, 15, 20–25.
- Goodale, M. A., and Westwood, D. A. An evolving view of duplex vision: Separate by interacting cortical pathways for perception and action. *Current Opinion in Neurobiology*, 2004, 14, 203–211.
- Goodglass, H., and Kaplan, E. *Assessment of Aphasia and Related Disorders*. Philadelphia: Lea & Febiger, 1972.
- Goodman, W. K., Foote, K. D., Greenberg, B. D., et al. Deep brain stimulation for intractable obsessive compulsive disorder: Pilot study using a blinded, staggered-onset design. *Biological Psychiatry*, 2010, 67, 535–542.
- Gooren, L. The biology of human psychosexual differentiation. *Hormones and Behavior*, 2006, 50, 589–601.
- Gordon, H. W., and Sperry, R. Lateralization of olfactory perception in the surgically separated hemispheres in man. *Neuropsychologia*, 1969, 7, 111–120.
- Gordon, I., Zagoory-Sharon, O., Leckman, J. F., and Feldman, R. Prolactin, oxytocin, and the development of paternal behavior across the first six months of fatherhood. *Hormones and Behavior*, 2010, 58, 513–518.
- Gorski, R. A., Gordon, J. H., Shryne, J. E., and Southam, A. M. Evidence for a morphological sex difference within the medial preoptic area of the rat brain. *Brain Research*, 1978, 148, 333–346.
- Gosselin, N., Peretz, I., Noulhiane, M., Hasboun, D., et al. Impaired recognition of scary music following unilateral temporal lobe excision. *Brain*, 2005, 128, 628–640.
- Gottesman, I. I., and Shields, J. *Schizophrenia: The Epigenetic Puzzle*. New York: Cambridge University Press, 1982.
- Gould, E., Beylin, A., Tanapat, P., Reeves, A., and Shors, T. J. Learning enhances adult neurogenesis in the hippocampal formation. *Nature Neuroscience*, 1999, 2, 260–265.
- Gouras, P. Identification of cone mechanisms in monkey ganglion cells. *Journal of Physiology*, 1968, 199, 533–538.
- Grafton, S. T., Waters, C., Sutton, J., Lew, M. F., and Couldwell, W. Pallidotomy increases activity of motor association cortex in Parkinson's disease: A positron emission tomographic study. *Annals of Neurology*, 1995, 37, 776–783.
- Grainger, J., Dufau, S., Montant, M., et al. Orthographic processing in baboons (*Papio papio*). *Science*, 2012, 336, 245–248.
- Graybiel, A. M. Basal ganglia: New therapeutic approaches to Parkinson's disease. *Current Biology*, 1996, 6, 368–371.
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., and Cohen, J. D. An fMRI investigation of emotional engagement in moral judgment. *Science*, 2001, 293, 2105–2108.
- Grelotti, D. J., Gauthier, I., and Schultz, R. T. Social interest and the development of cortical face

- specialization: What autism teaches us about face processing. *Developmental Psychobiology*, 2002, 40, 213–225.
- Grill, H. J., and Kaplan, J. M. Caudal brainstem participates in the distributed neural control of feeding. In *Handbook of Behavioral Neurobiology*, Vol. 10: *Neurobiology of Food and Fluid Intake*, edited by E. Stricker. New York: Plenum Press, 1990.
- Grill-Spector, K., Knouf, N., and Kanwisher, N. The fusiform face area subserves face perception, not generic within-category identification. *Nature Neuroscience*, 2004, 7, 555–561.
- Grill-Spector, K., and Malach, R. The human visual cortex. *Annual Review of Neuroscience*, 2004, 27, 649–677.
- Gross, C. G. Visual functions of inferotemporal cortex. In *Handbook of Sensory Physiology*, Vol. 7: *Central Processing of Visual Information*, edited by R. Jung. Berlin: Springer-Verlag, 1973.
- Grossman, E. D., and Blake, R. Brain activity evoked by inverted and imagined biological motion. *Vision Research*, 2001, 41, 1475–1482.
- Grossman, E. D., Donnelly, M., Price, R., Pickens, D., et al. Brain areas involved in perception of biological motion. *Journal of Cognitive Neuroscience*, 2000, 12, 711–720.
- Groves, D. A., and Brown, V. J. Vagal nerve stimulation: A review of its applications and potential mechanisms that mediate its clinical effects. *Neuroscience and Biobehavioral Reviews*, 2005, 29, 493–500.
- Grunhaus, L., Shipley, J. E., Eiser, A., Pande, A. C., et al. Sleep-onset rapid eye movement after electroconvulsive therapy is more frequent in patients who respond less well to electroconvulsive therapy. *Biological Psychiatry*, 1997, 42, 191–200.
- Guastella, A. J., Einfeld, S. L., Gray, K. M., et al. Intranasal oxytocin improves emotion recognition for youth with autism spectrum disorders. *Biological Psychiatry*, 2010, 67, 692–694.
- Guehl, D., Benazzouz, A., Aouizerate, B., Cuny, E., et al. Neuronal correlates of obsessions in the caudate nucleus. *Biological Psychiatry*, 2008, 63, 557–562.
- Guilleminault, C., Wilson, R. A., and Dement, W. C. A study on cataplexy. *Archives of Neurology*, 1974, 31, 255–261.
- Gurd, J. M., and Marshall, J. C. Cognition: Righting reading. *Current Biology*, 1993, 3, 593–595.
- Gutiérrez-Galve, L., Wheeler, C.A.M., Kingshott, C. A. M., Altmann, D. R., et al. Changes in the frontotemporal cortex and cognitive correlates in first-episode psychosis. *Biological Psychiatry*, 2010, 68, 51–60.
- Gutin, B., Owens, S., Okuyama, T., Riggs, S., Ferguson, M., et al. Effect of physical training and its cessation on percent fat and bone density of children with obesity. *Obesity Research*, 1999, 7, 208–214.
- Gvilia, I., Xu, F., McGinty, D., and Szymusiak, R. Homeostatic regulation of sleep: A role for preoptic area neurons. *Journal of Neuroscience*, 2006, 26, 9426–9433.
- Habib, M. The neurological basis of developmental dyslexia: An overview and working hypothesis. *Brain*, 2000, 123, 2373–2399.
- Hacke, W., Albers, G., Al-Rawi, Y., Bogousslavsky, J., et al. The desmoteplase in acute ischemic stroke trial (DIAS): A phase II MRI-based 9-hour window acute stroke thrombolysis trial with intravenous desmoteplase. *Stroke*, 2005, 36, 66–73.
- Hadjikhani, N., and de Gelder, B. Seeing fearful body expressions activates the fusiform cortex and amygdala. *Current Biology*, 2003, 13, 2201–2205.
- Hadjikhani, N., Liu, A. K., Dale, A. M., Cavanagh, P., and Tootell, R. B. H. Retinotopy and color sensitivity in human visual cortical area V8. *Nature Neuroscience*, 1998, 1, 235–241.
- Hadjipanayis, C. G., and Van Meir, E. G. Tumor initiating cells in malignant gliomas: Biology and implications for therapy. *Journal of Molecular Medicine*, 2009, 87, 363–374.
- Hague, S. M., Klaffke, S., and Bandmann, O. Neurodegenerative disorders: Parkinson's disease and Huntington's disease. *Journal of Neurology, Neurosurgery, and Psychiatry*, 2005, 76, 1058–1063.
- Hahn, T. M., Breininger, J. F., Baskin, D. G., and Schwartz, M. W. Coexpression of AgRP and NPY in fasting-activated hypothalamic neurons. *Nature Neuroscience*, 1998, 1, 271–272.
- Hahn, J., Hopf, F. W., and Bonci, A. Chronic cocaine enhances corticotropin-releasing factor-dependent potentiation of excitatory transmission in ventral tegmental area dopamine neurons. *Journal of Neuroscience*, 2009, 29, 6535–6544.
- Hainer, V., Stunkard, A., Kunesova, M., Parizkova, J., Stich, V., and Allison, D. B. A twin study of weight loss and metabolic efficiency. *International Journal of Obesity and Related Metabolic Disorders*, 2001, 25, 533–537.
- Hajak, G., Clarenbach, P., Fischer, W., Haase, W., et al. Effects of hypnotics on sleep quality and daytime well-being: Data from a comparative multicentre study in outpatients with insomnia. *European Psychiatry*, 1995, 10 (Suppl. 3), 173S–179S.
- Halaas, J. L., Gajiwala, K. D., Maffei, M., Cohen, S. L., et al. Weight-reducing effects of the plasma protein encoded by the obese gene. *Science*, 1995, 269, 543–546.
- Halassa, M. M., Florian, C., Fellin, T., et al. Astrocytic modulation of sleep homeostasis and cognitive consequences of sleep loss. *Neuron*, 2009, 61, 213–219.
- Halgren, E., Walter, R. D., Cherlow, D. G., and Crandall, P. E. Mental phenomena evoked by electrical stimulation of the human hippocampal formation and amygdala. *Brain*, 1978, 101, 83–117.
- Halpern, M. The organization and function of the vomeronasal system. *Annual Review of Neuroscience*, 1987, 10, 325–362.
- Hamet, P., and Tremblay, J. Genetics and genomics of depression. *Metabolism: Clinical and Experimental*, 2005, 54, 10–15.
- Hamilton, L. D., and Meston, C. M. The effects of partner togetherness on salivary testosterone in women in long distance relationships. *Hormones and Behavior*, 2010, 57, 198–202.
- Hanna, G. L., Veenstra-VanderWeele, J., Cox, N. J., et al. Genome-wide linkage analysis of families with obsessive-compulsive disorder ascertained through pediatric probands. *American Journal of Medical Genetics*, 2002, 114, 541–552.
- Hardy, J. Amyloid, the presenilins and Alzheimer's disease. *Trends in Neuroscience*, 1997, 4, 154–159.
- Harrison, Y., and Horne, J. A. Sleep loss impairs short and novel language tasks having a prefrontal focus. *Journal of Sleep Research*, 1998, 7, 95–100.
- Harrison, Y., and Horne, J. A. One night of sleep loss impairs innovative thinking and flexible decision-making. *Organizational Behavior and Human Decision Processes*, 1999, 78, 128–145.
- Hattar, S., Liao, H.-W., Takao, M., Berson, D. M., and Yau, K.-W. Melanopsin-containing retinal ganglion cells: Architecture, projections, and intrinsic photosensitivity. *Science*, 2002, 295, 1065–1070.
- Haubensak, W., Kunwar, P. S., Cai, H., et al. Genetic dissection of an amygdala microcircuit that gates conditioned fear. *Nature*, 2010, 468, 270–276.
- Haug, H.-J. Prediction of sleep deprivation outcome by diurnal variation of mood. *Biological Psychiatry*, 1992, 31, 271–278.
- Hauk, O., Johnsrude, I., and Pulvermüller, F. Somatotopic representation of action words in human motor and premotor cortex. *Neuron*, 2004, 41, 301–307.
- Hebb, D. O. *The Organization of Behaviour*. New York: Wiley-Interscience, 1949.
- Heckler, M. M. *Fifth Special Report to the U.S. Congress on Alcohol and Health*. Washington, D.C.: U.S. Government Printing Office, 1983.
- Heffner, H. E., and Heffner, R. S. Role of primate auditory cortex in hearing. In *Comparative Perception*, Vol. II: *Complex Signals*, edited by W. C. Stebbins and M. A. Berkley. New York: John Wiley & Sons, 1990.
- Hefzy, H., Silver, R. W., and Silver, B. The no smoking sign—Insular infarction. *Journal of Neuroimaging*, 2011, 213, 435–450.
- Heilman, K. M., Watson, R. T., and Bowers, D. Affective disorders associated with hemispheric disease. In *Neuropsychology of Human Emotion*, edited by K. M. Heilman and P. Satz. New York: Guilford Press, 1983.
- Heimer, L., and Larsson, K. Impairment of mating behavior in male rats following lesions in the preoptic-anterior hypothalamic continuum. *Brain Research*, 1966/1967, 3, 248–263.
- Heinrichs, S. C., Menzaghi, F., Pich, E. M., Baldwin, H. A., et al. Anti-stress action of a corticotropin-releasing factor antagonist on behavioral reactivity to stressors of varying type and intensity. *Neuropsychopharmacology*, 1994, 11, 179–186.
- Heinz, A., Reimold, M., Wrase, J., Hermann, D., et al. Correlation of stable elevations in striatal μ -opioid receptor availability in detoxified alcoholic patients with alcohol craving. *Archives of General Psychiatry*, 2005, 62, 57–64.
- Helenius, P., Uutela, K., and Hari, R. Auditory stream segregation in dyslexic adults. *Brain*, 1999, 122, 907–913.
- Hellhammer, D. H., Hubert, W., and Schurmeyer, T. Changes in saliva testosterone after psychological stimulation in men. *Psychoneuroendocrinology*, 1985, 10, 77–81.
- Helmuth, L. Dyslexia: Same brains, different languages. *Science*, 2001, 291, 2064–2065.
- Hendrickson, A. E., Wagoner, N., and Cowan, W. M. Autoradiographic and electron microscopic study of retino-hypothalamic connections. *Zeitschrift für Zellforschung und Mikroskopische Anatomie*, 1972, 125, 1–26.
- Hendry, S. H. C., and Yoshioka, T. A neurochemically distinct third channel in the caudate dorsal lateral geniculate nucleus. *Science*, 1994, 264, 575–577.
- Henke, P. G. The telencephalic limbic system and experimental gastric pathology: A review.

- Neuroscience and Biobehavioral Reviews*, 1982, 6, 381–390.
- Henningfield, J. E., Fant, R. V., Buchhalter, A. R., and Stitzer, M. L. Pharmacotherapy for nicotine dependence. *CA: A Cancer Journal for Clinicians*, 2005, 55, 281–299.
- Henry, M. L., Beeson, P. M., Stark, A. J., and Rapcsak, S. Z. The role of left perisylvian cortical regions in spelling. *Brain and Language*, 2007, 100, 44–52.
- Hetherington, A. W., and Ranson, S. W. Hypothalamic lesions and adiposity in the rat. *Anatomical Record*, 1942, 78, 149–172.
- Hettema, J. M., Neale, M. C., and Kendler, K. S. A review and meta-analysis of the genetic epidemiology of anxiety disorders. *American Journal of Psychiatry*, 2001, 158, 1568–1578.
- Heuser, J. E. Synaptic vesicle exocytosis revealed in quick-frozen frog neuromuscular junctions treated with 4-aminopyridine and given a single electrical shock. In *Society for Neuroscience Symposia, Vol. II*, edited by W. M. Cowan and J. A. Ferrendelli. Bethesda, Md.: Society for Neuroscience, 1977.
- Heuser, J. E., Reese, T. S., Dennis, M. J., et al. Synaptic vesicle exocytosis captured by quick freezing and correlated with quantal transmitter release. *Journal of Cell Biology*, 1979, 81, 275–300.
- Heywood, C. A., and Kentridge, R. W. Achromatopsia, color vision, and cortex. *Neurology Clinics of North America*, 2003, 21, 483–500.
- Hickok, G., Wilson, M., Clark, K., Klima, E. S., Kritchevsky, M., and Bellugi, U. Discourse deficits following right hemisphere damage in deaf signers. *Brain and Language*, 1999, 66, 233–248.
- Hicks, M. J., De, B. P., Rosenberg, J. B., et al. Cocaine analog coupled to disrupted adenovirus: A vaccine strategy to evoke high-titer immunity against addictive drugs. *Molecular Therapy*, 2011, 19, 612–619.
- Hill, J. O., Wyatt, H. R., Reed, G. W., and Peters, J. C. Obesity and the environment: Where do we go from here? *Science*, 2003, 299, 853–855.
- Hill, J. P., Hauptman, J., Anderson, J., Fujioka, K., et al. Orlistat, a lipase inhibitor, for weight maintenance after conventional dieting: A 1-year study. *American Journal of Clinical Nutrition*, 1999, 69, 1108–1116.
- Hobson, J. A. *The Dreaming Brain*. New York: Basic Books, 1988.
- Hochberg, L. R., Serruya, M. D., Friebs, G. M., Mukand, J. A., et al. Neuronal ensemble control of prosthetic devices by a human with tetraplegia. *Nature*, 2006, 442, 164–171.
- Hock, C., Konietzko, U., Streffer, J. R., Tracy, J., et al. Antibodies against β -amyloid slow cognitive decline in Alzheimer's disease. *Neuron*, 2003, 38, 547–554.
- Hodge, C. W., Haraguchi, M., Erickson, H., and Samson, H. H. Ventral tegmental microinjections of quinpirole decrease ethanol and sucrose-reinforced responding. *Alcohol: Clinical and Experimental Research*, 1993, 17, 370–375.
- Hoef, F., Meyler, A., Hernandez, A., Juel, C., Taylor-Hill, H., et al. Functional and morphometric brain dissociation between dyslexia and reading ability. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 4234–4239.
- Hohman, G. W. Some effects of spinal cord lesions on experienced emotional feelings. *Psychophysiology*, 1966, 3, 143–156.
- Holden, C. The violence of the lambs. *Science*, 2000, 289, 580–581.
- Hollander, E., Schiffman, E., Cohen, B., Rivera-Stein, M. A., et al. Signs of central nervous system dysfunction in obsessive-compulsive disorder. *Archives of General Psychiatry*, 1990, 47, 27–32.
- Hollander, J. A., Lu, Q., Cameron, M. D., et al. Insular hypocretin transmission regulates nicotine reward. *Proceedings of the National Academy of Sciences, USA*, 2008, 105, 19480–19485.
- Hollis, J. H., McKinley, M. J., D'Souza, M., Kampe, J., and Oldfield, B. J. The trajectory of sensory pathways from the lamina terminalis to the insular and cingulate cortex: A neuroanatomical framework for the generation of thirst. *American Journal of Physiology*, 2008, 294, R1390–R1401.
- Holstege, G., Georgiadis, J. R., Paans, A. M. J., Meiners, L. C., et al. Brain activation during human male ejaculation. *Journal of Neuroscience*, 2003a, 23, 9185–9193.
- Holstege, G., Reinders, A. A. T., Pannas, A. M. J., Meiners, L. C., et al. Brain activation during female sexual orgasm. Program No. 727.7. 2003 Abstract Viewer/Itinerary Planner. Washington, D.C.: Society for Neuroscience, 2003b.
- Holtzheimer, P. E., and Mayberg, H. S. Stuck in a rut: Rethinking depression and its treatment. *Trends in Neuroscience*, 2011, 94, 1–9.
- Hopf, H. C., Mueller-Forell, W., and Hopf, N. J. Localization of emotional and volitional facial paresis. *Neurology*, 1992, 42, 1918–1923.
- Hoppe, C. Controlling epilepsy. *Scientific American Mind*, 2006, 17, 62–67.
- Horne, J. A. A review of the biological effects of total sleep deprivation in man. *Biological Psychology*, 1978, 7, 55–102.
- Horowitz, R. M., and Gentili, B. Dihydrochalcone sweeteners. In *Symposium: Sweeteners*, edited by G. E. Inglett. Westport, Conn.: Avi Publishing, 1974.
- Horton, J. C., and Hubel, D. H. Cytochrome oxidase stain preferentially labels intersection of ocular dominance and vertical orientation columns in macaque striate cortex. *Society for Neuroscience Abstracts*, 1980, 6, 315.
- Houchi, H., Babovic, D., Pierrefiche, O., Ledent, C., et al. CB1 receptor knockout mice display reduced ethanol-induced conditioned place preference and increased striatal dopamine D2 receptors. *Neuropsychopharmacology*, 2005, 30, 339–340.
- Howard, J. D., Plailly, J., Grueschow, M., et al. Odor quality coding and categorization in human posterior piriform cortex. *Nature Neuroscience*, 2009, 12, 932–938.
- Howell, M. J., and Schenck, C. H. Treatment of nocturnal eating disorders. *Current Treatment Options in Neurology*, 2009, 11, 333–339.
- Howell, S., Westergaard, G., Hoos, B., Chavanne, T. J., et al. Serotonergic influences on life-history outcomes in free-ranging male rhesus macaques. *American Journal of Primatology*, 2007, 69, 851–865.
- Huang, H., Xu, Y., and van den Pol, A. N. Nicotine excites hypothalamic arcuate anorexigenic proopiomelanocortin neurons and orexigenic neuropeptide Y neurons: Similarities and differences. *Journal of Neurophysiology*, 2011, 106, 1191–1202.
- Hubel, D. H., and Wiesel, T. N. Functional architecture of macaque monkey visual cortex. *Proceedings of the Royal Society of London B*, 1977, 198, 1–59.
- Hubel, D. H., and Wiesel, T. N. Brain mechanisms of vision. *Scientific American*, 1979, 241, 150–162.
- Hublin, C. Narcolepsy: Current drug-treatment options. *CNS Drugs*, 1996, 5, 426–436.
- Hublin, C., Kaprio, J., Partinen, M., Heikkilä, K., and Koskenvuo, M. Prevalence and genetics of sleepwalking: A population-based twin study. *Neurology*, 1997, 48, 177–181.
- Hudspeth, A. J., and Gillespie, P. G. Pulling springs to tune transduction: Adaptation by hair cells. *Neuron*, 1994, 12, 1–9.
- Huestis, M. A., Gorelick, D. A., Heishman, S. J., Preston, K. L., et al. Blockade of effects of smoked marijuana by the CB1-selective cannabinoid receptor antagonist SR131716. *Archives of General Psychiatry*, 2001, 58, 322–328.
- Hughes, J., Smith, T. W., Kosterlitz, H. W., Fothergill, L. A., et al. Identification of two related pentapeptides from the brain with potent opiate agonist activity. *Nature*, 1975, 258, 577–579.
- Hull, E., and Dominguez, J. M. Sexual behavior in male rodents. *Hormones and Behavior*, 2007, 52, 45–55.
- Hulshoff-Pol, H. E., Schnack, H. G., Bertens, M. G., van Haren, N. E., et al. Volume changes in gray matter in patients with schizophrenia. *American Journal of Psychiatry*, 2002, 159, 244–250.
- Humphrey, A. L., and Hendrickson, A. E. Radial zones of high metabolic activity in squirrel monkey striate cortex. *Society for Neuroscience Abstracts*, 1980, 6, 315.
- Hungs, M., and Mignot, E. Hypocretin/orexin, sleep and narcolepsy. *Bioessays*, 2001, 23, 397–408.
- Hunt, D. M., Dulai, K. S., Cowing, J. A., Juliot, C., et al. Molecular evolution of trichromacy in primates. *Vision Research*, 1998, 38, 3299–3306.
- Hussey, E., and Safford, A. Perception of facial expression in somatosensory cortex supports simulationist models. *Journal of Neuroscience*, 2009, 29, 301–302.
- Hyman, S. E., and Malenka, R. C. Addiction and the brain: The neurobiology of compulsion and its persistence. *Nature Reviews: Neuroscience*, 2001, 2, 695–703.
- Iacoboni, M., Woods, R. P., Brass, M., Bekkering, H., Mazziotta, J. C., and Rizzolatti, G. Cortical mechanisms of human imitation. *Science*, 1999, 286, 2526–2528.
- Iaria, G., Petrides, M., Dagher, A., Pike, B., and Bohbot, V. D. Cognitive strategies dependent on the hippocampus and caudate nucleus in human navigation: Variability and change with practice. *Journal of Neuroscience*, 2003, 23, 5945–5952.
- Ibuka, N., and Kawamura, H. Loss of circadian rhythm in sleep-wakefulness cycle in the rat by suprachiasmatic nucleus lesions. *Brain Research*, 1975, 96, 76–81.
- Imperato, A., and Di Chiara, G. Preferential stimulation of dopamine-release in the accumbens of freely moving rats by ethanol. *Journal of Pharmacology and Experimental Therapeutics*, 1986, 239, 219–228.
- Insel, T. R. A neurobiological basis of social attachment. *American Journal of Psychiatry*, 1997, 154, 726–735.
- Insel, T. R., Wang, Z. X., and Ferris, C. F. Patterns of brain vasopressin receptor distribution associated

- with social organization in microtine rodents. *Journal of Neuroscience*, 1994, 14, 5381–5392.
- Shizuka, T., Murotani, T., and Yamatodani, A. Modafinil activates the histaminergic system through the orexinergic neurons. *Neuroscience Letters*, 2010, 483, 193–196.
- Iversen, L. Cannabis and the brain. *Brain*, 2003, 126, 1252–1270.
- Iwata, M. Kanji versus Kana: Neuropsychological correlates of the Japanese writing system. *Trends in Neurosciences*, 1984, 7, 290–293.
- Izard, C. E. *The Face of Emotion*. New York: Appleton-Century-Crofts, 1971.
- Jacob, S., and McClintock, M. K. Psychological state and mood effects of steroidal chemosignals in women and men. *Hormones and Behavior*, 2000, 37, 57–78.
- Jacobs, B. L., and McGinty, D. J. Participation of the amygdala in complex stimulus recognition and behavioral inhibition: Evidence from unit studies. *Brain Research*, 1972, 36, 431–436.
- Jacobs, G. H. Primate photopigments and primate color vision. *Proceedings of the National Academy of Sciences, USA*, 1996, 93, 577–581.
- Jacobsen, C. F., Wolfe, J. B., and Jackson, T. A. An experimental analysis of the functions of the frontal association areas in primates. *Journal of Nervous and Mental Disorders*, 1935, 82, 1–14.
- Jakobson, L. S., Archibald, Y. M., Carey, D., and Goodale, M. A. A kinematic analysis of reaching and grasping movements in a patient recovering from optic ataxia. *Neuropsychologia*, 1991, 29, 803–809.
- James, T. W., Culham, J., Humphrey, G. K., Milner, A. D., and Goodale, M. A. Ventral occipital lesions impair object recognition but not object-directed grasping: An fMRI study. *Brain*, 2003, 126, 2463–2475.
- James, W. What is an emotion? *Mind*, 1884, 9, 188–205.
- Jaramillo, F. Signal transduction in hair cells and its regulation by calcium. *Neuron*, 1995, 15, 1227–1230.
- Jaynes, J. The problem of animate motion in the seventeenth century. *Journal of the History of Ideas*, 1970, 6, 219–234.
- Jensen, T., Genefke, I., and Hyldebrandt, N. Cerebral atrophy in young torture victims. *New England Journal of Medicine*, 1982, 307, 1341.
- Jentsch, J. D., Redmond, D. E., Elsworth, J. D., Taylor, J. R., et al. Enduring cognitive deficits and cortical dopamine dysfunction in monkeys after long-term administration of phencyclidine. *Science*, 1997, 277, 953–955.
- Jeste, D. V., Del Carmen, R., Lohr, J. B., and Wyatt, R. J. Did schizophrenia exist before the eighteenth century? *Comprehensive Psychiatry*, 1985, 26, 493–503.
- Jo, Y.-H., Wiedl, D., and Role, L. W. Cholinergic modulation of appetite-related synapses in mouse lateral hypothalamic slice. *Journal of Neuroscience*, 2005, 25, 11133–11144.
- Jobard, G., Crivello, F., and Tzourio-Mazoyer, N. Evaluation of the dual route theory of reading: A metaanalysis of 35 neuroimaging studies. *NeuroImage*, 2003, 20, 693–712.
- Jobst, E. E., Enriori, P. J., and Cowley, M. A. The electrophysiology of feeding circuits. *Trends in Endocrinology and Metabolism*, 2004, 15, 488–499.
- Johansson, G. Visual perception of biological motion and a model for its analysis. *Perception and Psychophysics*, 1973, 14, 201–211.
- Johansson, R. S., and Flanagan, J. R. Coding and use of tactile signals from the fingertips in object manipulation tasks. *Nature Reviews Neuroscience*, 2009, 10, 345–359.
- Johnson, B. A., and Leon, M. Chemotopic odorant coding in a mammalian olfactory system. *Journal of Comparative Neurology*, 2007, 503, 1–34.
- Johnson, M. K., Kim, J. K., and Risse, G. Do alcoholic Korsakoff's syndrome patients acquire affective reactions? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 1985, 11, 22–36.
- Johnson, M. K., and Raye, C. L. False memories and confabulation. *Trends in Cognitive Sciences*, 1998, 2, 137–145.
- Jones, B. E. Influence of the brainstem reticular formation, including intrinsic monoaminergic and cholinergic neurons, on forebrain mechanisms of sleep and waking. In *The Diencephalon and Sleep*, edited by M. Mancina and G. Marini. New York: Raven Press, 1990.
- Jones, S. S., Collins, K., and Hong, H.-W. An audience effect on smile production in 10-month-old infants. *Psychological Science*, 1991, 2, 45–49.
- Jornales, V. E., Jakob, M., Zamani, A., and Vaina, L. M. Deficits on complex motion perception, spatial discrimination and eye movements in a patient with bilateral occipital-parietal lesions. *Investigative Ophthalmology and Visual Science*, 1997, 38, S72.
- Jouvet, M. The role of monoamines and acetylcholine-containing neurons in the regulation of the sleep-waking cycle. *Ergebnisse der Physiologie*, 1972, 64, 166–307.
- Jouvet-Mounier, D., Astic, L., and Lacote, D. Ontogenesis of the states of sleep in rat, cat, and guinea pig during the first postnatal month. *Developmental Psychobiology*, 1970, 2, 216–239.
- Kalin, N. H., Sherman, J. E., and Takahashi, L. K. Antagonism of endogenous CRG systems attenuates stress-induced freezing behavior in rats. *Brain Research*, 1988, 457, 130–135.
- Kalivas, P. W., Peters, J., and Knackstedt, L. Animal models and brain circuits in drug addiction. *Molecular Interventions*, 2006, 6, 339–344.
- Kane, M. D., Lipinski, W. J., Callahan, M. J., et al. Evidence for seeding of β -amyloid by intracerebral infusion of Alzheimer brain extracts in β -amyloid precursor protein-transgenic mice. *Journal of Neuroscience*, 2000, 20, 3606–3611.
- Kang, C., and Drayna, D. Genetics of speech and language disorders. *Annual Review of Genomics and Human Genetics*, 2011, 12, 145–164.
- Kanner, L. Autistic disturbances of affective contact. *The Nervous Child*, 1943, 2, 217–250.
- Kaplitt, M. G., Feigin, A., Tang, C., et al. Safety and tolerability of gene therapy with an adeno-associated virus (AAV) borne GAD gene for Parkinson's disease: An open label, phase I trial. *Lancet*, 2007, 369, 2097–2105.
- Kaptschuk, T. J., Friedlander, E., Kelley, J. M., et al. Placebos without deception: A randomized controlled trial in irritable bowel syndrome. *PLoS One*, 2010, 5, 215591.
- Karacan, I., Salis, P. J., and Williams, R. L. The role of the sleep laboratory in diagnosis and treatment of impotence. In *Sleep Disorders: Diagnosis and Treatment*, edited by R. J. Williams and I. Karacan. New York: John Wiley & Sons, 1978.
- Karacan, I., Williams, R. L., Finley, W. W., and Hirsch, C. J. The effects of naps on nocturnal sleep: Influence on the need for stage 1 REM and stage 4 sleep. *Biological Psychiatry*, 1970, 2, 391–399.
- Karlson, P., and Luscher, M. "Pheromones": A new term for a class of biologically active substances. *Nature*, 1959, 183, 55–56.
- Karlsson, M. P., and Frank, L. M. Awake replay of remote experiences in the hippocampus. *Nature Neuroscience*, 2009, 12, 913–918.
- Karnath, H.-O., Rüter, J., Mandler, A., and Himmelbach, M. The anatomy of object recognition—visual form agnosia caused by medial occipito-temporal stroke. *Journal of Neuroscience*, 2009, 29, 5854–5862.
- Katanoda, K., Yoshikawa, K., and Sugishita, M. A functional MRI study on the neural substrates for writing. *Human Brain Mapping*, 2001, 13, 34–42.
- Kauer, J. A., and Malenka, R. C. Synaptic plasticity and addiction. *Nature Reviews: Neuroscience*, 2007, 8, 844–858.
- Kawai, K., Sugimoto, K., Nakashima, K., et al. Leptin as a modulator of sweet taste sensitivities in mice. *Proceedings of the National Academy of Sciences, USA*, 2000, 97, 11044–11049.
- Kawauchi, H., Kawazoe, I., Tsubokawa, M., Kishida, M., and Baker, B. I. Characterization of melanin-concentrating hormone in chum salmon pituitaries. *Nature*, 1983, 305, 321–323.
- Kaye, W. H., Nagata, T., Weltzin, T. E., Hsu, G., et al. Double-blind placebo-controlled administration of fluoxetine in restricting- and restricting-purging-type anorexia nervosa. *Biological Psychiatry*, 2001, 49, 644–652.
- Kelso, S. R., Ganong, A. H., and Brown, T. H. Hebbian synapses in hippocampus. *Proceedings of the National Academy of Sciences, USA*, 1986, 83, 5326–5330.
- Kempermann, G., Wiskott, L., and Gage, F. H. Functional significance of adult neurogenesis. *Current Opinion in Neurobiology*, 2004, 13, 186–191.
- Kendell, R. E., and Adams, W. Unexplained fluctuations in the risk for schizophrenia by month and year of birth. *British Journal of Psychiatry*, 1991, 158, 758–763.
- Kendler, K. S., Jacobson, K. C., Prescott, C. A., and Neale, M. C. Specificity of genetic and environmental risk factors for use and abuse/dependence of cannabis, cocaine, hallucinogens, sedatives, stimulants, and opiates in male twins. *American Journal of Psychiatry*, 2003, 160, 687–695.
- Kertesz, A. Anatomy of jargon. In *Jargonaphasia*, edited by J. Brown. New York: Academic Press, 1981.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., et al. The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA*, 2003, 289, 3095–3105.
- Kety, S. S., Rosenthal, D., Wender, P. H., and Schulsinger, K. F. The types and prevalence of mental illness in the biological and adoptive families of adopted schizophrenics. In *The Transmission of Schizophrenia*, edited by D. Rosenthal and S. S. Kety. New York: Pergamon Press, 1968.

- Kety, S. S., Wender, P. H., Jacobsen, B., Ingraham, L. J., et al. Mental illness in the biological and adoptive relatives of schizophrenic adoptees: Replication of the Copenhagen Study in the rest of Denmark. *Archives of General Psychiatry*, 1994, 51, 442–455.
- Keys, A., Brozek, J., Henschel, A., Mickelsen, O., and Taylor, H. L. *The Biology of Human Starvation*. Minneapolis, Minn.: University of Minnesota Press, 1950.
- Khateb, A., Fort, P., Pegna, A., Jones, B. E., and Muhlethaler, M. Cholinergic nucleus basalis neurons are excited by histamine in vitro. *Neuroscience*, 1995, 69, 495–506.
- Kiecolt-Glaser, J. K., Loving, T. J., Stowell, J. R., et al. Hostile marital interactions, proinflammatory cytokine production, and wound healing. *Archives of General Psychiatry*, 2005, 62, 1377–1384.
- Kiecolt-Glaser, J. K., Marucha, P. T., Malarkey, W. B., Mercado, A. M., and Glaser, R. Slowing of wound healing by psychological stress. *Lancet*, 1995, 346, 1194–1196.
- Kihlstrom, J. F. Hypnosis. *Annual Review of Psychology*, 1985, 36, 385–418.
- Kim, J. Y., Duiyan, X., Liu, C. Y., et al. DISC1 regulates new neuron development in the adult brain via modulation of AKT-mTOR signaling through KIAA1212. *Neuron*, 2009, 63, 761–773.
- King, S., St-Hilaire, A., and Heidkamp, D. Prenatal factors in schizophrenia. *Current Directions in Psychological Science*, 2010, 19, 209–213.
- Kinnamon, S. C., and Cummings, T. A. Chemosensory transduction mechanisms in taste. *Annual Review of Physiology*, 1992, 54, 715–731.
- Kirkpatrick, B., Kim, J. W., and Insel, T. R. Limbic system for expression associated with paternal behavior. *Brain Research*, 1994, 658, 112–118.
- Kitada, T., Asakawa, S., Hattori, N., Matsumine, H., et al. Mutations in the parkin gene cause autosomal recessive juvenile parkinsonism. *Nature*, 1998, 392, 605–608.
- Kito, S., Hasegawa, T., and Koga, Y. Neuroanatomical correlates of therapeutic efficacy of low-frequency right prefrontal transcranial magnetic stimulation in treatment-resistant depression. *Psychiatry and Clinical Neuroscience*, 2011, 65, 175–182.
- Klaur, J., Zhao, Z., Klein, G. M., Lo, E. H., and Buchan, A. M. The neurotoxicity of tissue plasminogen activator? *Journal of Cerebral Blood Flow and Metabolism*, 2004, 24, 945–963.
- Klein, D. A., and Walsh, B. T. Eating disorders: Clinical features and pathophysiology. *Physiology and Behavior*, 2004, 81, 359–374.
- Klinge, C., Eippert, F., Röder, B., and Büchel, C. Corticocortical connections mediate primary visual cortex responses to auditory stimulation in the blind. *Journal of Neuroscience*, 2010, 30, 12798–12805.
- Klunk, W. E., Engler, H., Nordberg, A., Bacska, B. J., et al. Imaging the pathology of Alzheimer's disease: Amyloid-imaging with positron emission tomography. *Neuroimaging Clinics of North America*, 2003, 13, 781–789.
- Knebelmann, B., Boussin, L., Guerrier, D., Legeai, L., et al. Anti-Muellerian hormone Bruxelles: A nonsense mutation associated with the persistent Muellerian duct syndrome. *Proceedings of the National Academy of Sciences, USA*, 1991, 88, 3767–3771.
- Knecht, S., Dräger, B., Deppe, M., Bobe, L., et al. Handedness and hemispheric language dominance in healthy humans. *Brain*, 2000, 123, 2512–2518.
- Knutson, B., Adams, C. M., Fong, G. W., and Hommer, D. Anticipation of increasing monetary reward selectively recruits nucleus accumbens. *Journal of Neuroscience*, 2001, 21, RC159 (1–5).
- Knutson, B., and Adcock, R. A. Remembrance of rewards past. *Neuron*, 2005, 45, 331–332.
- Koenigs, M., Young, L., Adolphs, R., Tranel, D., et al. Damage to the prefrontal cortex increases utilitarian moral judgments. *Nature*, 2007, 446, 908–911.
- Kojima, M., Hosoda, H., Date, Y., Nakazato, M., et al. Ghrelin is a growth-hormone-releasing acylated peptide from stomach. *Nature*, 1999, 402, 656–660.
- Kolassa, I. T., Kolassa, S., Ertl, V., et al. The risk of posttraumatic stress disorder after trauma depends on traumatic load and the catechol-o-methyltransferase Val(158)Met polymorphism. *Biological Psychiatry*, 2010, 67, 304–308.
- Komisaruk, B. R., and Larsson, K. Suppression of a spinal and a cranial nerve reflex by vaginal or rectal probing in rats. *Brain Research*, 1971, 35, 231–235.
- Komisaruk, B. R., and Steinman, J. L. Genital stimulation as a trigger for neuroendocrine and behavioral control of reproduction. *Annals of the New York Academy of Sciences*, 1987, 474, 64–75.
- Kong, J., Shepel, N., Holden, C. P., Mackiewicz, M., et al. Brain glycogen decreases with increased periods of wakefulness: Implications for homeostatic drive to sleep. *Journal of Neuroscience*, 2002, 22, 5581–5587.
- Koob, G. F., Thatcher-Britton, K., Britton, D., Roberts, D. C. S., and Bloom, F. E. Destruction of the locus coeruleus or the dorsal NE bundle does not alter the release of punished responding by ethanol and chlordiazepoxide. *Physiology and Behavior*, 1984, 33, 479–485.
- Kordower, J. H., Dodiya, H. B., Kordower, A. M., et al. Transfer of host-derived alpha synuclein to grafter dopaminergic neurons in rat. *Neurobiology of Disease*, 2011, 43, 552–557.
- Koroshetz, W. J., and Moskowitz, M. A. Emerging treatments for stroke in humans. *Trends in Pharmacological Sciences*, 1996, 17, 227–233.
- Kortegaard, L. S., Hoerder, K., Joergensen, J., Gillberg, C., and Kyvik, K. O. A preliminary population-based twin study of self-reported eating disorder. *Psychological Medicine*, 2001, 31, 361–365.
- Kourtzi, A., and Kanwisher, N. Activation in human MT/MST by static images with implied motion. *Journal of Cognitive Neuroscience*, 2000, 12, 48–55.
- Kovács, G., Vogels, R., and Orban, G. A. Selectivity of macaque inferior temporal neurons for partially occluded shapes. *Journal of Neuroscience*, 1995, 15, 1984–1997.
- Koylu, E. O., Couceyro, P. R., Lambert, P. D., and Kuhar, M. J. Cocaine- and amphetamine-regulated transcript peptide immunohistochemical localization in the rat brain. *Journal of Comparative Neurology*, 1998, 391, 115–132.
- Kozlowski, L. T., and Cutting, J. E. Recognizing the sex of a walker from a dynamic point-light display. *Perception and Psychophysics*, 1977, 21, 575–580.
- Kramer, F. M., Jeffery, R. W., Forster, J. L., and Snell, M. K. Long-term follow-up of behavioral treatment for obesity: Patterns of weight regain among men and women. *International Journal of Obesity*, 1989, 13, 123–136.
- Kranzler, H. R., Modesto-Lowe, V., and Nuwayser, E. S. Sustained-release naltrexone for alcoholism treatment: A preliminary study. *Alcoholism: Clinical and Experimental Research*, 1998, 22, 1074–1079.
- Kraut, R. E., and Johnston, R. Social and emotional messages of smiling: An ethological approach. *Journal of Personality and Social Psychology*, 1979, 37, 1539–1553.
- Kress, M., and Zeilhofer, H. U. Capsaicin, protons and heat: New excitement about nociceptors. *Trends in Pharmacological Science*, 1999, 20, 112–118.
- Kristensen, P., Judge, M. E., Thim, L., Ribell, U., Christjansen, K. N., Wulff, B. S., et al. Hypothalamic CART is a new anorectic peptide regulated by leptin. *Nature*, 1998, 393, 72–76.
- Krolak-Salmon, P., Hénaff, M.-A., Vighetto, A., Bertrand, O., and Mauguère, F. Early amygdala reaction to fear spreading in occipital, temporal, and frontal cortex: A depth electrode ERP study in human. *Neuron*, 2004, 42, 665–676.
- Kuffler, S. W. Neurons in the retina: Organization, inhibition and excitation problems. *Cold Spring Harbor Symposium on Quantitative Biology*, 1952, 17, 281–292.
- Kuffler, S. W. Discharge patterns and functional organization of mammalian retina. *Journal of Neurophysiology*, 1953, 16, 37–68.
- Kunos, G., and Batkai, S. Novel physiologic functions of endocannabinoids as revealed through the use of mutant mice. *Neurochemical Research*, 2001, 26, 1015–1021.
- Kupfer, D. J. REM latency: A psychobiologic marker for primary depressive disease. *Biological Psychiatry*, 1976, 11, 159–174.
- Kurihara, K. Recent progress in taste receptor mechanisms. In *Umami: A Basic Taste*, edited by Y. Kawamura and M. R. Kare. New York: Dekker, 1987.
- Kuryatov, A., Berrettini, W., and Lindstrom, J. Acetylcholine receptor (AChR) $\alpha 5$ subunit variant associated with risk for nicotine dependence and lung cancer reduces ($\alpha 4\beta 2$) $\alpha 5$ AChR function. *Molecular Pharmacology*, 2011, 79, 119–125.
- LaBar, K. S., LeDoux, J. E., Spencer, D. D., and Phelps, E. A. Impaired fear conditioning following unilateral temporal lobectomy in humans. *Journal of Neuroscience*, 1995, 15, 6846–6855.
- Lahti, A. C., Weiler, M. A., Michaelidis, T., Parwani, A., and Tamminga, C. A. Effects of ketamine in normal and schizophrenic volunteers. *Neuropsychopharmacology*, 2001, 25, 455–467.
- Lai, E. C., Jankovic, J., Krauss, J. K., Ondo, W. G., and Grossman, R. G. Long-term efficacy of posteroven-tral pallidotomy in the treatment of Parkinson's disease. *Neurology*, 2000, 55, 1218–1222.
- Lai, Y.-Y., Kodama, T., Schenkel, E., and Siegel, J. M. Behavioral response and transmitter release during atonia elicited by medial medullary stimulation. *Journal of Neurophysiology*, 2010, 104, 2024–2033.
- Landsness, E. C., Goldstein, M. R., Peterson, M. J., et al. Antidepressant effects of selective slow wave sleep deprivation in major depression: A high-density EEG investigation. *Journal of Psychiatric Research*, 2011, 45, 1019–1026.

- Lange, C. G. *Über Gemüthsbewegungen*. Leipzig, Germany: T. Thomas, 1887.
- Langston, J. W., and Ballard, P. Parkinsonism induced by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP): Implications for treatment and the pathogenesis of Parkinson's disease. *Canadian Journal of Neurological Science*, 1984, 11 (1 Suppl.), 160–165.
- Langston, J. W., Ballard, P., Tetrud, J., and Irwin, I. Chronic parkinsonism in humans due to a product of meperidine-analog synthesis. *Science*, 1983, 219, 979–980.
- Larson, P. S. Deep brain stimulation for psychiatric disorders. *Neurotherapeutics*, 2008, 5, 50–58.
- Lavoie, B., and Parent, A. Immunohistochemical study of the serotonergic innervation of the basal ganglia in the squirrel monkey. *Journal of Comparative Neurology*, 1990, 299, 1–16.
- Lavond, D. G., Kim, J. J., and Thompson, R. F. Mammalian brain substrates of aversive classical conditioning. *Annual Review of Psychology*, 1993, 44, 317–342.
- Lê, S., Cardebat, D., Boulanouar, K., Hénaff, M. A., et al. Seeing, since childhood, without ventral stream: A behavioural study. *Brain*, 2002, 125, 58–74.
- Le Grand, R., Mondloch, C. J., Maurer, D., and Brent, H. P. Expert face processing requires visual input to the right hemisphere during infancy. *Nature Neuroscience*, 2003, 6, 1108–1112.
- Le Jeune, F., Vérin, M., N'Diaye, K., et al. Decrease of prefrontal metabolism after subthalamic stimulation in obsessive-compulsive disorder: A positron emission tomography study. *Biological Psychiatry*, 2010, 68, 1016–1022.
- LeDoux, J. E. Brain mechanisms of emotion and emotional learning. *Current Opinion in Neurobiology*, 1992, 2, 191–197.
- Lee, A. W., and Brown, R. E. Comparison of medial preoptic, amygdala, and nucleus accumbens lesions on parental behavior in California mice (*Peromyscus californicus*). *Physiology and Behavior*, 2007, 92, 617–628.
- Lee, M. S., Lee, H. Y., Lee, H. J., and Ryu, S. H. Serotonin transporter promoter gene polymorphism and long-term outcome of antidepressant treatment. *Psychiatric Genetics*, 2004, 14, 111–115.
- Lee, S. J., Desplats, P., Sigurdson, C., et al. Cell-to-cell transmission of non-prior protein aggregates. *Nature Reviews: Neuroscience*, 2010, 6, 702–706.
- Lee, S.-J., Lim, H.-S., Masliah, E., and Lee, H.-J. Protein aggregate spreading in neurodegenerative diseases: Problems and perspectives. *Neuroscience Research*, 2011, 70, 339–348.
- Lehman, M. N., Silver, R., Gladstone, W. R., Kahn, R. M., et al. Circadian rhythmicity restored by neural transplant: Immunocytochemical characterization with the host brain. *Journal of Neuroscience*, 1987, 7, 1626–1638.
- Leibenluft, E., Moul, D. E., Schwartz, P. J., et al. A clinical trial of sleep deprivation in combination with antidepressant medication. *Psychiatry Research*, 1993, 46, 213–227.
- Leonard, C. M., Rolls, E. T., Wilson, F. A. W., and Baylis, G. C. Neurons in the amygdala of the monkey with responses selective for faces. *Behavioral Brain Research*, 1985, 15, 159–176.
- Leonard, H. L., Lenane, M. C., Swedo, S. E., Rettew, D. C., Gershon, E. S., and Rapoport, J. L. Tics and Tourette's disorder: A 2- to 7-year follow-up of 54 obsessive-compulsive children. *American Journal of Psychiatry*, 1992a, 149, 1244–1251.
- Lesser, R. Selective preservation of oral spelling without semantics in a case of multi-infarct dementia. *Cortex*, 1989, 25, 239–250.
- LeVay, S. A difference in hypothalamic structure between heterosexual and homosexual men. *Science*, 1991, 253, 1034–1037.
- Levenson, R. W., Ekman, P., and Friesen, W. V. Voluntary facial action generates emotion-specific autonomic nervous system activity. *Psychophysiology*, 1990, 27, 363–384.
- Levy, R. M., and Bredeisen, D. E. Controversies in HIV-related central nervous system disease: Neuropsychological aspects of HIV-1 infection. In *AIDS Clinical Review 1989*, edited by P. Volberding, and M. A. Jacobson. New York: Marcel Dekker, 1989.
- Lewin, R. Big first scored with nerve diseases. *Science*, 1989, 245, 467–468.
- Lewis, D. A., and Smith, R. E. Steroid-induced psychiatric syndromes: A report of 14 cases and a review of the literature. *Journal of the Affective Disorders*, 1983, 5, 19–32.
- Lewis, M. B., and Bowler, P. J. Botulinum toxin cosmetic therapy correlates with a more positive mood. *Journal of Cosmetic Dermatology*, 2009, 8, 24–26.
- LeWitt, P. A., Rezaei, A. R., Leehey, M. A., et al. AAV2-GAD gene therapy for advanced Parkinson's disease: A double-blind, sham-surgery controlled, randomized trial. *Lancet Neurology*, 2011, 10, 309–319.
- Li, M. R., and Cheung, B. M. Rise and fall of anti-obesity drugs. *World Journal of Diabetes*, 2011, 15, 19–23.
- Li, S.-H., Lam, S., Cheng, A. L., and Li, X.-J. Intracranial huntingtin increases the expression of caspase-1 and induces apoptosis. *Human Molecular Genetics*, 2000, 9, 2859–2867.
- Li, X., Li, W., Wang, H., Cao, J., et al. Pseudogenization of a sweet-receptor gene accounts for cats' indifference toward sugar. *PLoS Genetics*, 2005, 1, 27–35.
- Lidberg, L., Asberg, M., and Sundqvist-Stensman, U. B. 5-Hydroxyindoleacetic acid levels in attempted suicides who have killed their children. *Lancet*, 1984, 2, 928.
- Lidberg, L., Tuck, J. R., Asberg, M., Scalia-Tomba, G. P., and Bertilsson, L. Homicide, suicide and CSF 5-HIAA. *Acta Psychiatrica Scandinavica*, 1985, 71, 230–236.
- Lieberman, J. A. Dopamine partial agonists: A new class of antipsychotic. *CNS Drugs*, 2004, 18, 251–267.
- Liepert, J., Bauder, H., Wolfgang, H. R., Miltner, W. H., et al. Treatment-induced cortical reorganization after stroke in humans. *Stroke*, 2000, 31, 1210–1216.
- Liljequist, S. The competitive NMDA receptor antagonist, CGP 39551, inhibits ethanol withdrawal seizures. *European Journal of Pharmacology*, 1991, 192, 197–198.
- Lim, M. M., and Young, L. F. Vasopressin-dependent neuronal circuits underlying pair bond formation in the monogamous prairie vole. *Neuroscience*, 2004, 125, 35–45.
- Lin, J. S., Sakai, K., and Jouvet, M. Evidence for histaminergic arousal mechanisms in the hypothalamus of cat. *Neuropharmacology*, 1998, 27, 111–122.
- Lin, L., Faraco, J., Li, R., Kadotani, H., et al. The sleep disorder canine narcolepsy is caused by a mutation in the hypocretin (orexin) receptor 2. *Cell*, 1999, 98, 365–376.
- Lindgren, A. C., Barkeling, B., Hägg, A., et al. Eating behavior in Prader-Willi syndrome, normal weight, and obese control groups. *Journal of Pediatrics*, 2000, 137, 50–55.
- Liu, C., Zhang, W.-T., Tang, Y.-Y., Mai, X.-Q., et al. The visual word form area: Evidence from an fMRI study of implicit processing of Chinese characters. *NeuroImage*, 2008, 40, 1350–1361.
- Livingstone, M. S., and Hubel, D. H. Anatomy and physiology of a color system in the primate visual cortex. *Journal of Neuroscience*, 1984, 4, 309–356.
- Livingstone, M. S., and Hubel, D. H. Psychophysical evidence for separate channels for the perception of form, color, movement, and depth. *Journal of Neuroscience*, 1987, 7, 3416–3468.
- Lledo, P. M., Hjelmstad, G. O., Mukherji, S., Soderling, T. R., et al. Calcium/calmodulin-dependent kinase II and long-term potentiation enhance synaptic transmission by the same mechanism. *Proceedings of the National Academy of Sciences, USA*, 1995, 92, 11175–11179.
- Löken, L. S., Wessberg, J., Morrison, I., McGlone, F., et al. Coding of pleasant touch by unmyelinated afferents in humans. *Nature Neuroscience*, 2009, 12, 547–548.
- Lomo, T. Frequency potentiation of excitatory synaptic activity in the dentate area of the hippocampal formation. *Acta Physiologica Scandinavica*, 1966, 68 (Suppl. 227), 128.
- Longcamp, M., Anton, J.-L., Roth, M., and Velay, J.-L. Premotor activations in response to visually presented single letters depend on the hand used to write: A study on left-handers. *Neuropsychologia*, 2005, 43, 1801–1809.
- Lozano, A. M., Mayberg, H. S., Giacobbe, P., Hamani, C., Craddock, R. C., and Kennedy, S. H. Subcallosal cingulate gyrus deep brain stimulation for treatment-resistant depression. *Biological Psychiatry*, 2008, 64, 461–467.
- Lu, J., Greco, M. A., Shiromani, P., and Saper, C. B. Effect of lesions of the ventrolateral preoptic nucleus on NREM and REM sleep. *Journal of Neuroscience*, 2000, 20, 3830–3842.
- Lu, J., Zhang, Y.-H., Chou, T. C., Gaus, S. E., et al. Contrasting effects of ibotenate lesions of the paraventricular nucleus and subparaventricular zone on sleep-wake cycle and temperature regulation. *Journal of Neuroscience*, 2001, 21, 4864–4874.
- Ludwig, D. S., Tritos, N. A., Mastaitis, J. W., Kulkarni, R., et al. Melanin-concentrating hormone overexpression in transgenic mice leads to obesity and insulin resistance. *Journal of Clinical Investigation*, 2001, 107, 379–386.
- Luigjes, J., van den Brink, W., Feenstra, M., et al. Deep brain stimulation in addiction: A review of potential brain targets. *Molecular Psychiatry*, 2011, Epub ahead of print.
- Luo, M., Fee, M. S., and Katz, L. C. Encoding pheromonal signals in the accessory olfactory bulb of behaving mice. *Science*, 2003, 299, 1196–1201.

- Lupien, S., Lecours, A. R., Schwartz, G., Sharma, S., Hauger, R. L., Meaney, M. J., and Nair, N. P. V. Longitudinal study of basal cortisol levels in healthy elderly subjects: Evidence for subgroups. *Neurobiology of Aging*, 1996, 17, 95–105.
- Lüscher, C., Xia, H., Beattie, E. C., Carroll, R. C., et al. Role of AMPA receptor cycling in synaptic transmission and plasticity. *Neuron*, 1999, 24, 649–658.
- Luzzi, S., Pucci, E., Di Bella, P., and Piccirilli, M. Topographical disorientation consequent to amnesia of spatial location in a patient with right parahippocampal damage. *Cortex*, 2000, 36, 427–434.
- Lynch, G., Larson, J., Kelso, S., Barrionuevo, G., and Schottler, F. Intracellular injections of EGTA block induction of long-term potentiation. *Nature*, 1984, 305, 719–721.
- Lytton, W. W., and Brust, J. C. M. Direct dyslexia: Preserved oral reading of real words in Wernicke's aphasia. *Brain*, 1989, 112, 583–594.
- Ma, W., Miao, Z., and Novotny, M. Induction of estrus in grouped female mice (*Mus domesticus*) by synthetic analogs of preputial gland constituents. *Chemical Senses*, 1999, 24, 289–293.
- Ma, X., Zubcevic, L., Brüning, J. C., Ashcroft, F. M., and Burdakov, D. Electrical inhibition of identified anorexigenic POMC neurons by orexin/hypocretin. *Journal of Neuroscience*, 2007, 27, 1529–1533.
- MacDonald, A. W., Carter, C. S., Kerns, J. G., Ursu, S., et al. Specificity of prefrontal dysfunction and context processing deficits to schizophrenia in never-medicated patients with first-episode psychosis. *American Journal of Psychiatry*, 2005, 162, 475–484.
- MacLean, H. E., Warne, G. L., and Zajac, J. D. Defects of androgen receptor function: From sex reversal to motor-neuron disease. *Molecular and Cellular Endocrinology*, 1995, 112, 133–141.
- MacLean, P. D. Psychosomatic disease and the “visceral brain”: Recent developments bearing on the Papez theory of emotion. *Psychosomatic Medicine*, 1949, 11, 338–353.
- MacSweeney, M., Capek, C. M., Campbell, R., and Woll, B. The signing brain: The neurobiology of sign language. *Trends in Cognitive Sciences*, 2008a, 12, 432–440.
- MacSweeney, M., Waters, D., Brammer, M. J., et al. Phonological processing in deaf signers and the impact of age of first language acquisition. *NeuroImage*, 2008b, 40, 1369–1379.
- Madden, P. A. F., Heath, A. C., Rosenthal, N. E., and Martin, N. G. Seasonal changes in mood and behavior: The role of genetic factors. *Archives of General Psychiatry*, 1996, 53, 47–55.
- Maggard, M. A., Shugarman, L. R., Suttorp, M., Maglione, M., et al. Meta-analysis: Surgical treatment of obesity. *Annals of Internal Medicine*, 2005, 142, 547–559.
- Maguire, E. A., Frackowiak, R. S. J., and Frith, C. D. Recalling routes around London: Activation of the right hippocampus in taxi drivers. *Journal of Neuroscience*, 1997, 17, 7103–7110.
- Maguire, E. A., Gadian, D. G., Johnsrude, I. S., Good, C. D., et al. Navigation-related structural change in the hippocampi of taxi drivers. *Proceedings of the National Academy of Sciences, USA*, 2000, 97, 4398–4403.
- Mahowald, M. W., and Schenck, C. H. Insights from studying human sleep disorders. *Nature*, 2005, 437, 1279–1285.
- Maj, M. Organic mental disorders in HIV-1 infection. *AIDS*, 1990, 4, 831–840.
- Mak, G. K., Enwere, E. K., Gregg, C., Pakarainen, T., et al. Male pheromone-stimulated neurogenesis in the adult female brain: Possible role in mating behavior. *Nature Neuroscience*, 2007, 10, 1003–1011.
- Makino, H., and Malinow, R. AMPA receptor incorporation into synapses during LTP: The role of lateral movement and exocytosis. *Neuron*, 2009, 64, 381–390.
- Málaga-Trillo, E., Solis, G. P., Schrock, Y., et al. Regulation of embryonic cell adhesion by the prion protein. *PLoS Biology*, 2009, 7, 0576_0590.
- Mallucci, G., Dickinson, A., Linehan, J., Klöhn, P. C., et al. Depleting neuronal PrP in prion infections prevents disease and reverses spongiosis. *Science*, 2003, 302, 871–874.
- Malnic, B., Godfrey, P. A., and Buck, L. B. The human olfactory receptor gene family. *Proceedings of the National Academy of Sciences, USA*, 2004, 101, 2584–2589.
- Malnic, B., Hirono, J., Sato, T., and Buck, L. B. Combinatorial receptor codes for odors. *Cell*, 1999, 96, 713–723.
- Malsbury, C. W. Facilitation of male rat copulatory behavior by electrical stimulation of the medial preoptic area. *Physiology and Behavior*, 1971, 7, 797–805.
- Mameli, M., Halbout, B., Creton, C., et al. Cocaine-evoked synaptic plasticity: Persistence in the VTA triggers adaptations in the NAC. *Nature Neuroscience*, 2009, 12, 1039–1041.
- Mancuso, K., Hauswirth, W. W., Li, Q., et al. Gene therapy for red-green colour blindness in adult primates. *Nature*, 2009, 461, 784–787.
- Manji, H. K., Moore, G. J., and Chen, G. Bipolar disorder: Leads from the molecular and cellular mechanisms of action of mood stabilisers. *British Journal of Psychiatry*, 2001, 178 (Suppl 41), S107–S109.
- Manley, R. S., O'Brien, K. M., and Samuels, S. Fitness instructors' recognition of eating disorders and attendant ethical/liability issues. *Eating Disorders*, 2008, 16, 103–116.
- Mantione, M., van de Brink, W., Schuurman, P. R., and Denys, D. Smoking cessation and weight loss after chronic deep brain stimulation of the nucleus accumbens: Therapeutic and research implications: Case report. *Neurosurgery*, 2010, 66, E218.
- Mao-Draayer, Y., and Panitch, H. Alexia without agraphia in multiple sclerosis: Case report with magnetic resonance imaging localization. *Multiple Sclerosis*, 2004, 10, 705–707.
- Maquet, P. Sleep function(s) and cerebral metabolism. *Behavioural Brain Research*, 1995, 69, 75–83.
- Maquet, P., Dive, D., Salmon, E., Sadzot, B., Branco, G., et al. Cerebral glucose utilization during sleep-wake cycle in man determined by positron emission tomography and [18F]2-fluoro-2-deoxy- δ -glucose method. *Brain Research*, 1990, 413, 136–143.
- Maret, G., Testa, B., Jenner, P., et al. The MPTP story: MAO activates tetrahydropyridine derivatives to toxins causing parkinsonism. *Drug Metabolism Review*, 1990, 22, 291–332.
- Margolin, D. I., and Goodman-Schulman, R. Oral and written spelling impairments. In *Cognitive Neuropsychology in Clinical Practice*, edited by D. I. Margolin. New York: Oxford University Press, 1992.
- Margolin, D. I., Marcel, A. J., and Carlson, N. R. Common mechanisms in dysnomia and post-semantic surface dyslexia: Processing deficits and selective attention. In *Surface Dyslexia: Neuropsychological and Cognitive Studies of Phonological Reading*, edited by M. Coltheart. London: Lawrence Erlbaum Associates, 1985.
- Margolin, D. I., and Walker, J. A. Personal communication, 1981.
- Margolskee, R. G., Dyer, J., Kokrashvili, Z., et al. TIR3 and gustducin in gut sense sugars to regulate expression of Na⁺-glucose cotransporter 1. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 15075–15080.
- Marrocco, R. T., Witte, E. A., and Davidson, M. C. Arousal systems. *Current Opinion in Neurobiology*, 1994, 4, 166–170.
- Marrosu, F., Portas, C., Mascia, M. S., Casu, M. A., et al. Microdialysis measurement of cortical and hippocampal acetylcholine release during sleep-wake cycle in freely moving cats. *Brain Research*, 1995, 671, 329–332.
- Marshall, L., and Born, J. The contribution of sleep to hippocampus-dependent memory consolidation. *Trends in Cognitive Science*, 2007, 11, 442–450.
- Marson, L., and McKenna, K. E. CNS cell groups involved in the control of the ischiocavernosus and bulbospongiosus muscles: A transneuronal tracing study using pseudorabies virus. *Journal of Comparative Neurology*, 1996, 374, 161–179.
- Martinez, M., Campion, D., Babron, M. C., and Clergetdarpous, F. Is a single mutation at the same locus responsible for all affected cases in a large Alzheimer pedigree (Fad4)? *Genetic Epidemiology*, 1993, 10, 431–435.
- Martins, I. J., Hone, E., Foster, J. K., Sünram-Lea, S. I., et al. Apolipoprotein E, cholesterol metabolism, diabetes, and the convergence of risk factors for Alzheimer's disease and cardiovascular disease. *Molecular Psychiatry*, 2006, 11, 721–736.
- Mas, M. Neurobiological correlates of masculine sexual behavior. *Neuroscience and Biobehavioral Reviews*, 1995, 19, 261–277.
- Masland, R. H. Neuronal diversity in the retina. *Current Opinion in Neurobiology*, 2001, 11, 431–436.
- Mathalon, D. H., Pfefferbaum, A., Lim, K. O., Rosenbloom, M. J., and Sullivan, E. V. Compounded brain volume deficits in schizophrenia-alcoholism comorbidity. *Archives of General Psychiatry*, 2003, 60, 245–252.
- Mathers, C. D., and Loncar, D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Medicine*, 2006, 3, e442.
- Mathis, C. A., Klunk, W. E., Price, J. C., and DeKosky, S. T. Imaging technology for neurodegenerative diseases. *Archives of Neurology*, 2005, 62, 196–200.
- Matsuda, L. A., Lolait, S. J., Brownstein, M. J., Young, A. C., and Bonner, T. I. Structure of a cannabinoid receptor and functional expression of the cloned cDNA. *Nature*, 1990, 346, 561–564.
- Matsumoto, D., and Willingham, B. Spontaneous facial expressions of emotion of congenitally and

- noncongenitally blind individuals. *Journal of Personality and Social Psychology*, 2009, 96, 1–10.
- Matsunami, H., Montmayeur, J.-P., and Buck, L. B. A family of candidate taste receptors in human and mouse. *Nature*, 2000, 404, 601–604.
- Mattson, M. P., Haughey, N. J., and Nath, A. Cell death in HIV dementia. *Cell Death and Differentiation*, 2005, 12, 893–904.
- Maviel, T., Durkin, T. P., Menzaghi, F., and Bontempi, B. Sites of neocortical reorganization critical for remote spatial memory. *Science*, 2004, 305, 96–99.
- Mayberg, H. S. Targeted electrode-based modulation of neural circuits for depression. *Journal of Clinical Investigation*, 2009, 119, 717–725.
- Mayberg, H. S., Lozano, A. M., Voon, V., McNeely, H. E., et al. Deep brain stimulation for treatment-resistant depression. *Neuron*, 2005, 45, 651–660.
- Mayers, A. G., and Baldwin, D. S. Antidepressants and their effect on sleep. *Human Psychopharmacology*, 2005, 20, 533–559.
- McCann, U. D., Wong, D. F., Yokoi, F., Villemagne, V., et al. Reduced striatal dopamine transporter density in abstinent methamphetamine and methcathinone users: Evidence from positron emission tomography studies with [¹¹C]WIN-35,428. *Journal of Neuroscience*, 1998, 18, 8417–8422.
- McCarley, R. W., and Hobson, J. A. The form of dreams and the biology of sleep. In *Handbook of Dreams: Research, Theory, and Applications*, edited by B. Wolman. New York: Van Nostrand Reinhold, 1979.
- McClintock, M. K. Menstrual synchrony and suppression. *Nature*, 1971, 229, 244–245.
- McClintock, M. K., and Adler, N. T. The role of the female during copulation in wild and domestic Norway rats (*Rattus norvegicus*). *Behaviour*, 1978, 67, 67–96.
- McCormick, D. A. Neurotransmitter actions in the thalamus and cerebral cortex. *Journal of Clinical Neurophysiology*, 1992, 9, 212–223.
- McEwen, B. S., and Sapolsky, R. M. Stress and cognitive function. *Current Biology*, 1995, 5, 205–216.
- McGrath, C. L., Glatt, S. J., Sklar, P., et al. Evidence for genetic association of *RORB* with bipolar disorder. *BMC Psychiatry*, 2009, 9, 70.
- McGregor, A., and Roberts, D. C. S. Dopaminergic antagonism within the nucleus accumbens or the amygdala produces differential effects on intravenous cocaine self-administration under fixed and progressive ratio schedules of reinforcement. *Brain Research*, 1993, 624, 245–252.
- Medcalf, R. Plasminogen activation-based thrombolysis for ischaemic stroke: The diversity of targets may demand new approaches. *Current Drug Targets*, 2011, Epub ahead of print.
- Mednick, S. A., Machon, R. A., and Huttunen, M. O. An update on the Helsinki influenza project. *Archives of General Psychiatry*, 1990, 47, 292.
- Mednick, S., Nakayama, K., and Stickgold, R. Sleep-dependent learning: A nap is as good as a night. *Nature Neuroscience*, 2003, 6, 697–698.
- Meeren, H. K., van Heijnsbergen, C. C., and de Gelder, B. Rapid perceptual integration of facial expression and emotional body language. *Proceedings of the National Academy of Sciences, USA*, 2005, 102, 16518–16523.
- Melzak, R. Phantom limbs. *Scientific American*, 1992, 266, 120–126.
- Menon, V., and Desmond, J. E. Left superior parietal cortex involvement in writing: Integrating fMRI with lesion evidence. *Cognitive Brain Research*, 2001, 12, 337–340.
- Meredith, M. Chronic recording of vomeronasal pump activation in awake behaving hamsters. *Physiology and Behavior*, 1994, 56, 345–354.
- Meredith, M., and O'Connell, R. J. Efferent control of stimulus access to the hamster vomeronasal organ. *Journal of Physiology*, 1979, 286, 301–316.
- Mereu, G., Yoon, K.-W. P., Boi, V., Gessa, G. L., et al. Preferential stimulation of ventral tegmental area dopaminergic neurons by nicotine. *European Journal of Pharmacology*, 1987, 141, 395–400.
- Merikangas, K. R., and Low, N. C. Genetic epidemiology of anxiety disorders. *Handbook of Experimental Pharmacology*, 2005, 169, 163–179.
- Mesulam, M.-M. Patterns in behavioral neuroanatomy: Association areas, the limbic system, and hemispheric specialization. In *Principles of Behavioral Neurology*, edited by M.-M. Mesulam. Philadelphia: F. A. Davis, 1985.
- Meyer, M., Alter, K., Friederici, A. D., Lohmann, G., and von Cramon, D. Y. fMRI reveals brain regions mediating slow prosodic modulations in spoken sentences. *Human Brain Mapping*, 2002, 17, 73–88.
- Meyer-Bahlburg, H. F. L. Psychoendocrine research on sexual orientation: Current status and future options. *Progress in Brain Research*, 1984, 63, 375–398.
- Meyer-Bahlburg, H. F. L. Gender identity outcome in female-raised 46, XY persons with penile agenesis, cloacal exstrophy of the bladder, or penile ablation. *Archives of Sexual Behavior*, 2005, 34, 423–438.
- Michel, L., Derkinderen, P., Laplaud, D., Dumas-Duport, B., et al. Emotional facial palsy following striato-capsular infarction. *Journal of Neurology, Neurosurgery, and Psychiatry*, 2008, 79, 193–194.
- Mignot, E. Genetic and familial aspects of narcolepsy. *Neurology*, 1998, 50, S16–S22.
- Migues, P. V., Hardt, O., Wu, D. C., et al. PKM ζ maintains memories by regulating GluR2-dependent AMPA receptor trafficking. *Nature Neuroscience*, 2010, 13, 630–634.
- Milani, P., Gagliardi, S., Cova, E., and Cereda, C. SOD1 transcriptional and posttranscriptional regulation and its potential implications in ALS. *Neurology Research International*, 2011, Epub ahead of print.
- Milevskiy, B. Y., Kiyashchenko, L. I., and Siegel, J. M. Behavioral correlates of activity in identified hypocretin/orexin neurons. *Neuron*, 2005, 46, 787–798.
- Miller, R. P., Roseweir, A. K., Tello, J. A., et al. Kisspeptin antagonists: Unraveling the role of kisspeptin in reproductive physiology. *Brain Research*, 2010, 1364, 81–89.
- Miller, G. Neurodegeneration: Could they all be prion diseases? *Science*, 2009, 326, 1337–1339.
- Miller, N. E. Understanding the use of animals in behavioral research: Some critical issues. *Annals of the New York Academy of Sciences*, 1983, 406, 113–118.
- Miller, R. G., Mitchell, J. D., Lyon, M., and Moore, D. H. Riluzole for amyotrophic lateral sclerosis (ALS)/motor neuron disease (MND). *Amyotrophic Lateral Sclerosis and Other Motor Neuron Disorders*, 2003, 4, 191–206.
- Milner, A. D., Perrett, D. I., Johnston, R. S., and Benson, P. J. Perception and action in “visual form agnosia.” *Brain*, 1991, 114, 405–428.
- Milner, B. Memory and the temporal regions of the brain. In *Biology of Memory*, edited by K. H. Pribram and D. E. Broadbent. New York: Academic Press, 1970.
- Milner, B., Corkin, S., and Teuber, H.-L. Further analysis of the hippocampal amnesic syndrome: 14-year follow-up study of H. M. *Neuropsychologia*, 1968, 6, 317–338.
- Mindus, P., Rasmussen, S. A., and Lindquist, C. Neurosurgical treatment for refractory obsessive-compulsive disorder: Implications for understanding frontal lobe function. *Journal of Neuropsychiatry and Clinical Neurosciences*, 1994, 6, 467–477.
- Mishkin, M. Visual mechanisms beyond the striate cortex. In *Frontiers in Physiological Psychology*, edited by R. W. Russell. New York: Academic Press, 1966.
- Mitchell, J. E. Psychopharmacology of eating disorders. *Annals of the New York Academy of Sciences*, 1989, 575, 41–49.
- Mitler, M. M. Evaluation of treatment with stimulants in narcolepsy. *Sleep*, 1994, 17, S103–S106.
- Mizuno, Y., Kondo, T., Kuno, S., et al. Early addition of Selegiline to L-DOPA treatment is beneficial for patients with Parkinson disease. *Clinical Neuropharmacology*, 2010, 33, 1–4.
- Modahl, C., Green, L., Fein, D., et al. Plasma oxytocin levels in autistic children. *Biological Psychiatry*, 1998, 43, 270–277.
- Moghaddam, B., and Bunney, B. S. Differential effect of cocaine on extracellular dopamine levels in rat medial prefrontal cortex and nucleus accumbens: Comparison to amphetamine. *Synapse*, 1989, 4, 156–161.
- Molko, N., Cohen, L., Mangin, J. F., et al. Visualizing the neural bases of a disconnection syndrome with diffusion tensor imaging. *Journal of Cognitive Neuroscience*, 2002, 14, 629–636.
- Mollon, J. D. “Tho’ she kneel’d in that place where they grew . . .”: The uses and origins of primate colour vision. *Journal of Experimental Biology*, 1989, 146, 21–38.
- Mombaerts, P. Molecular biology of odorant receptors in vertebrates. *Annual Review of Neuroscience*, 1999, 22, 487–510.
- Money, J., and Ehrhardt, A. *Man & Woman, Boy & Girl*. Baltimore: Johns Hopkins University Press, 1972.
- Monk, C. S., Telzer, E. H., Mogg, K., Bradley, B. P., et al. Amygdala and ventrolateral prefrontal cortex activation to masked angry faces in children and adolescents with generalized anxiety disorder. *Archives of General Psychiatry*, 2008, 65, 568–576.
- Monsonogo, A., and Weiner, H. L. Immunotherapeutic approaches to Alzheimer’s disease. *Science*, 2003, 302, 834–838.
- Montagna, P., Gambetti, P., Cortelli, P., and Lugaresi, E. Familial and sporadic fatal insomnia. *The Lancet Neurology*, 2003, 2, 167–176.
- Moore, D. J., West, A. B., Dawson, V. L., and Dawson, T. M. Molecular pathophysiology of Parkinson’s disease. *Annual Review of Neuroscience*, 2005, 28, 57–87.
- Moore, G. J., Bechuk, J. M., Wilds, I. B., Chen, G., and Manji, H. K. Lithium-induced increase in

- human brain grey matter. *Lancet*, 2000, 356, 1241–1242.
- Moore, R. Y., and Eichler, V. B. Loss of a circadian-adrenal corticosterone rhythm following suprachiasmatic lesions in the rat. *Brain Research*, 1972, 42, 201–206.
- Moore, R. Y., Speh, J. C., and Leak, R. K. Suprachiasmatic nucleus organization. *Cell Tissue Research*, 2002, 309, 89–98.
- Moran, T. H., Shnayder, L., Hostetler, A. M., and McHugh, P. R. Pylorotomy reduces the satiety action of cholecystokinin. *American Journal of Physiology*, 1989, 255, R1059–R1063.
- Moretto, G., Ládavas, E., Mattioli, F., and di Pellegrino, G. A psychophysiological investigation of moral judgment after ventromedial prefrontal damage. *Journal of Cognitive Neuroscience*, 2009, 22, 1888–1899.
- Morgan, C. J. A., Freeman, T. P., Schafer, G. L., and Curran, H. V. Cannabidiol attenuates the appetitive effects of Δ^9 -tetrahydrocannabinol in humans smoking their chosen cannabis. *Neuropsychopharmacology*, 2010, 35, 1879–1885.
- Morris, J. A., Gobrogge, K. L., Jordan, C. L., and Breedlove, S. M. Brain aromatase: Dyed-in-the-wool homosexuality. *Endocrinology*, 2004, 145, 475–477.
- Morris, J. S., Frith, C. D., Perrett, D. I., Rowland, D., et al. A differential neural response in the human amygdala to fearful and happy facial expressions. *Nature*, 1996, 383, 812–815.
- Morris, N. M., Udry, J. R., Khan-Dawood, F., and Dawood, M. Y. Marital sex frequency and midcycle female testosterone. *Archives of Sexual Behavior*, 1987, 16, 27–37.
- Morris, R. G. M., Garrud, P., Rawlins, J. N. P., and O'Keefe, J. Place navigation impaired in rats with hippocampal lesions. *Nature*, 1982, 297, 681–683.
- Moscovitch, M., and Olds, J. Asymmetries in emotional facial expressions and their possible relation to hemispheric specialization. *Neuropsychologia*, 1982, 20, 71–81.
- Mueser, K. T., and McGurk, S. R. Schizophrenia. *The Lancet*, 2004, 363, 2063–2072.
- Mukhametov, L. M. Sleep in marine mammals. In *Sleep Mechanisms*, edited by A. A. Borbély and J. L. Valatx. Munich: Springer-Verlag, 1984.
- Münch, C., and Bertolotti, A. Self-propagation and transmission of misfolded mutant SOD1: Prion or prion-like phenomenon? *Cell Cycle*, 2011, 10, 1711.
- Murray, S. O., Boyaci, H., and Kersten, D. The representation of perceived angular size in human primary visual cortex. *Nature Neuroscience*, 2006, 9, 429–434.
- Murre, J. M. J., Graham, K. S., and Hodges, J. R. Semantic dementia: Relevance to connectionist models of long-term memory. *Brain*, 2001, 124, 647–675.
- Nadeau, S. E. Impaired grammar with normal fluency and phonology. *Brain*, 1988, 111, 1111–1137.
- Nader, K. Memory traces unbound. *Trends in Neuroscience*, 2003, 26, 65–72.
- Naeser, M. A., Palumbo, C. L., Helm-Estabrooks, N., Stiassny-Eder, D., et al. Severe nonfluency in aphasia: Role of the medial subcallosal fasciculus and other white matter pathways in recovery of spontaneous speech. *Brain*, 1989, 112, 1–38.
- Nägerl, U. V., Köstinger, G., Anderson, J. C., Martin, K. A. C., and Bonhoeffer, T. Protracted synaptogenesis after activity-dependent synaptogenesis in hippocampal neurons. *Journal of Neuroscience*, 2007, 27, 8149–8156.
- Nakahara, D., Ozaki, N., Miura, Y., Miura, H., and Nagatsu, T. Increased dopamine and serotonin metabolism in rat nucleus accumbens produced by intracranial self-stimulation of medial forebrain bundle as measured by in vivo microdialysis. *Brain Research*, 1989, 495, 178–181.
- Nakazato, M., Mauakami, N., Date, Y., Kojima, M., et al. A role for ghrelin in the central regulation of feeding. *Nature*, 2001, 409, 194–198.
- Nambu, T., Sakurai, T., Mizukami, K., Hosoya, Y., et al. Distribution of orexin neurons in the adult rat brain. *Brain Research*, 1999, 827, 243–260.
- Naqvi, N. H., and Bechara, A. The airway sensory impact of nicotine contributes to the conditioned reinforcing effects of individual puffs from cigarettes. *Pharmacology, Biochemistry and Behavior*, 2005, 81, 821–829.
- Naqvi, N. H., Rudrauf, D., Damasio, H., and Bechara, A. Damage to the insula disrupts addiction to cigarette smoking. *Science*, 2007, 315, 531–534.
- Nathans, J. The evolution and physiology of human color vision: Insights from molecular genetic studies of visual pigments. *Neuron*, 1999, 24, 299–312.
- Navakkode, S., Sajikumar, S., Sacktor, T. C., and Frey, J. U. Protein kinase M ζ is essential for the induction and maintenance of dopamine-induced long-term potentiation in apical CA1 dendrites. *Learning and Memory*, 2010, 17, 605–611.
- Nazir, T. A., Jacobs, A. M., and O'Regan, J. K. Letter legibility and visual word recognition. *Memory and Cognition*, 1998, 26, 810–821.
- Nef, P., Hermansborgmeyer, I., Artierespin, H., Beasley, L., et al. Spatial pattern of receptor expression in the olfactory epithelium. *Proceedings of the National Academy of Sciences, USA*, 1992, 89, 8948–8952.
- Nergårdh, R., Ammar, A., Brodin, U., Bergström, J., Scheurink, A., et al. Neuropeptide Y facilitates activity-based anorexia. *Psychoneuroendocrinology*, 2007, 32, 493–502.
- Neumann, K., Preibisch, C., Euler, H. A., von Gudenberg, A. W., et al. Cortical plasticity associated with stuttering therapy. *Journal of Fluency Disorders*, 2005, 30, 23–39.
- New, A. S., Buchsbaum, M. S., Hazlett, E. A., Goodman, M., Koenigsberg, H. W., Lo, J., Iskander, L., Newmark, R., Brand, J., O'Flynn, K., and Siever, L. J. Fluoxetine increases relative metabolic rate in prefrontal cortex in impulsive aggression. *Psychopharmacology*, 2004, 176, 451–458.
- Newman, A. J., Supalla, T., Hauser, P. C., et al. Prosodic and narrative processing in American Sign Language: An fMRI study. *NeuroImage*, 2010, 52, 669–676.
- Nichelli, P., Grafman, J., Pietrini, P., Clark, K., et al. Where the brain appreciates the moral of a story. *NeuroReport*, 1995, 6, 2309–2313.
- Nicholl, C. S., and Russell, R. M. Analysis of animal rights literature reveals the underlying motives of the movement: Ammunition for counter offensive by scientists. *Endocrinology*, 1990, 127, 985–989.
- Nicoll, J. A. R., Wilkinson, D., Holmes, C., Steart, P., et al. Neuropathology of human Alzheimer disease after immunization with amyloid- β peptide: A case report. *Nature Medicine*, 2003, 9, 448–452.
- Nilius, B., Owsianik, G., Voets, T., and Peters, J. A. Transient receptor potential cation channels in disease. *Physiological Review*, 2007, 87, 165–217.
- NINDS. Tissue plasminogen activator for acute ischemic stroke. The National Institute of Neurological Disorders and Stroke RT-PA stroke study group. *New England Journal of Medicine*, 1995, 333, 1189–1191.
- Nishino, S. Clinical and neurobiological aspects of narcolepsy. *Sleep Medicine*, 2007, 8, 373–399.
- Nissant, A., Bardy, C., Katagiri, H., et al. Adult neurogenesis promotes synaptic plasticity in the olfactory bulb. *Nature Neuroscience*, 2009, 12, 728–730.
- Niwa, M., Kamiya, A., Murai, R., et al. Knockdown of DISC1 by in utero gene transfer disturbs postnatal dopaminergic maturation in the frontal cortex and leads to adult behavioral deficits. *Neuron*, 2010, 65, 480–489.
- Nobler, M. S., Oquendo, M. A., Kegeles, L. S., Malone, K. M., et al. Deceased regional brain metabolism after ECT. *American Journal of Psychiatry*, 2001, 158, 305–308.
- Norgren, R., and Grill, H. Brain-stem control of ingestive behavior. In *The Physiological Mechanisms of Motivation*, edited by D. W. Pfaff. New York: Springer-Verlag, 1982.
- Normandin, J., and Murphy, A. Z. Nucleus paragigantocellularis afferents in male and female rats: Organization, gonadal steroid receptor expression, and activation during sexual behavior. *Journal of Comparative Neurology*, 2008, 508, 771–794.
- Nothdurfter, C., Rammes, G., Baghai, T. C., et al. TSPO (18 kDa) as a target for novel anxiolytics with a favourable side-effect profile. *Journal of Neuroendocrinology*, 2011, Epub ahead of print.
- Novin, D., VanderWeele, D. A., and Rezek, M. Hepatic-portal 2-deoxy-d-glucose infusion causes eating: Evidence for peripheral glucoreceptors. *Science*, 1973, 181, 858–860.
- Novotny, M. V., Ma, W., Wiesler, D., and Zidek, L. Positive identification of the puberty-accelerating pheromone of the house mouse: The volatile ligands associating with the major urinary protein. *Proceedings of the Royal Society of London B*, 1999, 266, 2017–2022.
- Nugent, N. R., Amstadter, A. B., and Koenen, K. C. Genetics of post-traumatic stress disorder: Informing clinical conceptualizations and promoting future research. *American Journal of Medical Genetics Part C*, 2008, 148C, 127–132.
- Numan, M. Medial preoptic area and maternal behavior in the female rat. *Journal of Comparative and Physiological Psychology*, 1974, 87, 746–759.
- Numan, M., and Numan, M. J. Projection sites of medial preoptic area and ventral bed nucleus of the stria terminalis neurons that express Fos during maternal behavior in female rats. *Journal of Neuroendocrinology*, 1997, 9, 369–384.
- Numan, M., and Smith, H. G. Maternal behavior in rats: Evidence for the involvement of preoptic projections to the ventral tegmental area. *Behavioral Neuroscience*, 1984, 98, 712–727.
- Nutt, D. J., Glue, P., Lawson, C. W., and Wilson, S. Flumazenil provocation of panic attacks: Evidence for altered benzodiazepine receptor sensitivity in

- panic disorders. *Archives of General Psychiatry*, 1990, 47, 917–925.
- Oaknin, S., Rodriguez del Castillo, A., Guerra, M., Battaner, E., and Mas, M. Change in forebrain Na, K-ATPase activity and serum hormone levels during sexual behavior in male rats. *Physiology and Behavior*, 1989, 45, 407–410.
- Oberman, L. M., Winkelman, P., and Ramachandran, V. S. Face to face: Blocking facial mimicry can selectively impair recognition of emotional expressions. *Social Neuroscience*, 2007, 2, 167–178.
- Ober, L. K., and Gjerlow, K. *Language and the Brain*. Cambridge, England: Cambridge University Press, 1999.
- O'Brien, C. P., Volpicelli, L. A., and Volpicelli, J. R. Naltrexone in the treatment of alcoholism: A clinical review. *Alcohol*, 1996, 13, 35–39.
- Ockleford, E. M., Vince, M. A., Layton, C., and Reader, M. R. Responses of neonates to parents' and others' voices. *Early Human Development*, 1988, 18, 27–36.
- O'Connor, M., Walbridge, M., Sandson, T., and Alexander, M. A neuropsychological analysis of Capgras syndrome. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology*, 1996, 9, 265–271.
- Oertel, D., and Young, E. D. What's a cerebellar circuit doing in the auditory system? *Trends in Neuroscience*, 2004, 27, 104–110.
- Ogawa, S., Olazabal, U. E., Parhar, I. S., and Pfaff, D. W. Effects of intrahypothalamic administration of antisense DNA for progesterone receptor mRNA on reproductive behavior and progesterone receptor immunoreactivity in female rat. *Journal of Neuroscience*, 1994, 14, 1766–1774.
- Ogden, C. L., Carroll, M. D., and Flegal, K. M. Epidemiologic trends in overweight and obesity. *Endocrinology and Metabolism Clinics of North America*, 2003, 32, 741–760.
- O'Keefe, J., and Bouma, H. Complex sensory properties of certain amygdala units in the freely moving cat. *Experimental Neurology*, 1969, 23, 384–398.
- O'Keefe, J., and Dostrovsky, T. The hippocampus as a spatial map: Preliminary evidence from unit activity in the freely moving rat. *Brain Research*, 1971, 34, 171–175.
- Olanow, C. W., Goetz, C. G., Kordower, J. H., Stoessl, A. J., et al. A double-blind controlled trial of bilateral fetal nigral transplantation in Parkinson's disease. *Annals of Neurology*, 2003, 54, 403–414.
- Olausson, H., Lamarre, Y., Backlund, H., Morin, C., Wallin, B. G., Starck, G., Ekholm, S., Strigo, I., Worsley, K., Vallbo, Å. B., and Bushnell, M. C. Unmyelinated tactile afferents signal touch and project to insular cortex. *Nature Neuroscience*, 2002, 5, 900–904.
- Olds, J. Commentary. In *Brain Stimulation and Motivation*, edited by E. S. Valenstein. Glenview, Ill.: Scott, Foresman, 1973.
- Oleksenko, A. I., Mukhametov, L. M., Polyakova, I. G., Supin, A. Y., and Kovalzon, V. M. Unihemispheric sleep deprivation in bottlenose dolphins. *Journal of Sleep Research*, 1992, 1, 40–44.
- Olsson, A., Nearing, K. I., and Phelps, E. A. Learning fears by observing others: The neural systems of social fear transmission. *SCAN*, 2007, 2, 3–11.
- Olshewski, P. K., Fredriksson, R., Olshewski, A. M., et al. Hypothalamic FTO is associated with the regulation of energy intake not feeding reward. *BMC Neuroscience*, 2009, 10, 129.
- Omura, K., Tsukamoto, T., Kotani, Y., Ohgami, Y., and Yoshikawa, K. Neural correlates of phoneme-to-grapheme conversion. *Neuroreport*, 2004, 15, 949–953.
- Opitz, B., and Friederici, A. D. Interactions of the hippocampal system and the prefrontal cortex in learning language-like rules. *NeuroImage*, 2003, 19, 1730–1737.
- Opitz, B., and Friederici, A. D. Neural basis of processing sequential and hierarchical syntactic structures. *Human Brain Mapping*, 2007, 28, 585–592.
- Orzel-Gryglewska, J. Consequences of sleep deprivation. *International Journal of Occupational Medicine and Environmental Health*, 2010, 23, 95–114.
- Otsuki, M., Soma, Y., Arai, T., Otsuka, A., and Tsuji, S. Pure apraxic agraphia with abnormal writing stroke sequences: Report of a Japanese patient with a left superior parietal haemorrhage. *Journal of Neurology, Neurosurgery, and Psychiatry*, 1999, 66, 233–237.
- Overduin, J., Frayo, R. S., Grill, H. J., Kaplan, J. M., and Cummings, D. E. Role of the duodenum and macronutrient type in ghrelin regulation. *Endocrinology*, 2005, 146, 845–850.
- Ozonoff, S., Young, G. S., Carter, A., et al. Recurrence risk for autism spectrum disorders: A baby siblings research consortium study. *Pediatrics*, 2011, 238, e1–e8.
- Packard, M. G., and Teather, L. A. Double dissociation of hippocampal and dorsal-striatal memory systems by posttraining intracerebral injections of 2-amino-5-phosphonopentanoic acid. *Behavioral Neuroscience*, 1997, 111, 543–551.
- Padberg, F., and Moller, H. J. Repetitive transcranial magnetic stimulation: Does it have potential in the treatment of depression? *CNS Drugs*, 2003, 17, 383–403.
- Pallast, E. G. M., Jongbloet, P. H., Straatman, H. M., and Zeilhuis, G. A. Excess of seasonality of births among patients with schizophrenia and seasonal ovopathy. *Schizophrenia Bulletin*, 1994, 20, 269–276.
- Papadimitriou, G. N., Christodoulou, G. N., Katsouyanni, K., and Stefanis, C. N. Therapy and prevention of affective illness by total sleep deprivation. *Journal of the Affective Disorders*, 1993, 27, 107–116.
- Papez, J. W. A proposed mechanism of emotion. *Archives of Neurology and Psychiatry*, 1937, 38, 725–744.
- Paré, D., Quirk, G. J., and LeDoux, J. E. New vistas on amygdala networks in conditioned fear. *Journal of Neurophysiology*, 2004, 92, 1–9.
- Park, Y.-U., Jeong, J., Lee, H., et al. *Disrupted-in-schizophrenia 1* (DISC1) plays essential roles in mitochondria in collaboration with mitofilin. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 17785–17790.
- Pascoe, J. P., and Kapp, B. S. Electrophysiological characteristics of amygdaloid central nucleus neurons during Pavlovian fear conditioning in the rabbit. *Behavioural Brain Research*, 1985, 16, 117–133.
- Pasterski, V. L., Geffner, M. E., Brain, C., Hindmarsh, P., et al. Prenatal hormones and postnatal socialization by parents as determinants of male-typical toy play in girls with congenital adrenal hyperplasia. *Child Development*, 2005, 76, 264–278.
- Pattatucci, A. M. L., and Hamer, D. H. Development and familiarity of sexual orientation in females. *Behavior Genetics*, 1995, 25, 407–420.
- Paulesu, E., Démonet, J.-F., Fazio, F., McCrory, E., et al. Dyslexia: Cultural diversity and biological unity. *Science*, 2001, 291, 2165–2167.
- Paulus, M. P., Feinstein, J. S., Castillo, G., et al. Dose-dependent decrease of activation in bilateral amygdala and insula by lorazepam during emotion processing. *Archives of General Psychiatry*, 2005, 62, 282–288.
- Peck, B. K., and Vanderwolf, C. H. Effects of raphe stimulation on hippocampal and neocortical activity and behaviour. *Brain Research*, 1991, 568, 244–252.
- Pedersen-Bjergaard, U., Host, U., Kelbaek, H., Schifter, S., et al. Influence of meal composition on postprandial peripheral plasma concentrations of vasoactive peptides in man. *Scandinavian Journal of Clinical and Laboratory Investigation*, 1996, 56, 497–503.
- Peigneux, P., Laureys, S., Fuchs, S., Collette, F., et al. Are spatial memories strengthened in the human hippocampus during slow wave sleep? *Neuron*, 2004, 44, 535–545.
- Pelleymounter, M. A., Cullen, M. J., Baker, M. B., Hecht, R., et al. Effects of the obese gene product on body weight regulation in ob/ob mice. *Science*, 1995, 269, 540–543.
- Pelphrey, K. A., Morris, J. P., Michelich, C. R., Allison, T., and McCarthy, G. Functional anatomy of biological motion perception in posterior temporal cortex: An fMRI study of eye, mouth and hand movements. *Cerebral Cortex*, 2005, 15, 1866–1876.
- Penfield, W., and Perot, P. The brain's record of auditory and visual experience: A final summary and discussion. *Brain*, 1963, 86, 595–697.
- Perani, D., Saccuman, M. C., Scifo, P., et al. Functional specializations for music processing in the human newborn brain. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 4758–4763.
- Pereira, A. C., Huddleston, D. E., Brickman, A. M., Sosunov, A. A., et al. An *in vivo* correlate of exercise-induced neurogenesis in the adult dentate gyrus. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 5638–5643.
- Peretz, I., Blood, A. J., Penhune, V., and Zatorre, R. Cortical deafness to dissonance. *Brain*, 2001, 124, 928–940.
- Peretz, I., Gagnon, L., and Bouchard, B. Music and emotion: Perceptual determinants, immediacy, and isolation after brain damage. *Cognition*, 1998, 68, 111–141.
- Peretz, I., and Zatorre, R. J. Brain organization for music processing. *Annual Review of Psychology*, 2005, 56, 89–114.
- Pert, C. B., Snowman, A. M., and Snyder, S. H. Localization of opiate receptor binding in presynaptic membranes of rat brain. *Brain Research*, 1974, 70, 184–188.
- Peuskens, H., Snaert, S., Dupont, P., Van Hecke, P., and Orban, G. A. Human brain regions involved in heading estimation. *Journal of Neuroscience*, 2001, 21, 2451–2461.
- Peyrache, A., Khamassi, M., Benchenane, K., et al. Replay of rule-learning related neural patterns in

- the prefrontal cortex during sleep. *Nature Neuroscience*, 2009, 12, 919–926.
- Peyron, R., Laurent, B., and Garcia-Larrea, L. Functional imaging of brain responses to pain: A review and meta-analysis. *Neurophysiology Clinics*, 2000, 30, 263–288.
- Pfaff, D. W., and Sakuma, Y. Deficit in the lordosis reflex of female rats caused by lesions in the ventromedial nucleus of the hypothalamus. *Journal of Physiology*, 1979, 288, 203–210.
- Pfaus, J. G., Kleopoulos, S. P., Mobbs, C. V., Gibbs, R. B., and Pfaff, D. W. Sexual stimulation activates c-fos within estrogen-concentrating regions of the female rat forebrain. *Brain Research*, 1993, 624, 253–267.
- Pfister, E. L., Kennington, L., Straubhaar, J., et al. Five siRNAs targeting three SNPs may provide therapy for three-quarters of Huntington's disease patients. *Current Biology*, 2009, 19, 774–778.
- Phelps, E. A., Delgado, M. R., Nearing, K. I., and LeDoux, J. E. Extinction learning in humans: Role of the amygdala and vmPFC. *Neuron*, 2004, 43, 897–905.
- Phiel, C. J., and Klein, P. S. Molecular targets of lithium action. *Annual Review of Pharmacology and Toxicology*, 2001, 41, 789–813.
- Phillips, D. P., and Farmer, M. E. Acquired word deafness, and the temporal grain of sound representation in the primary auditory cortex. *Behavioural Brain Research*, 1990, 40, 85–94.
- Phillips, M. L., and Felix, D. Specific angiotensin II receptive neurons in the cat subfornical organ. *Brain Research*, 1976, 109, 531–540.
- Phillips, R. G., and LeDoux, J. E. Differential contribution of amygdala and hippocampus to cued and contextual fear conditioning. *Behavioral Neuroscience*, 1992, 106, 274–285.
- Piccirillo, J. F., Duntley, S., and Schotland, H. Obstructive sleep apnea. *Journal of the American Medical Association*, 2000, 284, 1492–1494.
- Pickles, J. O., and Corey, D. P. Mechano-electrical transduction by hair cells. *Trends in Neuroscience*, 1992, 15, 254–259.
- Pijl, S., and Schwarz, D. W. F. Intonation of musical intervals by musical intervals by deaf subjects stimulated with single bipolar cochlear implant electrodes. *Hearing Research*, 1995a, 89, 203–211.
- Pijl, S., and Schwarz, D. W. F. Melody recognition and musical interval perception by deaf subjects stimulated with electrical pulse trains through single cochlear implant electrodes. *Journal of the Acoustical Society of America*, 1995b, 98, 886–895.
- Pike, K. M., Walsh, B. T., Vitousek, K., Wilson, G. T., and Bauer, J. Cognitive behavior therapy in the posthospitalization treatment of anorexia nervosa. *American Journal of Psychiatry*, 2003, 160, 2046–2049.
- Pinkham, A. E., Brenhsinger, C., Kohler, C., et al. Actively paranoid patients with schizophrenia overattribute anger to neutral faces. *Schizophrenia Research*, 2011, 125, 174–178.
- Pitcher, D., Garrido, L., Walsh, V., and Duchaine, B. C. Transcranial magnetic stimulation disrupts the perception and embodiment of facial expressions. *Journal of Neuroscience*, 2008, 28, 8929–8933.
- Pitkänen, A., Savander, V., and LeDoux, J. E. Organization of intra-amygdaloid circuits: An emerging framework for understanding functions of the amygdala. *Trends in Neuroscience*, 1997, 20, 517–523.
- Pleim, E. T., and Barfield, R. J. Progesterone versus estrogen facilitation of female sexual behavior by intracranial administration to female rats. *Hormones and Behavior*, 1988, 22, 150–159.
- Pobric, G., Jefferies, E., and Lambon Ralph, M. A. Anterior temporal lobes mediate semantic representation: Mimicking semantic dementia by using rTMS in normal participants. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 20137–20141.
- Poeppel, D. Pure word deafness and the bilateral processing of the speech code. *Cognitive Science*, 2001, 25, 679–693.
- Poggio, G. F., and Poggio, T. The analysis of stereopsis. *Annual Review of Neuroscience*, 1984, 7, 379–412.
- Polymenopoulos, M. H., Higgins, J. J., Golbe, L. I., Johnson, W. G., et al. Mapping of a gene for Parkinson's disease to chromosome 4q21–q23. *Science*, 1996, 274, 1197–1199.
- Pomp, D., and Nielsen, M. K. Quantitative genetics of energy balance: Lessons from animal models. *Obesity Research*, 1999, 7, 106–110.
- Pompili, M., Mancinelli, I., Girardi, P., Ruberto, A., and Tatarelli, R. Suicide in anorexia nervosa: A meta-analysis. *International Journal of Eating Disorders*, 2004, 36, 99–103.
- Popko, B. Myelin maintenance: Axonal support required. *Nature Neuroscience*, 2010, 13, 275–277.
- Popova, N. K. From genes to aggressive behavior: The role of serotonergic system. *BioEssays*, 2006, 28, 495–503.
- Porkka-Heiskanen, T., Strecker, R. E., and McCarley, R. W. Brain site-specificity of extracellular adenosine concentration changes during sleep deprivation and spontaneous sleep: An *in vivo* microdialysis study. *Neuroscience*, 2000, 99, 507–517.
- Porter, J., Craven, B., Khan, R. M., Chang, S.-J., et al. Mechanisms of scent-tracking in humans. *Nature Neuroscience*, 2007, 10, 27–29.
- Posmontier, B. Sleep quality in women with and without postpartum depression. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 2008, 37, 722–735.
- Powers, J. B., and Winans, S. S. Vomeronasal organ: Critical role in mediating sexual behavior of the male hamster. *Science*, 1975, 187, 961–963.
- Price, D. B. Psychological and neural mechanisms of the affective dimension of pain. *Science*, 2000, 288, 1769–1772.
- Price, L. H., and Heninger, G. R. Drug therapy: Lithium in the treatment of mood disorders. *New England Journal of Medicine*, 1994, 331, 591–598.
- Pritchard, T. C., Hamilton, R. B., Morse, J. R., and Norgren, R. Projections of thalamic gustatory and lingual areas in the monkey, *Macaca fascicularis*. *Journal of Comparative Neurology*, 1986, 244, 213–228.
- Provencio, I., Rodriguez, I. R., Jiang, G., Hayes, W. P., et al. A novel human opsin in the inner retina. *Journal of Neuroscience*, 2000, 20, 600–605.
- Prusiner, S. B. Novel proteinaceous infectious particles cause scrapie. *Science*, 1982, 216, 136–144.
- Pulvermüller, F., and Fadiga, L. Active perception: Sensorimotor circuits as a cortical basis for language. *Nature Reviews: Neuroscience*, 2010, 11, 351–360.
- Pulvermüller, F., Huss, M., Kherif, F., et al. Motor cortex maps articulatory features of speech sounds. *Proceedings of the National Academy of Sciences, USA*, 2006, 103, 7865–7870.
- Qu, D., Ludwig, D. S., Gammeltoft, S., Piper, M., et al. A role for melanin-concentrating hormone in the central regulation of feeding behavior. *Nature*, 1996, 380, 243–247.
- Raine, A., Lencz, T., Bihle, S., LaCasse, L., and Colletti, P. Reduced prefrontal gray matter volume and reduced autonomic activity in antisocial personality disorder. *Archives of General Psychiatry*, 2002, 57, 119–127.
- Raine, A., Meloy, J. R., Bihle, S., Stoddard, J., et al. Reduced prefrontal and increased subcortical brain functioning assessed using positron emission tomography in predatory and affective murderers. *Behavioral Science and the Law*, 1998, 16, 319–332.
- Rainville, P., Duncan, G. H., Price, D. D., et al. Pain affect encoded in human anterior cingulate but not somatosensory cortex. *Science*, 1997, 277, 968–971.
- Rakic, P. Evolution of the neocortex: A perspective from developmental biology. *Nature Reviews Neuroscience*, 2009, 10, 724–735.
- Ramakrishnan, K., and Scheid, D. C. Treatment options for insomnia. *American Family Physician*, 2007, 76, 517–526.
- Ramesh, V., Thakkar, M. M., Strecker, R. E., Basheer, R., and McCarley, R. W. Wakefulness-inducing effects of histamine in the basal forebrain of freely moving rats. *Behavioural Brain Research*, 2004, 152, 271–278.
- Ramirez, I. Why do sugars taste good? *Neuroscience and Biobehavioral Reviews*, 1990, 14, 125–134.
- Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., et al. Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain*, 2003, 126, 841–865.
- Rapin, I. Autism in search of a home in the brain. *Neurology*, 1999, 52, 902–904.
- Rapoport, J. L. Recent advances in obsessive-compulsive disorder. *Neuropsychopharmacology*, 1991, 5, 1–10.
- Rapoport, J. L., Ryland, D. H., and Kriete, M. Drug treatment of canine acral lick: An animal model of obsessive-compulsive disorder. *Archives of General Psychiatry*, 1992, 49, 517–521.
- Rasmusson, D. D., Clow, K., and Szerb, J. C. Modification of neocortical acetylcholine release and electroencephalogram desynchronization due to brain stem stimulation by drugs applied to the basal forebrain. *Neuroscience*, 1994, 60, 665–677.
- Rattenborg, N. C., Lima, S. L., and Amlaner, C. J. Facultative control of avian unihemispheric sleep under the risk of predation. *Behavioural Brain Research*, 1999, 105, 163–172.
- Rauch, S. L., Shin, L. M., and Phelps, E. A. Neurocircuitry models of posttraumatic stress disorder and extinction: Human neuroimaging research—Past, present, and future. *Biological Psychiatry*, 2006, 60, 376–382.
- Raupach, T., and van Schayck, C. P. Pharmacotherapy for smoking cessation. *CNS Drugs*, 2011, 26, 371–382.
- Rauschecker, J. P., and Scott, S. K. Maps and streams in the auditory cortex: Nonhuman primates illuminate human speech processing. *Nature Neuroscience*, 2009, 12, 718–724.

- Rauschecker, J. P., and Tian, B. Mechanisms and streams for processing of "what" and "where" in auditory cortex. *Proceedings of the National Academy of Sciences, USA*, 2000, 97, 11800–11806.
- Ravussin, E., Valencia, M. E., Esparza, J., Bennett, P. H., and Schulz, L. O. Effects of a traditional lifestyle on obesity in Pima Indians. *Diabetes Care*, 1994, 17, 1067–1074.
- Reber, P. J., and Squire, L. R. Encapsulation of implicit and explicit memory in sequence learning. *Journal of Cognitive Neuroscience*, 1998, 10, 248–263.
- Recer, P. Study: English is a factor in dyslexia. Washington, D.C.: Associated Press, 16 March 2001.
- Reddrop, C., Moldrich, R. X., Beart, P. M., Farso, M., et al. Vampire bat salivary plasminogen activator (desmotepase) inhibits tissue-type plasminogen activator-induced potentiation of excitotoxic injury. *Stroke*, 2005, 36, 1241–1246.
- Reed, C. L., Caselli, R. J., and Farah, M. J. Tactile agnosia: Underlying impairment and implications for normal tactile object recognition. *Brain*, 1996, 119, 875–888.
- Reed, J. M., and Squire, L. R. Retrograde amnesia for facts and events: Findings from four new cases. *Journal of Neuroscience*, 1998, 18, 3943–3954.
- Regan, B. C., Julliot, C., Simmen, B., Vienot, F., et al. Fruits, foliage and the evolution of primate colour vision. *Philosophical Transactions of the Royal Society of London B*, 2001, 356, 229–283.
- Reid, L. D. Endogenous opioids and alcohol dependence: Opioid alkaloids and the propensity to drink alcoholic beverages. *Alcohol*, 1996, 13, 5–11.
- Reinehr, T., Roth, C. L., Schernthaner, G. H., Kopp, H. P., et al. Peptide YY and glucagon-like peptide-1 in morbidly obese patients before and after surgically induced weight loss. *Obesity Surgery*, 2007, 17, 1571–1577.
- Reiner, W. G. Gender identity and sex-of-rearing in children with disorders of sexual differentiation. *Journal of Pediatric Endocrinology and Metabolism*, 2005, 18, 549–553.
- Rempe, M. J., Best, J., and Terman, D. A mathematical model of the sleep/wake cycle. *Journal of Mathematical Biology*, 2010, 60, 615–644.
- Ressler, K. J., and Mayberg, H. S. Targeting abnormal neural circuits in mood and anxiety disorders: From the laboratory to the clinic. *Nature Neuroscience*, 2007, 10, 1116–1124.
- Ressler, K. J., Sullivan, S. L., and Buck, L. A molecular dissection of spatial patterning in the olfactory system. *Current Opinion in Neurobiology*, 1994, 4, 588–596.
- Rétey, J. V., Adam, M., Honneger, E., et al. A functional genetic variation of adenosine deaminase affects the duration and intensity of deep sleep in humans. *Proceedings of the National Academy of Sciences, USA*, 2005, 102, 15676–15681.
- Rhees, R. W., Shryne, J. E., and Gorski, R. A. Onset of the hormone-sensitive perinatal period for sexual differentiation of the sexually dimorphic nucleus of the preoptic area in female rats. *Journal of Neurobiology*, 1990a, 21, 781–786.
- Rhees, R. W., Shryne, J. E., and Gorski, R. A. Termination of the hormone-sensitive period for differentiation of the sexually dimorphic nucleus of the preoptic area in male and female rats. *Developmental Brain Research*, 1990b, 52, 17–23.
- Riemann, D., Wiegand, M., and Berger, M. Are there predictors for sleep deprivation response in depressive patients? *Biological Psychiatry*, 1991, 29, 707–710.
- Rijntjes, M., Dettmers, C., Buchel, C., Kiebel, S., et al. A blueprint for movement: Functional and anatomical representations in the human motor system. *Journal of Neuroscience*, 1999, 19, 8043–8048.
- Rilling, J. K., Glasser, M. F., Preuss, T. M., et al. The evolution of the arcuate fasciculus revealed with comparative DTI. *Nature Neuroscience*, 2008, 11, 426–428.
- Rimmele, U., Hediger, K., Heinrichs, M., and Klaver, P. Oxytocin makes a face in memory familiar. *Journal of Neuroscience*, 2009, 29, 38–42.
- Ritter, R. C., Brenner, L., and Yox, D. P. Participation of vagal sensory neurons in putative satiety signals from the upper gastrointestinal tract. In *Neuroanatomy and Physiology of Abdominal Vagal Afferents*, edited by S. Ritter, R. C. Ritter, and C. D. Barnes. Boca Raton, Fla.: CRC Press, 1992.
- Ritter, S., Dinh, T. T., and Friedman, M. I. Induction of Fos-like immunoreactivity (Fos-li) and stimulation of feeding by 2,5-anhydro-D-mannitol (2,5-AM) require the vagus nerve. *Brain Research*, 1994, 646, 53–64.
- Ritter, S., Dinh, T. T., and Zhang, Y. Localization of hind-brain glucoreceptive sites controlling food intake and blood glucose. *Brain Research*, 2000, 856, 37–47.
- Ritter, S., and Taylor, J. S. Vagal sensory neurons are required for lipoprivic but not glucoprivic feeding in rats. *American Journal of Physiology*, 1990, 258, R1395–R1401.
- Rizzolatti, G., and Sinigaglia, C. The functional role of the parieto-frontal mirror circuit: Interpretations and misinterpretations. *Nature Reviews: Neuroscience*, 2010, 11, 264–274.
- Rizzolatti, R., Fogassi, L., and Gallese, V. Neurophysiological mechanisms underlying the understanding and imitation of action. *Nature Reviews: Neuroscience*, 2001, 2, 661–670.
- Robbins, L. N., Helzer, J. E., Weissman, M. M., Orvaschel, H., et al. Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of General Psychiatry*, 1984, 41, 949–958.
- Roberts, S. C., Havlicek, J., Flegr, J., Mruskova, M., et al. Female facial attractiveness increases during the fertile phase of the menstrual cycle. *Biology Letters*, 2004, 271, S270–S272.
- Robertson, G. S., Pfäus, J. G., Atkinson, L. J., Matsumura, H., et al. Sexual behavior increases c-fos expression in the forebrain of the male rat. *Brain Research*, 1991, 564, 352–357.
- Robinson, D., Wu, H., Munne, R. A., Ashtari, M., et al. Reduced caudate nucleus volume in obsessive-compulsive disorder. *Archives of General Psychiatry*, 1995, 52, 393–398.
- Roeltgen, D. P., Rothi, L. H., and Heilman, K. M. Linguistic semantic aphasia: A dissociation of the lexical spelling system from semantics. *Brain and Language*, 1986, 27, 257–280.
- Roffwarg, H. P., Muzio, J. N., and Dement, W. C. Ontogenetic development of human sleep-dream cycle. *Science*, 1966, 152, 604–619.
- Rogawski, M. A., and Wenk, G. L. The neuropharmacological basis for the use of memantine in the treatment of Alzheimer's disease. *CNS Drug Reviews*, 2003, 9, 275–308.
- Rolls, E. T. Feeding and reward. In *The Neural Basis of Feeding and Reward*, edited by B. G. Hobel and D. Novin. Brunswick, Me.: Haer Institute, 1982.
- Rolls, E. T., and Baylis, G. C. Size and contrast have only small effects on the responses to faces of neurons in the cortex of the superior temporal sulcus of the monkey. *Experimental Brain Research*, 1986, 65, 38–48.
- Rolls, E. T., Yaxley, S., and Sienkiewicz, Z. J. Gustatory responses of single neurons in the orbitofrontal cortex of the macaque monkey. *Journal of Neurophysiology*, 1990, 64, 1055–1066.
- Romanovsky, A. A. Thermoregulation: Some concepts have changed. Functional architecture of the thermoregulatory system. *American Journal of Physiology*, 2007, 292, R37–R46.
- Rose, J. E. Nicotine and nonnicotine factors in cigarette addiction. *Psychopharmacology*, 2006, 184, 274–285.
- Rosenblatt, J. S., Hazelwood, S., and Poole, J. Maternal behavior in male rats: Effects of medial preoptic area lesions and presence of maternal aggression. *Hormones and Behavior*, 1996, 30, 201–215.
- Rosenthal, D. A program of research on heredity in schizophrenia. *Behavioral Science*, 1971, 16, 191–201.
- Rosenthal, N. E., Sack, D. A., Gillin, C., Lewy, A. J., et al. Seasonal affective disorder: A description of the syndrome and preliminary findings with light therapy. *Archives of General Psychiatry*, 1984, 41, 72–80.
- Rosenthal, N. E., Sack, D. A., James, S. P., Parry, B. L., et al. Seasonal affective disorder and phototherapy. *Annals of the New York Academy of Sciences*, 1985, 453, 260–269.
- Roses, A. D. A model for susceptibility polymorphisms for complex diseases: Apolipoprotein E and Alzheimer disease. *Neurogenetics*, 1997, 1, 3–11.
- Rösner, S., Hackl-Herrwerth, A., Leucht, S., et al. Acamprosate for alcohol dependence. *Cochrane Database of Systematic Reviews*, 2010, Issue 9.
- Rubin, B. S., and Barfield, R. J. Priming of estrous responsiveness by implants of 17 β -estradiol in the ventromedial hypothalamic nucleus of female rats. *Endocrinology*, 1980, 106, 504–509.
- Rubin, L. L., and Staddon, J. M. The cell biology of the blood-brain barrier. *Annual Review of Neuroscience*, 1999, 22, 11–28.
- Rück, C., Karlsson, A., Steele, J. D., Edman, G., et al. Capsulotomy for obsessive-compulsive disorder. *Archives of General Psychiatry*, 2008, 65, 914–922.
- Rumpel, S., LeDoux, J., Zador, A., and Malinow, R. Postsynaptic receptor trafficking underlying a form of associative learning. *Science*, 2005, 308, 83–88.
- Russell, G. F. M., and Treasure, J. The modern history of anorexia nervosa: An interpretation of why the illness has changed. *Annals of the New York Academy of Sciences*, 1989, 575, 13–30.
- Russell, M. J., Switz, G. M., and Thompson, K. Olfactory influences on the human menstrual cycle. *Pharmacology, Biochemistry and Behavior*, 1980, 13, 737–738.
- Ryback, R. S., and Lewis, O. F. Effects of prolonged bed rest on EEG sleep patterns in young, healthy volunteers. *Electroencephalography and Clinical Neurophysiology*, 1971, 31, 395–399.
- Saal, D., Dong, Y., Bonci, A., and Malenka, R. C. Drugs of abuse and stress trigger a common

- synaptic adaptation in dopamine neurons. *Neuron*, 2003, 37, 577–582.
- Sachar, E. J., and Baron, M. The biology of affective disorders. *Annual Review of Neuroscience*, 1979, 2, 505–518.
- Sackeim, H. A. Lateral asymmetry in bodily response to hypnotic suggestion. *Biological Psychiatry*, 1982, 17, 437–447.
- Sackeim, H. A., Decina, P., Prohovnik, I., Malitz, S., and Resor, S. R. Anticonvulsant and antidepressant properties of electroconvulsive therapy: A proposed mechanism of action. *Biological Psychiatry*, 1983, 18, 1301–1310.
- Sackeim, H. A., and Gur, R. C. Lateral asymmetry in intensity of emotional expression. *Neuropsychologia*, 1978, 16, 473–482.
- Sackeim, H. A., Paulus, D., and Weiman, A. L. Classroom seating and hypnotic susceptibility. *Journal of Abnormal Psychology*, 1979, 88, 81–84.
- Sacktor, T. C. PINing for things past. *Science Signaling*, 2010, 3, pe9.
- Sacktor, T. C. How does PKM ζ maintain long-term memory? *Nature Reviews: Neuroscience*, 2011, 12, 9–15.
- Saffran, E. M., Marin, O. S. M., and Yeni-Komshian, G. H. An analysis of speech perception in word deafness. *Brain and Language*, 1976, 3, 209–228.
- Saffran, E. M., Schwartz, M. F., and Marin, O. S. M. Evidence from aphasia: Isolating the components of a production model. In *Language Production*, edited by B. Butterworth. London: Academic Press, 1980.
- Sahay, A., and Hen, R. Adult hippocampal neurogenesis in depression. *Nature Neuroscience*, 2007, 10, 1110–1115.
- Sahu, A., Kalra, P. S., and Kalra, S. P. Food deprivation and ingestion induce reciprocal changes in neuropeptide Y concentrations in the paraventricular nucleus. *Peptides*, 1988, 9, 83–86.
- Sakai, F., Meyer, J. S., Karacan, I., Derman, S., and Yamamoto, M. Normal human sleep: Regional cerebral haemodynamics. *Annals of Neurology*, 1979, 7, 471–478.
- Sakuma, Y., and Pfaff, D. W. Facilitation of female reproductive behavior from mesencephalic central grey in the rat. *American Journal of Physiology*, 1979a, 237, R279–R284.
- Sakuma, Y., and Pfaff, D. W. Mesencephalic mechanisms for integration of female reproductive behavior in the rat. *American Journal of Physiology*, 1979b, 237, R285–R290.
- Sakuma, Y., and Pfaff, D. W. Convergent effects of lordosis-relevant somatosensory and hypothalamic influences on central gray cells in the rat mesencephalon. *Experimental Neurology*, 1980a, 70, 269–281.
- Sakuma, Y., and Pfaff, D. W. Excitability of female rat central gray cells with medullary projections: Changes produced by hypothalamic stimulation and estrogen treatment. *Journal of Neurophysiology*, 1980b, 44, 1012–1023.
- Sakurai, T. The neural circuit of orexin (hypocretin): Maintaining sleep and wakefulness. *Nature Reviews: Neuroscience*, 2007, 8, 171–181.
- Sakurai, T., Amemiya, A., Ishii, M., Matsuzaki, I., et al. Orexins and orexin receptors: A family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior. *Cell*, 1998, 20, 573–585.
- Sakurai, Y., Ichikawa, Y., and Mannen, T. Pure alexia from a posterior occipital lesion. *Neurology*, 2001, 56, 778–781.
- Sakurai, Y., Momose, T., Iwata, M., Sudo, Y., et al. Different cortical activity in reading of Kanji words, Kana words and Kana nonwords. *Cognitive Brain Research*, 2000, 9, 111–115.
- Sakurai, Y., Sakai, K., Sakuta, M., and Iwata, M. Naming difficulties in alexia with agraphia for kanji after a left posterior inferior temporal lesion. *Journal of Neurology, Neurosurgery, and Psychiatry*, 1994, 57, 609–613.
- Salamone, J. D. Complex motor and sensorimotor function of striatal and accumbens dopamine: Involvement in instrumental behavior processes. *Psychopharmacology*, 1992, 107, 160–174.
- Salas, J. C. T., Iwasaki, H., Jodo, E., Schmidt, M. H., et al. Penile erection and micturition events triggered by electrical stimulation of the mesopontine tegmental area. *American Journal of Physiology*, 2007, 294, R102–R111.
- Salm, A. K., Pavelko, M., Krouse, E. M., Webster, W., et al. Lateral amygdaloid nucleus expansion in adult rats is associated with exposure to prenatal stress. *Developmental Brain Research*, 2004, 148, 159–167.
- Salmelin, R., Schnitzler, A., Schmitz, F., and Freund, H. J. Single word reading in developmental stutterers and fluent speakers. *Brain*, 2000, 123, 1184–1202.
- Samson, H. H., Hodge, C. W., Tolliver, G. A., and Haraguchi, M. Effect of dopamine agonists and antagonists on ethanol reinforced behavior: The involvement of the nucleus accumbens. *Brain Research Bulletin*, 1993, 30, 133–141.
- Saper, C. B., Chou, T. C., and Scammell, T. E. The sleep switch: Hypothalamic control of sleep and wakefulness. *Trends in Neurosciences*, 2001, 24, 726–731.
- Saper, C. B., Fuller, P. M., Pedersen, N. P., et al. Sleep state switching. *Neuron*, 2010, 68, 1023–1042.
- Saper, C. B., Scammell, T. E., and Lu, J. Hypothalamic regulation of sleep and circadian rhythms. *Nature*, 2005, 437, 1257–1263.
- Sapolsky, R. M. *Stress, the Aging Brain and the Mechanisms of Neuron Death*. Cambridge, Mass.: MIT Press, 1992.
- Sapolsky, R. M. Social subordination as a marker of hypercortisolism: Some unexpected subtleties. *Annals of the New York Academy of Sciences*, 1995, 771, 626–639.
- Sapolsky, R. M. Is impaired neurogenesis relevant to the affective symptoms of depression? *Biological Psychiatry*, 2004, 56, 137–139.
- Sauter, D. A., Eisner, F., Ekman, P., and Scott, S. K. Cross-cultural recognition of basic emotions through nonverbal emotional vocalizations. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 2408–2412.
- Savic, I., Berglund, H., and Lindström, P. Brain response to putative pheromones in homosexual men. *Proceedings of the National Academy of Sciences, USA*, 2005, 102, 7356–7361.
- Savic, I., Hedén-Blomqvist, E., and Berglund, H. Pheromone signal transduction in humans: What can be learned from olfactory loss. *Human Brain Mapping*, 2009, 30, 3057–3065.
- Sawchenko, P. E. Toward a new neurobiology of energy balance, appetite, and obesity: The anatomist weigh in. *Journal of Comparative Neurology*, 1998, 402, 435–441.
- Saxena, S., Brody, A. L., Schwartz, J. M., and Baxter, L. R. Neuroimaging and frontal-subcortical circuitry in obsessive-compulsive disorder. *British Journal of Psychiatry*, 1998, 173, 26–37.
- Saxton, T. K., Lyndon, A. C., Little, A. C., and Roberts, S. C. Evidence that androstadienone, a putative human chemosignal, modulates women's attributions of men's attractiveness. *Hormones and Behavior*, 2008, 54, 597–601.
- Scammell, T. E., Gerashchenko, D. Y., Mochizuki, T., McCarthy, M. T., et al. An adenosine A2a agonist increases sleep and induces Fos in ventrolateral preoptic neurons. *Neuroscience*, 2001, 107, 653–663.
- Schaller, G., Schmidt, A., Pleiner, J., Woloszczuk, W., et al. Plasma ghrelin concentrations are not regulated by glucose or insulin: A double-blind, placebo-controlled crossover clamp study. *Diabetes*, 2003, 52, 16–20.
- Schein, S. J., and Desimone, R. Spectral properties of V4 neurons in the macaque. *Journal of Neuroscience*, 1990, 10, 3369–3389.
- Schenck, C. H., Bundlie, S. R., Ettinger, M. G., and Mahowald, M. W. Chronic behavioral disorders of human REM sleep: A new category of parasomnia. *Sleep*, 1986, 9, 293–308.
- Schenck, C. H., Hurwitz, T. D., Bundlie, S. R., and Mahowald, M. W. Sleep-related eating disorders: Polysomnographic correlates of a heterogeneous syndrome distinct from daytime eating disorders. *Sleep*, 1991, 14, 419–431.
- Schenck, C. H., Hurwitz, T. D., and Mahowald, M. W. REM-sleep behavior disorder: An update on a series of 96 patients and a review of the world literature. *Journal of Sleep Research*, 1993, 2, 224–231.
- Schenck, C. H., and Mahowald, M. W. Motor dysfunction in narcolepsy: Rapid-eye-movement (REM) sleep without atonia and REM sleep behavior disorder. *Annals of Neurology*, 1992, 32, 3–10.
- Schenk, D., Barbour, R., Dunn, W., et al. Immunization with amyloid-beta attenuates Alzheimer-disease-like pathology in the PDAPP mouse. *Nature*, 1999, 400, 173–177.
- Schenkein, J., and Montagna, P. Self management of fatal familial insomnia. 1: What is FFI? *Medscape General Medicine*, 2006a, 8, 65.
- Schenkein, J., and Montagna, P. Self management of fatal familial insomnia. 2: Case report. *Medscape General Medicine*, 2006b, 8, 66.
- Scherschlicht, R., Polc, P., Schneeberger, J., Steiner, M., and Haefely, W. Selective suppression of rapid eye movement sleep (REMS) in cats by typical and atypical antidepressants. In *Typical and Atypical Antidepressants: Molecular Mechanisms*, edited by E. Costa and G. Racagni. New York: Raven Press, 1982.
- Schiffman, J., Ekstrom, M., LaBrie, J., Schulsinger, F., et al. Minor physical anomalies and schizophrenia spectrum disorders: A prospective investigation. *American Journal of Psychiatry*, 2002, 159, 238–243.
- Schiffman, J., Walker, E., Ekstrom, M., Schulsinger, F., et al. Childhood videotaped social and neuromotor precursors of schizophrenia: A prospective investigation. *American Journal of Psychiatry*, 2004, 161, 2021–2027.
- Schiller, P. H., and Malpeli, J. G. Properties and tectal projections of monkey retinal ganglion cells. *Journal of Neurophysiology*, 1977, 40, 428–445.

- Schloegl, H., Percik, R., Horstmann, A., et al. Peptide hormones regulating appetite—Focus on neuroimaging studies in humans. *Diabetes/Metabolism Research and Reviews*, 2011, 27, 104–112.
- Schmid, D., Held, K., Ising, M., Uhr, M., et al. Ghrelin stimulates appetite, imagination of food, GH, ACTH, and cortisol, but does not affect leptin in normal controls. *Neuropsychopharmacology*, 2005, 30, 1187–1192.
- Schmidt, M. H., and Schmidt, H. S. Sleep-related erections: Neural mechanisms and clinical significance. *Current Neurology and Neuroscience Reports*, 2004, 4, 170–178.
- Schmidt, M. H., Valatx, J.-L., Sakai, K., Fort, P., and Jouvet, M. Role of the lateral preoptic area in sleep-related erectile mechanisms and sleep generation in the rat. *Journal of Neuroscience*, 2000, 20, 6640–6647.
- Schneider, B., Muller, M. J., and Philipp, M. Mortality in affective disorders. *Journal of the Affective Disorders*, 2001, 65, 263–274.
- Schneider, P., Scherg, M., Dosch, H. G., Specht, H. L., et al. Morphology of Heschl's gyrus reflects enhanced activation in the auditory cortex of musicians. *Nature Neuroscience*, 2002, 5, 688–694.
- Schnider, A. Spontaneous confabulation and the adaptation of thought to ongoing reality. *Nature Reviews Neuroscience*, 2003, 4, 662–671.
- Schoenfeld, M. A., Neuer, G., Tempelmann, C., Schüssler, K., et al. Functional magnetic resonance tomography correlates of taste perception in the human primary taste cortex. *Neuroscience*, 2004, 127, 347–353.
- Schultz, R. T. Developmental deficits in social perception in autism: The role of the amygdala and fusiform face area. *International Journal of Developmental Neuroscience*, 2005, 23, 125–141.
- Schumacher, J., Kristensen, A. S., Wendland, J. R., et al. The genetics of panic disorder. *Medical Genetics*, 2011, 48, 361–368.
- Schumacher, J., Laje, G., Abou Jamra, R. et al. The DISC locus and schizophrenia: Evidence from an association study in a central European sample and from a meta-analysis across different European populations. *Human Molecular Genetics*, 2009, 18, 2719–2727.
- Schwartz, M. F., Marin, O. S. M., and Saffran, E. M. Dissociations of language function in dementia: A case study. *Brain and Language*, 1979, 7, 277–306.
- Schwartz, M. F., Saffran, E. M., and Marin, O. S. M. The word order problem in agrammatism. I: Comprehension. *Brain and Language*, 1980, 10, 249–262.
- Schwartz, S., Ponz, A., Poryazova, R., Werth, E., et al. Abnormal activity in hypothalamus and amygdala during humour processing in human narcolepsy with cataplexy. *Brain*, 2008, 131, 514–522.
- Schwartz, W. J., and Gainer, H. Suprachiasmatic nucleus: Use of 14C-labelled deoxyglucose uptake as a functional marker. *Science*, 1977, 197, 1089–1091.
- Schwarzlose, R. F., Baker, C. I., and Kanwisher, N. Separate face and body selectivity on the fusiform gyrus. *Journal of Neuroscience*, 2005, 25, 11055–11059.
- Scott, K. The sweet and the bitter of mammalian taste. *Current Opinions in Neurobiology*, 2004, 14, 423–427.
- Scott, S. K., Blank, E. C., Rosen, S., and Wise, R. J. S. Identification of a pathway for intelligible speech in the left temporal lobe. *Brain*, 2000, 123, 2400–2406.
- Scott, T. R., and Plata-Salaman, C. R. Coding of taste quality. In *Smell and Taste in Health and Disease*, edited by T. N. Getchell. New York: Raven Press, 1991.
- Scoville, W. B., and Milner, B. Loss of recent memory after bilateral hippocampal lesions. *Journal of Neurology, Neurosurgery and Psychiatry*, 1957, 20, 11–21.
- Sebat, J., Lakshmi, B., Malhotra, D., Troge, J., et al. Strong association of de novo copy number mutations with autism. *Science*, 2007, 316, 445–449.
- Selye, H. *The Stress of Life*. New York: McGraw-Hill, 1976.
- Serrano, P., Friedman, E. L., Kenney, J., et al. PKM ζ maintains spatial, instrumental, and classically conditioned long-term memories. *PLoS Biology*, 2008, 23, 2698–2706.
- Sforza, E., Montagna, P., Tinuper, P., Cortelli, P., et al. Sleep-wake cycle abnormalities in fatal familial insomnia: Evidence of the role of the thalamus in sleep regulation. *Electroencephalography and Clinical Neurophysiology*, 1995, 94, 398–405.
- Shallice, T. Phonological agraphia and the lexical route in writing. *Brain*, 1981, 104, 413–429.
- Sham, P. C., O'Callaghan, E., Takei, N., Murray, G. K., et al. Schizophrenia following pre-natal exposure to influenza epidemics between 1939 and 1960. *British Journal of Psychiatry*, 1992, 160, 461–466.
- Shannon, R. V. Understanding hearing through deafness. *Proceedings of the National Academy of Sciences, USA*, 2007, 104, 6883–6884.
- Shapiro, L. E., Leonard, C. M., Sessions, C. E., Dewsbury, D. A., and Insel, T. R. Comparative neuroanatomy of the sexually dimorphic hypothalamus in monogamous and polygamous voles. *Brain Research*, 1991, 541, 232–240.
- Sharp, D. J., Scott, S. K., and Wise, R. J. S. Retrieving meaning after temporal lobe infarction: The role of the basal language area. *Annals of Neurology*, 2004, 56, 836–846.
- Shaywitz, B. A., Shaywitz, S. E., Pugh, K. R., Mencl, W. E., et al. Disruption of posterior brain systems for reading in children with developmental dyslexia. *Biological Psychiatry*, 2002, 52, 101–110.
- Shen, K., and Meyer, T. Dynamic control of CaMKII translocation and localization in hippocampal neurons by NMDA stimulation. *Science*, 1999, 284, 162–166.
- Shepherd, G. M. Discrimination of molecular signals by the olfactory receptor neuron. *Neuron*, 1994, 13, 771–790.
- Sher, A. E. Surgery for obstructive sleep apnea. *Progress in Clinical Biology Research*, 1990, 345, 407–415.
- Sherin, J. E., Elmquist, J. K., Torrealba, F., and Saper, C. B. Innervation of histaminergic tuberomammillary neurons by GABAergic and galaninergic neurons in the ventrolateral preoptic nucleus of the rat. *Journal of Neuroscience*, 1998, 18, 4705–4721.
- Shi, S.-H., Hayashi, Y., Petralia, R. S., Zaman, S. H., et al. Rapid spine delivery and redistribution of AMPA receptors after synaptic NMDA receptor activation. *Science*, 1999, 284, 1811–1816.
- Shimada, M., Tritos, N. A., Lowell, B. B., Flier, J. S., and Maratos-Flier, E. Mice lacking melanin-concentrating hormone are hypophagic and lean. *Nature*, 1998, 396, 670–674.
- Shimura, T., Yamamoto, T., and Shimokochi, M. The medial preoptic area is involved in both sexual arousal and performance in male rats: Re-evaluation of neuron activity in freely moving animals. *Brain Research*, 1994, 640, 215–222.
- Shin, A. C., Zheng, H., Pistell, P. J., and Berthoud, H.-R. Roux-en-Y gastric bypass surgery changes food reward in rats. *International Journal of Obesity*, 2011, 35, 642–651.
- Shin, L. M., Wright, C. I., Cannistraro, P. A., Wedig, M. M., et al. A functional magnetic resonance imaging study of amygdala and medial prefrontal cortex responses to overtly presented fearful faces in posttraumatic stress disorder. *Archives of General Psychiatry*, 2005, 62, 273–281.
- Shipley, M. T., and Ennis, M. Functional organization of the olfactory system. *Journal of Neurobiology*, 1996, 30, 123–176.
- Shors, T. J. Saving new brain cells. *Scientific American*, 2009, 100, 46–54.
- Shoulson, I., Oakes, D., Fahn, S., et al. Parkinson Study Group. Impact of sustained deprenyl (selegiline) in levodopa-treated Parkinson's disease: A randomized placebo-controlled extension of the deprenyl and tocopherol antioxidative therapy of parkinsonism trial. *Annals of Neurology*, 2002, 51, 604–612.
- Shuto, Y., Shibasaki, T., Otagiri, A., Kuriyama, H., et al. Hypothalamic growth hormone secretagogue receptor regulates growth hormone secretion, feeding, and adiposity. *Journal of Clinical Investigation*, 2002, 109, 1429–1436.
- Sidman, M., Stoddard, L. T., and Mohr, J. P. Some additional quantitative observations of immediate memory in a patient with bilateral hippocampal lesions. *Neuropsychologia*, 1968, 6, 245–254.
- Siegel, J. Clues to the functions of mammalian sleep. *Nature*, 2005, 437, 1264–1271.
- Siegel, R. M., and Andersen, R. A. Motion perceptual deficits following ibotenic acid lesions of the middle temporal area (MT) in the behaving monkey. *Society for Neuroscience Abstracts*, 1986, 12, 1183.
- Siegel, S. A. Pavlovian conditioning analysis of morphine tolerance. In *Behavioral Tolerance: Research and Treatment Implications*, edited by N. A. Krasnegor. Washington, DC: NIDA Research Monographs, 1978.
- Siegel, S., Hinson, R. E., Krank, M. D., and McCully, J. Heroin "overdose" death: Contribution of drug-associated environmental cues. *Science*, 1982, 216, 436–437.
- Silva, A. J., Stevens, C. F., Tonegawa, S., and Wang, Y. Deficient hippocampal long-term potentiation in calcium-calmodulin kinase II mutant mice. *Science*, 1992, 257, 201–206.
- Silver, J. M., Shin, C., and McNamara, J. O. Antiepileptogenic effects of conventional anticonvulsants in the kindling model of epilepsy. *Annals of Neurology*, 1991, 29, 356–363.
- Silver, R., LeSauter, J., Tresco, P. A., and Lehman, M. N. A diffusible coupling signal from the transplanted suprachiasmatic nucleus controlling circadian locomotor rhythms. *Nature*, 1996, 382, 810–813.
- Silveri, M. C. Peripheral aspects of writing can be differentially affected by sensorial and attentional defect: Evidence from a patient with afferent

- disgraphia and case dissociation. *Cortex*, 1996, 32, 155–172.
- Silverman, J. L., Yang, M., Lord, C., and Crawley, J. N. Behavioural phenotyping assays for mouse models of autism. *Nature Reviews: Neuroscience*, 2010, 11, 490–501.
- Simpson, J. B., Epstein, A. N., and Camardo, J. S. The localization of dipsogenic receptors for angiotensin II in the subfornical organ. *Journal of Comparative and Physiological Psychology*, 1978, 92, 581–608.
- Sindelar, D. K., Ste. Marie, L., Miura, G. I., Palmiter, R. D., et al. Neuropeptide Y is required for hyperphagic feeding in response to neuroglucopenia. *Endocrinology*, 2004, 145, 3363–3368.
- Singer, C., and Weiner, W. J. Male sexual dysfunction. *Neurologist*, 1996, 2, 119–129.
- Singer, F., and Zumoff, B. Subnormal serum testosterone levels in male internal medicine residents. *Steroids*, 1992, 57, 86–89.
- Singer, T., Seymour, B., O'Doherty, J., Kaube, H., et al. Empathy for pain involves the affective but not sensory components of pain. *Science*, 2004, 303, 1157–1162.
- Singh, D., and Bronstad, P. M. Female body odour is a potential cue to ovulation. *Proceedings of the Royal Society of London B*, 2001, 268, 797–801.
- Sipos, M. L., and Nyby, J. G. Concurrent androgenic stimulation of the ventral tegmental area and medial preoptic area: Synergistic effects on male-typical reproductive behaviors in house mice. *Brain Research*, 1996, 729, 29–44.
- Skene, D. J., Lockley, S. W., and Arendt, J. Melatonin in circadian sleep disorders in the blind. *Biological Signals and Receptors*, 1999, 8, 90–95.
- Skutella, T., Criswell, H., Moy, S., Probst, J. C., et al. Corticotropin-releasing hormone (CRH) antisense oligodeoxynucleotide induces anxiolytic effects in rat. *Neuroreport*, 1994, 5, 2181–2185.
- Slotkin, T. A. Fetal nicotine or cocaine exposure: Which one is worse? *Journal of Pharmacology and Experimental Therapeutics*, 1998, 22, 521–527.
- Smith, C. N., and Squire, L. R. Medial temporal lobe activity during retrieval of semantic memory is related to the age of the memory. *Journal of Neuroscience*, 2009, 29, 930–938.
- Smith, G. P. Animal models of human eating disorders. *Annals of the New York Academy of Sciences*, 1989, 16, 219–237.
- Smith, M. D., Patterson, E., Wahed, A. S., et al. Relationship between surgeon volume and adverse outcomes after RYGB in Longitudinal Assessment of Bariatric Surgery (LABS) study. *Surgery for Obesity and Related Disorders*, 2010, 6, 118–125.
- Snyder, L. H., Batista, A. P., and Andersen, R. A. Intention-related activity in the posterior parietal cortex: A review. *Vision Research*, 2000, 40, 1433–1441.
- Snyder, S. H. *Madness and the Brain*. New York: McGraw-Hill, 1974.
- Soares, J. C., and Gershon, S. The lithium ion: A foundation for psychopharmacological specificity. *Neuropsychopharmacology*, 1998, 19, 167–182.
- Södersten, P., Bergh, C., and Zandian, M. Understanding eating disorders. *Hormones and Behavior*, 2006, 50, 572–578.
- Soliman, F., Glatt, C. E., Bath, K. G., et al. A genetic variant BDNF polymorphism alters extinction learning in both mouse and human. *Science*, 2010, 327, 863–866.
- Solstad, T., Boccarda, C. N., Kropff, E., et al. Representation of geometric borders in the entorhinal cortex. *Science*, 2008, 322, 1865–1868.
- Solyom, L., Turnbull, I. M., and Wilensky, M. A case of self-inflicted leucotomy. *British Journal of Psychiatry*, 1987, 151, 855–857.
- Soria, G., Mendizabal, V., Rourino, C., Robledo, P., Ledent, C., et al. Lack of CB₁ cannabinoid receptor impairs cocaine self-administration. *Neuropsychopharmacology*, 2005, 30, 1670–1680.
- Sormani, M. P., Bruzzi, P., Comi, G., and Filippi, M. The distribution of the magnetic resonance imaging response to glatiramer acetate in multiple sclerosis. *Multiple Sclerosis*, 2005, 11, 447–449.
- Sotillo, M., Carretié, L., Hinojosa, J. A., Tapia, M., et al. Neural activity associated with metaphor comprehension: Spatial analysis. *Neuroscience Letters*, 2005, 373, 5–9.
- Sotres-Bayon, F., and Quirk, G. J. Prefrontal control of fear: More than just extinction. *Current Opinion in Neurobiology*, 2010, 20, 231–235.
- Sotthibundhu, A., Sykes, A. M., Fox, B., Underwood, C. K., et al. β -Amyloid_{1–42} induces neuronal death through the p75 neurotrophin receptor. *Journal of Neuroscience*, 2008, 28, 3941–3946.
- Southwell, A. L., Ko, J., and Patterson, P. H. Intrabody gene therapy ameliorates motor, cognitive, and neuropathological symptoms in multiple mouse models of Huntington's disease. *Journal of Neuroscience*, 2009, 29, 13589–13602.
- Sperry, R. W. Brain bisection and consciousness. In *Brain and Conscious Experience*, edited by J. Eccles. New York: Springer-Verlag, 1966.
- Spiers, H. J., Maguire, E. A., and Burgess, N. Hippocampal amnesia. *Neurocase*, 2001, 7, 357–382.
- Squire, L. R. Stable impairment in remote memory following electroconvulsive therapy. *Neuropsychologia*, 1974, 13, 51–58.
- Squire, L. R. Memory and the hippocampus: A synthesis from findings with rats, monkeys, and humans. *Psychological Review*, 1992, 99, 195–231.
- Squire, L. R., Shimamura, A. P., and Amaral, D. G. Memory and the hippocampus. In *Neural Models of Plasticity: Experimental and Theoretical Approaches*, edited by J. H. Byrne and W. O. Berry. San Diego: Academic Press, 1989.
- St. George-Hyslop, P. H., Tanzi, R. E., Polinsky, R. J., Haines, J. L., et al. The genetic defect causing familial Alzheimer's disease maps on chromosome 21. *Science*, 1987, 235, 885–890.
- Stahl, S. M., Grady, M. M., Moret, C., and Briley, M. SNRIs: Their pharmacology, clinical efficacy, and tolerability in comparison with other classes of antidepressants. *CNS Spectrums*, 2005, 10, 732–747.
- Stanislavsky, C. *An Actor Prepares*. New York: Theater Arts/Routledge, 1936.
- Starkey, S. J., Walker, M. P., Beresford, I. J. M., and Hagan, R. M. Modulation of the rat suprachiasmatic circadian clock by melatonin in-vitro. *Neuroreport*, 1995, 6, 1947–1951.
- Steele, A. D., Emsley, J. G., Ozdinler, P. H., Lindquist, S., and Macklis, J. D. Prion protein (PrP^c) positively regulates neural precursor proliferation during developmental and adult mammalian neurogenesis. *Proceedings of the National Academy of Sciences, USA*, 2006, 203, 3416–3421.
- Steeves, J. K. E., Humphrey, G. K., Culham, J. C., Menon, R. A., et al. Behavioral and neuroimaging evidence for a contribution of color and texture information to scene classification in a patient with visual form agnosia. *Journal of Cognitive Neuroscience*, 2004, 16, 955–965.
- Stefanacci, L., and Amaral, D. G. Topographic organization of cortical inputs to the lateral nucleus of the macaque monkey amygdala: A retrograde tracing study. *Journal of Comparative Neurology*, 2000, 22, 52–79.
- Stefanatos, G. A., Gershkoff, A., and Madigan, S. On pure word deafness, temporal processing, and the left hemisphere. *Journal of the International Neuropsychological Society*, 2005, 11, 456–470.
- Stein, M. B., Jang, K. L., Taylor, S., Vernon, P. A., and Livesley, W. J. Genetic and environmental influences on trauma exposure and posttraumatic stress disorder symptoms: A twin study. *American Journal of Psychiatry*, 2002, 159, 1675–1681.
- Stein, M. B., Simmons, A. N., Feinstein, J. S., and Paulus, M. P. Increased amygdala and insula activation during emotion processing in anxiety-prone subjects. *American Journal of Psychiatry*, 2007, 164, 318–327.
- Stein, M. B., and Uhde, T. W. The biology of anxiety disorders. In *American Psychiatric Press Textbook of Psychopharmacology*. Washington, D.C.: American Psychiatric Press, 1995.
- Steinhausen, H. C. The outcome of anorexia nervosa in the 20th century. *American Journal of Psychiatry*, 2002, 159, 1284–1293.
- Steininger, R. L., Alam, M. N., Szymusiak, R., and McGinty, D. State dependent discharge of tuberomammillary neurons in the rat hypothalamus. *Sleep Research*, 1996, 25, 28.
- Stephan, F. K., and Nuñez, A. A. Elimination of circadian rhythms in drinking activity, sleep, and temperature by isolation of the suprachiasmatic nuclei. *Behavioral Biology*, 1977, 20, 1–16.
- Stephan, F. K., and Zucker, I. Circadian rhythms in drinking behavior and locomotor activity of rats are eliminated by hypothalamic lesion. *Proceedings of the National Academy of Sciences, USA*, 1972, 69, 1583–1586.
- Steriade, M. Arousal: Revisiting the reticular activating system. *Science*, 1996, 272, 225–226.
- Steriade, M. The corticothalamic system in sleep. *Frontiers in Bioscience*, 2003, 8, d878–d899.
- Steriade, M. Grouping of brain rhythms in corticothalamic systems. *Neuroscience*, 2006, 137, 1087–1106.
- Stevens, J. R. Neurology and neuropathology of schizophrenia. In *Schizophrenia as a Brain Disease*, edited by F. A. Henn and H. A. Nasrallah. New York: Oxford University Press, 1982.
- Stewart, L. Fractionating the musical mind: Insights from congenital amusia. *Current Opinion in Neurobiology*, 2008, 18, 127–130.
- Stinson, D., and Thompson, C. Clinical experience with phototherapy. *Journal of the Affective Disorders*, 1990, 18, 129–135.
- Stoeckel, L. E., Weller, R. E., Giddings, M., and Cox, J. E. Peptide YY levels are associated with appetite suppression in response to long-chain fatty acids. *Physiology and Behavior*, 2008, 93, 289–295.
- Stolerman, I. P., and Jarvis, M. J. The scientific case that nicotine is addictive. *Psychopharmacology*, 1995, 117, 2–10.

- Stone, A. A., Reed, B. R., and Neale, J. M. Changes in daily event frequency precede episodes of physical symptoms. *Journal of Human Stress*, 1987, 13, 70–74.
- Stowe, G. N., Vendruscolo, L. F., Edwards, S., et al. A vaccine strategy that induces protective immunity against heroin. *Journal of Medical Chemistry*, 2011, 54, 5195–5204.
- Stowers, L., Holy, T. E., Meister, M., Dulac, C., and Koentges, G. Loss of sex discrimination of male-male aggression in mice deficient for TRP2. *Science*, 2002, 295, 1493–1500.
- Strange, P. G. Antipsychotic drug action: Antagonism, inverse agonism or partial agonism. *Trends in Pharmacological Science*, 2008, 29, 314–321.
- Stumpf, R. M., and Boesch, C. Does promiscuous mating preclude female choice? Female sexual strategies in chimpanzees (*Pan troglodytes verus*) of the Tai National Park, Côte d'Ivoire. *Behavioral Ecology and Sociobiology*, 2005, 57, 511–524.
- Sturgis, J. D., and Bridges, R. S. N-methyl-DL-aspartic acid lesions of the medial preoptic area disrupt ongoing parental behavior in male rats. *Physiology and Behavior*, 1997, 62, 305–310.
- Styron, W. *Darkness Visible: A Memoir of Madness*. New York: Random House, 1990.
- Sulik, K. K. Genesis of alcohol-induced craniofacial dysmorphism. *Experimental Biology and Medicine*, 2005, 230, 366–375.
- Sun, Y., Ahmed, S., and Smith, R. G. Deletion of ghrelin impairs neither growth nor appetite. *Molecular and Cellular Biology*, 2003, 23, 7973–7981.
- Sun, Y., Wang, P., Zheng, H., and Smith, R. G. Ghrelin stimulation of growth hormone release and appetite is mediated through the growth hormone secretagogue receptor. *Proceedings of the National Academy of Sciences, USA*, 2004, 101, 4679–4684.
- Suntsova, N., Guzman-Marin, R., Kumar, S., Alam, M. N., et al. The median preoptic nucleus reciprocally modulates activity of arousal-related and sleep-related neurons in the perifornical lateral hypothalamus. *Journal of Neuroscience*, 2007, 27, 1616–1630.
- Suzdak, P. D., Glowa, J. R., Crawley, J. N., Schwartz, R. D., et al. A selective imidazobenzodiazepine antagonist of ethanol in the rat. *Science*, 1986, 234, 1243–1247.
- Suzuki, S., Ramos, E. J., Goncalves, C. G., Chen, C., and Meguid, M. M. Changes in GI hormones and their effect on gastric emptying and transit times after Roux-en-Y gastric bypass in rat model. *Surgery*, 2005, 138, 283–290.
- Swaab, D. F., Gooren, L. J. G., and Hofman, M. A. Brain research, gender, and sexual orientation. *Journal of Homosexuality*, 1995, 28, 283–301.
- Swaab, D. F., and Hofman, M. A. An enlarged suprachiasmatic nucleus in homosexual men. *Brain Research*, 1990, 537, 141–148.
- Sweet, W. H. Participant in brain stimulation in behaving subjects. Neurosciences Research Program Workshop, 1966.
- Swordlow, N. R., Geyer, M. A., Vale, W. W., and Koob, G. F. Corticotropin-releasing factor potentiates acoustic startle in rats: Blockade by chlordiazepoxide. *Psychopharmacology*, 1986, 88, 147–152.
- Szwed, M., Cohen, L., Qiao, E., and Dehaene, S. The role of invariant line junctions in object and visual word recognition. *Vision Research*, 2009, 49, 718–725.
- Takahashi, K., Lin, J.-S., and Sakai, K. Characterization and mapping of sleep-waking specific neurons in the basal forebrain and preoptic hypothalamus in mice. *Neuroscience*, 2009, 161, 269–292.
- Takahashi, L. K. Hormonal regulation of sociosexual behavior in female mammals. *Neuroscience and Biobehavioral Reviews*, 1990, 14, 403–413.
- Takahashi, Y. K., Nagayama, S., and Mori, K. Detection and masking of spoiled food smells by odor maps in the olfactory bulb. *Journal of Neuroscience*, 2004, 24, 8690–8694.
- Tan, L. H., Laird, A. R., Li, K., and Fox, P. T. Neuroanatomical correlates of phonological processing of Chinese characters and alphabetic words: A meta-analysis. *Human Brain Mapping*, 2005, 25, 83–91.
- Tan, T. M. M., Vanderpump, M., Khoo, B., et al. Somatostatin infusion lowers plasma ghrelin without reducing appetite in adults with Prader-Willi syndrome. *Journal of Clinical Endocrinology and Metabolism*, 2004, 89, 4162–4165.
- Tanner, C. M. The role of environmental toxins in the etiology of Parkinson's disease. *Trends in Neuroscience*, 1989, 12, 49–54.
- Taub, E., Uswatte, F., King, D. K., Morris, D., et al. A placebo-controlled trial of constraint-induced movement therapy for upper extremity after stroke. *Stroke*, 2006, 37, 1045–1049.
- Tavera-Mendoza, L. E., and White, J. H. Cell defenses and the sunshine vitamin. *Scientific American*, 2007, 297, 62–72.
- Taxidis, J., Coombes, S., Mason, R., and Owen, M. R. Modeling sharp wave-ripple complexes through a CA3-CA1 network model with chemical synapses. *Hippocampus*, 2011, DOI: 10.1002/hipo.20930
- Teff, K. L., Elliott, S. S., Tschöp, M., et al. Dietary fructose reduces circulating insulin and leptin, attenuates postprandial suppression of ghrelin, and increases triglycerides in women. *Journal of Clinical Endocrinology and Metabolism*, 2004, 89, 2963–2972.
- Teitelbaum, P., and Stellar, E. Recovery from the failure to eat produced by hypothalamic lesions. *Science*, 1954, 120, 894–895.
- Teng, E., and Squire, L. R. Memory for places learned long ago is intact after hippocampal damage. *Nature*, 1999, 400, 675–677.
- Terenius, L., and Wahlström, A. Morphine-like ligand for opiate receptors in human CSF. *Life Sciences*, 1975, 16, 1759–1764.
- Termen, M. Evolving applications of light therapy. *Sleep Medicine Reviews*, 2007, 11, 497–507.
- Terracciano, A., Tanaka, T., Sutin, A. R., et al. Genomewide association scan of trait depression. *Biological Psychiatry*, 2010, 68, 811–817.
- Terry, R. D., and Davies, P. Dementia of the Alzheimer type. *Annual Review of Neuroscience*, 1980, 3, 77–96.
- Tetel, M. J., Getzinger, M. J., and Blaustein, J. D. Fos expression in the rat brain following vaginal-cervical stimulation by mating and manual probing. *Journal of Neuroendocrinology*, 1993, 5, 397–404.
- Tetrad, J. W., and Langston, J. W. The effect of deprenyl (Selegiline) on the natural history of Parkinson's disease. *Science*, 1989, 245, 519–522.
- Thaker, G. K., and Carpenter, W. T. Advances in schizophrenia. *Nature Medicine*, 2001, 7, 667–671.
- Thapar, A., O'Donovan, M., and Owen, M. J. The genetics of attention deficit hyperactivity disorder. *Human Molecular Genetics*, 2005, 14, R275–R282.
- Thase, M. E. Treatment issues related to sleep and depression. *Journal of Clinical Psychiatry*, 2000, 61, 46–50.
- Theorell, T., Leymann, H., Jodko, M., Konarski, K., et al. "Person under train" incidents: Medical consequences for subway drivers. *Psychosomatic Medicine*, 1992, 54, 480–488.
- Thiels, E., Xie, X. P., Yeckel, M. F., Barrionuevo, G., and Berger, T. W. NMDA receptor-dependent LTD in different subfields of hippocampus in vivo and in vitro. *Hippocampus*, 1996, 6, 43–51.
- Thomas, A. C., Allen, F. L., Phillips, H., and Karantzas, G. Gaming machine addiction: The role of avoidance, accessibility and social support. *Psychology of Addictive Behaviors*, 2011. Epub ahead of print.
- Thomas, O., Avidan, G., Humphreys, K., et al. Reduced structural connectivity in ventral visual cortex in congenital prosopagnosia. *Nature Neuroscience*, 2009, 12, 29–31.
- Thompson, P. M., Hayashi, K. M., Simon, S. L., Geaga, J. A., et al. Structural abnormalities in the brains of human subjects who use methamphetamine. *Journal of Neuroscience*, 2004, 24, 6028–6036.
- Thompson, S. M., Fortunato, C., McKinney, R. A., Müller, M., and Gähwiler, B. H. Mechanisms underlying the neuropathological consequences of epileptic activity in the rat hippocampus in vitro. *Journal of Comparative Neurology*, 1996, 372, 515–528.
- Thomson, J. J. *Rights, Restitution, and Risk: Essays in Moral Theory*. Cambridge, Mass.: Harvard University Press, 1986.
- Thorn, C. A., Atallah, H., Howe, M., and Graybiel, A. M. Differential dynamics of activity changes in dorsolateral and dorsomedial striatal loops during learning. *Neuron*, 2010, 66, 781–795.
- Thuy, D. H. D., Matsuo, K., Nakamura, K., Toma, K., et al. Implicit and explicit processing of kanji and kana words and non-words studied with fMRI. *Neuroimage*, 2004, 23, 878–889.
- Toh, K. L., Jones, C. R., He, Y., Eide, E. J., et al. An hPer2 phosphorylation site mutation in familial advanced sleep phase syndrome. *Science*, 2001, 291, 1040–1043.
- Tootell, R. B. H., Tsao, D., and Vanduffel, W. Neuroimaging weighs in: Humans meet macaques in "primate" visual cortex. *Journal of Neuroscience*, 2003, 23, 3981–3989.
- Topper, R., Kosinski, C., and Mull, M. Volitional type of facial palsy associated with pontine ischemia. *Journal of Neurology, Neurosurgery, and Psychiatry*, 1995, 58, 732–734.
- Tordoff, M. G., and Friedman, M. I. Hepatic control of feeding: Effect of glucose, fructose, and manitol. *American Journal of Physiology*, 1988, 254, R969–R976.
- Tracy, J. L., and Robbins, R. W. The automaticity of emotion recognition. *Emotion*, 2008, 8, 81–95.
- Tronel, S., Fabre, A., Charrier, V., et al. Spatial learning sculpts the dendritic arbor of adult-born hippocampal neurons. *Proceedings of the National Academy of Sciences, USA*, 2010, 107, 7963–7968.
- Trulson, M. E., and Jacobs, B. L. Raphe unit activity in freely moving cats: Correlation with level of behavioral arousal. *Brain Research*, 1979, 163, 135–150.
- Tsacopoulos, M., and Magistretti, P. J. Metabolic coupling between glia and neurons. *Journal of Neuroscience*, 1996, 16, 877–885.

- Tsai, H.-C., Zhang, F., Adamantidis, A., et al. Phasic firing in dopaminergic neurons is sufficient for behavioral conditioning. *Science*, 2009, 324, 1080–1084.
- Tsao, D. Y., Vanduffel, W., Sasaki, Y., Fize, D., et al. Stereopsis activates V3A and caudal intraparietal areas in macaques and humans. *Neuron*, 2003, 39, 555–568.
- Tschöp, M., Smiley, D. L., and Heiman, M. L. Ghrelin induces adiposity in rodents. *Nature*, 2000, 407, 908–913.
- Tsuang, M. T., Gilbertson, M. W., and Faraone, S. V. The genetics of schizophrenia: Current knowledge and future directions. *Schizophrenia Research*, 1991, 4, 157–171.
- Tucker, M. A., Hirota, Y., Wamsley, E. J., Lau, H., et al. A daytime nap containing solely non-REM sleep enhances declarative but not procedural memory. *Neurobiology of Learning and Memory*, 2006, 86, 241–247.
- Turner, S. M., Beidel, D. C., and Nathan, R. S. Biological factors in obsessive-compulsive disorders. *Psychological Bulletin*, 1985, 97, 430–450.
- Tye, K. M., Prakash, R., Kim, S.-Y., et al. Amygdala circuitry mediating reversible and bidirectional control of anxiety. *Nature*, 2011, 471, 358–362.
- Tyrell, J. B., and Baxter, J. D. Glucocorticoid therapy. In *Endocrinology and Metabolism*, edited by P. Felig, J. D. Baxter, A. E. Broadus, and L. A. Frohman. New York: McGraw-Hill, 1981.
- Unger, J., McNeill, T. H., Moxley, R. T., White, M., Moss, A., and Livingston, J. N. Distribution of insulin receptor-like immunoreactivity in the rat forebrain. *Neuroscience*, 1989, 31, 143–157.
- Ungerleider, L. G., and Mishkin, M. Two cortical visual systems. In *Analysis of Visual Behavior*, edited by D. J. Ingle, M. A. Goodale, and R. J. W. Mansfield. Cambridge, Mass.: MIT Press, 1982.
- Uno, H., Tarara, R., Else, J. G., Suleman, M. A., and Sapolsky, R. M. Hippocampal damage associated with prolonged and fatal stress in primates. *Journal of Neuroscience*, 1989, 9, 1705–1711.
- Urban, P. P., Wicht, S., Marx, J., Mitrovic, S., et al. Isolated voluntary facial paresis due to pontine ischemia. *Neurology*, 1998, 50, 1859–1862.
- Urgesi, C., Berlucchi, G., and Aglioti, S. M. Magnetic stimulation of extrastriate body area impairs visual processing of nonfacial body parts. *Current Biology*, 2004, 13, 2130–2134.
- Vaina, L. M. Complex motion perception and its deficits. *Current Opinion in Neurobiology*, 1998, 8, 494–502.
- Valcour, V., Sithinamsuwan, P., Letendre, S., and Ances, B. Pathogenesis of HIV in the central nervous system. *Current HIV/AIDS*, 2011, 8, 54–61.
- Valenstein, E. S. *Great and Desperate Cures: The Rise and Decline of Psychosurgery and Other Radical Treatments for Mental Illness*. New York: Basic Books, 1986.
- Valenza, N., Ptak, R., Zimine, I., Badan, M., et al. Dissociated active and passive tactile shape recognition: A case study of pure tactile apraxia. *Brain*, 2001, 124, 2287–2298.
- Van den Top, M., Lee, K., Whyment, A. D., Blanks, A. M., and Spanswick, D. Orexin-sensitive NPY/AGRP pacemaker neurons in the hypothalamic arcuate nucleus. *Nature Neuroscience*, 2004, 7, 493–494.
- van der Lee, S., and Boot, L. M. Spontaneous pseudopregnancy in mice. *Acta Physiologica et Pharmacologica Neerlandica*, 1955, 4, 442–444.
- Van Goozen, S., Wiegant, V., Ender, E., Helmond, F., and Van de Poll, N. Psychoendocrinological assessments of the menstrual cycle: The relationship between hormones, sexuality, and mood. *Archives of Sexual Behavior*, 1997, 26, 359–382.
- van Harmelen, A. L., van Tol, M. J., van der Wee, N. J., et al. Reduced medial prefrontal cortex volume in adults reporting childhood emotional maltreatment. *Biological Psychiatry*, 2010, 68, 832–838.
- van Leengoed, E., Kerker, E., and Swanson, H. H. Inhibition of post-partum maternal behaviour in the rat by injecting an oxytocin antagonist into the cerebral ventricles. *Journal of Endocrinology*, 1987, 112, 275–282.
- Vandenbergh, J. G., Whitsett, J. M., and Lombardi, J. R. Partial isolation of a pheromone accelerating puberty in female mice. *Journal of Reproductive Fertility*, 1975, 43, 515–523.
- Vandenbulcke, M., Peeters, R., Fannes, K., and Vandenbergh, R. Knowledge of visual attributes in the right hemisphere. *Nature Neuroscience*, 2006, 9, 964–970.
- Vanderwolf, C. H. The electrocorticogram in relation to physiology and behavior: A new analysis. *Electroencephalography and Clinical Neurophysiology*, 1992, 82, 165–175.
- Vassar, R., Ngai, J., and Axel, R. Spatial segregation of odorant receptor expression in the mammalian olfactory epithelium. *Cell*, 1993, 74, 309–318.
- Veldman, B. A., Wijn, A. M., Knoers, N., et al. Genetic and environmental risk factors in Parkinson's disease. *Clinical Neurology and Neurosurgery*, 1998, 100, 15–26.
- Vergnes, M., Depaulis, A., Boehrer, A., and Kempf, E. Selective increase of offensive behavior in the rat following intrahypothalamic 5,7-DHT-induced serotonin depletion. *Brain Research*, 1988, 29, 85–91.
- Verney, E. B. The antidiuretic hormone and the factors which determine its release. *Proceedings of the Royal Society of London B*, 1947, 135, 25–106.
- Vewers, M. E., Dhatt, R., and Tejwani, G. A. Naltrexone administration affects ad libitum smoking behavior. *Psychopharmacology*, 1998, 140, 185–190.
- Vgontzas, A. N., and Kales, A. Sleep and its disorders. *Annual Review of Medicine*, 1999, 50, 387–400.
- Viding, E., Blair, R. J. R., Moffitt, T. E., and Plomin, R. Evidence for substantial genetic risk for psychopathy in 7-year olds. *Journal of Child Psychology and Psychiatry*, 2005, 46, 592–597.
- Viding, E., Jones, A. P., Frick, P. J., et al. Heritability of antisocial behaviour at 0: Do callous-unemotional traits matter? *Developmental Science*, 2008, 11, 17–22.
- Vinckier, F., Dehaene, S., Jobert, A., Dubus, J. P., Sigman, M., and Cohen, L. Hierarchical coding of letter strings in the ventral stream: Dissecting the inner organization of the visual word-form system. *Neurons*, 2007, 55, 143–156.
- Virkkunen, M., De Jong, J., Bartko, J., and Linnoila, M. Psychobiological concomitants of history of suicide attempts among violent offenders and impulsive fire setters. *Archives of General Psychiatry*, 1989, 46, 604–606.
- Vocci, F. J., Aciri, J., and Elkashef, A. Medical development for addictive disorders: The state of the science. *American Journal of Psychiatry*, 2005, 162, 1431–1440.
- Vogel, G. W., Buffenstein, A., Minter, K., and Hennessey, A. Drug effects on REM sleep and on endogenous depression. *Neuroscience and Biobehavioral Reviews*, 1990, 14, 49–63.
- Vogel, G. W., Thurmond, A., Gibbons, P., Sloan, K., Boyd, M., and Walker, M. REM sleep reduction effects on depression syndromes. *Archives of General Psychiatry*, 1975, 32, 765–777.
- Vogel, G. W., Vogel, F., McAbee, R. S., and Thurmond, A. J. Improvement of depression by REM sleep deprivation: New findings and a theory. *Archives of General Psychiatry*, 1980, 37, 247–253.
- Volkow, N. D., Wang, G.-J., Fowler, J. S., Logan, J., et al. “Nonhedonic” food motivation in humans involves dopamine in the dorsal striatum and methylphenidate amplifies this effect. *Synapse*, 2002, 44, 175–180.
- Volpe, B. T., LeDoux, J. E., and Gazzaniga, M. S. Information processing of visual stimuli in an “extinguished” field. *Nature*, 1979, 282, 722–724.
- von Kriegstein, K., Eger, E., Kleinschmidt, A., and Giraud, A. L. Modulation of neural responses to speech by directing attention to voices or verbal content. *Cognitive Brain Research*, 2003, 17, 48–55.
- Wada, H., Inagaki, N., Itowi, N., and Yamatodani, A. Histaminergic neuron systems in the brain: Distribution and possible functions. *Brain Research Bulletin*, 1991, 27, 367–370.
- Wallen, K. Desire and ability: Hormones and the regulation of female sexual behavior. *Neuroscience and Biobehavioral Reviews*, 1990, 14, 233–241.
- Wallen, K. Sex and context: Hormones and primate sexual motivation. *Hormones and Behavior*, 2001, 40, 339–357.
- Wallen, K., Eisler, J. A., Tannenbaum, P. L., Nagell, K. M., and Mann, D. R. Antide (Nal-Lys GnRH antagonist) suppression of pituitary-testicular function and sexual behavior in group-living rhesus monkeys. *Physiology and Behavior*, 1991, 50, 429–435.
- Walsh, T., McClellan, J. M., McCarthy, S. E., et al. Rare structural variants disrupt multiple genes in neurodevelopmental pathways in schizophrenia. *Science*, 2008, 320, 539–543.
- Walsh, V., Carden, D., Butler, S. R., and Kulikowski, J. J. The effects of V4 lesions on the visual abilities of macaques: Hue discrimination and color constancy. *Behavioural Brain Research*, 1993, 53, 51–62.
- Walsh, V., Ellison, A., Battelli, L., and Cowey, A. Task-specific impairments and enhancements induced by magnetic stimulation of human visual area V5. *Proceedings in Biological Sciences*, 1998, 265, 537–543.
- Walters, E. E., and Kendler, K. S. Anorexia nervosa and anorexic-like syndromes in a population-based female twin sample. *American Journal of Psychiatry*, 1995, 152, 64–71.
- Wamsley, E. J., Tucker, M., Payne, J. D., et al. Dreaming of a learning task is associated with enhanced sleep-dependent memory consolidation. *Current Biology*, 2010, 20, 1–6.

- Wandell, B. A., Dumoulin, S. O., and Brewer, A. A. Visual field maps in human cortex. *Neuron*, 2007, 56, 366–383.
- Wang, Q., Charych, E. I., Pulito, V. L., et al. The psychiatric disease risk factors DISC1 and TNK1 interact to regulate synapse composition and function. *Molecular Psychiatry*, 2010, 16, 1006–1023.
- Ward, H. E., Johnson, E. A., Salm, A. K., and Birkle, D. L. Effects of prenatal stress on defensive withdrawal behavior and corticotrophin releasing factor systems in rat brain. *Physiology and Behavior*, 2000, 70, 359–366.
- Warne, G. L., and Zajac, J. D. Disorders of sexual differentiation. *Endocrinology and Metabolism Clinics of North America*, 1998, 27, 945–967.
- Watkins, K. E., Dronkers, N. F., and Vargha-Khadem, F. Behavioural analysis of an inherited speech and language disorder: Comparison with acquired aphasia. *Brain*, 2002a, 125, 452–464.
- Watkins, K. E., Smith, S. M., Davis, S., and Howell, P. Structural and functional abnormalities of the motor system in developmental stuttering. *Brain*, 2008, 131, 50–59.
- Watkins, K. E., Vargha-Khadem, F., Ashburner, J., Passingham, R. E., et al. MRI analysis of an inherited speech and language disorder: Structural brain abnormalities. *Brain*, 2002b, 125, 465–478.
- Wattendorf, D. J., and Muenke, M. Prader-Willi syndrome. *American Family Physician*, 2005, 72, 827–830.
- Weinberger, D. R. Schizophrenia and the frontal lobe. *Trends in Neurosciences*, 1988, 11, 367–370.
- Weinberger, D. R., and Wyatt, R. J. Brain morphology in schizophrenia: *In vivo* studies. In *Schizophrenia as a Brain Disease*, edited by F. A. Henn and H. A. Nasrallah. New York: Oxford University Press, 1982.
- Weiner, R. D., and Krystal, A. D. The present use of electroconvulsive therapy. *Annual Review of Medicine*, 1994, 45, 273–281.
- Weiser, M., Reichenberg, A., Grotto, I., Yasvitzky, R., et al. Higher rates of cigarette smoking in male adolescents before the onset of schizophrenia: A historical-prospective cohort study. *American Journal of Psychiatry*, 2004, 161, 1219–1223.
- Wernicke, C. *Der Aphasische Symptomenkomplex*. Breslau, Poland: Cohn & Weigert, 1874.
- Westmark, P. R., Westmark, C. J., Wang, S., et al. Pin1 and PKMzeta sequentially control dendritic protein synthesis. *Science Signaling*, 2010, 3, ra18.
- Whalen, P. J., Rauch, S. L., Etcoff, N. L., McInerney, S. C., et al. Masked presentations of emotional facial expressions modulate amygdala activity without explicit knowledge. *Journal of Neuroscience*, 1998, 18, 411–418.
- Whipple, B., and Komisaruk, B. R. Analgesia produced in women by genital self-stimulation. *Journal of Sex Research*, 1988, 24, 130–140.
- White, F. J. Synaptic regulation of mesocorticolimbic dopamine neurons. *Annual Review of Neuroscience*, 1996, 19, 405–436.
- White, J. Autonomic discharge from stimulation of the hypothalamus in man. *Association for Research in Nervous and Mental Disorders*, 1940, 20, 854–863.
- Whiteside, S. P., Port, J. D., and Abramowitz, J. S. A meta-analysis of functional neuroimaging in obsessive-compulsive disorder. *Psychiatry Research: Neuroimaging*, 2004, 132, 69–79.
- Whitten, W. K. Occurrence of anestrus in mice caged in groups. *Journal of Endocrinology*, 1959, 18, 102–107.
- Wickelgren, I. Drug may suppress the craving for nicotine. *Science*, 1998, 282, 1797–1798.
- Wiesner, B. P., and Sheard, N. *Maternal Behaviour in the Rat*. London: Oliver and Brody, 1933.
- Wigren, H. K., Schepens, M., Matto, V., et al. Glutamatergic stimulation of the basal forebrain elevates extracellular adenosine and increases the subsequent sleep. *Neuroscience*, 2007, 147, 811–823.
- Willer, C. J., Speliotes, E. K., Loos, R. J. F., et al. Six new loci associated with body mass index highlight a neuronal influence on body weight regulation. *Nature Genetics*, 2009, 41, 25–34.
- Willesen, M. G., Kristensen, P., and Romer, J. Co-localization of growth hormone secretagogue receptor and NPY mRNA in the arcuate nucleus of the rat. *Neuroendocrinology*, 1999, 70, 306–316.
- Williams, J. R., Insel, T. R., Harbaugh, C. R., and Carter, C. S. Oxytocin centrally administered facilitates formation of a partner preference in female prairie voles (*Microtus ochrogaster*). *Journal of Neuroendocrinology*, 1994, 6, 247–250.
- Williams, R. Slowing the decline. *Nature*, 2010, 466, s13–s14.
- Williams, Z. M., and Eskandar, E. N. Selective enhancement of associative learning by microstimulation of the anterior caudate. *Nature Neuroscience*, 2006, 9, 562–568.
- Willour, V. L., Shugart, Y. Y., Samuels, J., et al. Replication study supports evidence for linkage to 9p24 in obsessive-compulsive disorder. *American Journal of Medical Genetics*, 2004, 75, 508–513.
- Wilson, B. E., Meyer, G. E., Cleveland, J. C., and Weigle, D. S. Identification of candidate genes for a factor regulating body weight in primates. *American Journal of Physiology*, 1990, 259, R1149–R1155.
- Winans, E. Aripiprazole. *American Journal of Health-System Pharmacy*, 2003, 60, 2437–2445.
- Winans, S. S., and Powers, J. B. Olfactory and vomeronasal deafferentation of male hamsters: Histological and behavioral analyses. *Brain Research*, 1977, 126, 325–344.
- Wirz-Justice, A., Graw, P., Kraeuchi, K., Sarrafzadeh, A., et al. 'Natural' light treatment of seasonal affective disorder. *Journal of Affective Disorders*, 1996, 37, 109–120.
- Wirz-Justice, A., and Van den Hoofdakker, R. H. Sleep deprivation in depression: What do we know, where do we go? *Biological Psychiatry*, 1999, 46, 445–453.
- Wise, M. S. Narcolepsy and other disorders of excessive sleepiness. *Medical Clinics of North America*, 2004, 99, 597–610.
- Wise, R. A., Leone, P., Rivest, R., and Leeb, K. Elevations of nucleus accumbens dopamine and DOPAC levels during intravenous heroin self-administration. *Synapse*, 1995, 21, 140–148.
- Wise, S. P., and Rapoport, J. L. Obsessive compulsive disorder: Is it a basal ganglia dysfunction? *Psychopharmacology Bulletin*, 1988, 24, 380–384.
- Wissinger, B., and Sharpe, L. T. New aspects of an old theme: The genetic basis of human color vision. *American Journal of Human Genetics*, 1998, 63, 1257–1262.
- Wolpaw, J. R., and McFarland, D. J. Control of a two-dimensional movement signal by a noninvasive brain-computer interface in humans. *Proceedings of the National Academy of Sciences, USA*, 2004, 101, 17849–17854.
- Wong-Riley, M. T. Personal communication, 1978. Cited by Livingstone, M. S., and Hubel, D. H. Thalamic inputs to cytochrome oxidase-rich regions in monkey visual cortex. *Proceedings of the National Academy of Sciences, USA*, 1982, 79, 6098–6101.
- Wood, E. R., Dudchenko, P. A., Robitsek, R. J., and Eichenbaum, H. Hippocampal neurons encode information about different types of memory episodes occurring in the same location. *Neuron*, 2000, 27, 623–633.
- Wood, R. I., and Newman, S. W. Mating activates androgen receptor-containing neurons in chemosensory pathways of the male Syrian hamster brain. *Brain Research*, 1993, 614, 65–77.
- Woodruff-Pak, D. S. Eyeblink classical conditioning in H. M.: Delay and trace paradigms. *Behavioral Neuroscience*, 1993, 107, 911–925.
- Woods, B. T. Is schizophrenia a progressive neurodevelopmental disorder? Toward a unitary pathogenetic mechanism. *American Journal of Psychiatry*, 1998, 155, 1661–1670.
- Woods, S. C., Lotter, E. C., McKay, L. D., and Porte, D. Chronic intracerebroventricular infusion of insulin reduces food intake and body weight of baboons. *Nature*, 1979, 282, 503–505.
- Woodworth, R. S., and Schlosberg, H. *Experimental Psychology*. New York: Holt, Rinehart and Winston, 1954.
- Wu, J. C., and Bunney, W. E. The biological basis of an antidepressant response to sleep deprivation and relapse: Review and hypothesis. *American Journal of Psychiatry*, 1990, 147, 14–21.
- Wulff, K., Gatti, S., Wettstein, J. G., and Foster, R. G. Sleep and circadian rhythm disruption in psychiatric and neurodegenerative disease. *Nature Reviews: Neuroscience*, 2010, 11, 1–11.
- Wyart, C., Webster, W. W., Chen, J. H., Wilson, S. R., et al. Smelling a single component of male sweat alters levels of cortisol in women. *Journal of Neuroscience*, 2007, 27, 1261–1265.
- Wynne, K., Stanley, S., McGowan, B., and Bloom, S. Appetite control. *Journal of Endocrinology*, 2005, 184, 291–318.
- Wysocki, C. J. Neurobehavioral evidence for the involvement of the vomeronasal system in mammalian reproduction. *Neuroscience and Biobehavioral Reviews*, 1979, 3, 301–341.
- Xiao, Z., Lee, T., Zhang, J. X., Wu, Q., et al. Thirsty heroin addicts show different fMRI activations when exposed to water-related and drug-related cues. *Drug and Alcohol Dependence*, 2006, 83, 157–162.
- Yadav, J. S., Wholey, M. H., Kuntz, R. E., Fayad, P., et al. Protected carotid-artery stenting versus endarterectomy in high-risk patients. *New England Journal of Medicine*, 2004, 351, 1493–1501.
- Yamanaka, A., Beuckmann, C. T., Willie, J. T., Hara, J., et al. Hypothalamic orexin neurons regulate arousal according to energy balance in mice. *Neuron*, 2003, 38, 701–713.
- Yang, L., Scott, K. A., Hyun, J., et al. Role of dorsomedial hypothalamic neuropeptide Y in modulating food intake and energy balance. *Journal of Neuroscience*, 2009, 29, 179–190.

- Yang, T., and Maunsell, J. H. R. The effect of perceptual learning on neuronal responses in monkey visual area V4. *Journal of Neuroscience*, 2004, 24, 1617–1626.
- Yao, Y., Kelly, M. T., Sajikumar, S., et al. PKM Zeta maintains late long-term potentiation by N-ethylmaleimide-sensitive factor/GluR2-dependent trafficking of postsynaptic AMPA receptors. *Journal of Neuroscience*, 2008, 28, 7820–7827.
- Yehuda, R., and LeDoux, J. Response variation following trauma: A translational neuroscience approach to understanding PTSD. *Neuron*, 2007, 56, 19–32.
- Yin, H. H., Mulcare, S. P., Hilário, M. R. F., et al. Dynamic reorganization of striatal circuits during the acquisition and consolidation of a skill. *Nature Neuroscience*, 2009, 12, 333–341.
- Yokoo, H., Tanaka, M., Yoshida, M., Tsuda, A., et al. Direct evidence of conditioned fear-elicited enhancement of noradrenaline release in the rat hypothalamus assessed by intracranial microdialysis. *Brain Research*, 1990, 536, 305–308.
- Yost, W. A. Auditory image perception and analysis: The basis for hearing. *Hearing Research*, 1991, 56, 8–18.
- Young, A. W., Aggleton, J. P., Hellawell, D. J., Johnson, M., Brooks, P., and Hanley, J. R. Face processing impairments after amygdalotomy. *Brain*, 1995, 118, 15–24.
- Youngren, K. D., Inglis, F. M., Pivrotto, P. J., Jedema, H. P., et al. Clozapine preferentially increases dopamine release in the rhesus monkey prefrontal cortex compared with the caudate nucleus. *Neuropsychopharmacology*, 1999, 20, 403–412.
- Yu, H., Wang, Y., Pattwell, S., et al. Variant BDNF Val66Met polymorphism affects extinction of conditioned aversive memory. *Journal of Neuroscience*, 2009, 29, 4056–4064.
- Zammit, S., Thomas, K., Thompson, A., et al. Maternal tobacco, cannabis and alcohol use during pregnancy and risk of adolescent psychotic symptoms in offspring. *British Journal of Psychiatry*, 2009, 195, 294–300.
- Zandian, M., Ioakimidis, I., Bergh, C., and Södersten, P. Cause and treatment of anorexia nervosa. *Physiology and Behavior*, 2007, 92, 290–293.
- Zayfert, C., Dums, A. R., Ferguson, R. J., and Hegel, M. T. Health functioning impairments associated with posttraumatic stress disorder, anxiety disorders, and depression. *Journal of Nervous and Mental Disease*, 2002, 190, 233–240.
- Zeki, S. The representation of colours in the cerebral cortex. *Nature*, 1980, 284, 412–418.
- Zeki, S., Aglioti, S., McKeefry, D., and Berlucchi, G. The neurological basis of conscious color perception in a blind patient. *Proceedings of the National Academy of Sciences, USA*, 1999, 96, 13594–13596.
- Zeki, S., and Marini, L. Three cortical stages of colour processing in the human brain. *Brain*, 1998, 121, 1669–1685.
- Zenner, H.-P., Zimmermann, U., and Schmitt, U. Reversible contraction of isolated mammalian cochlear hair cells. *Hearing Research*, 1985, 18, 127–133.
- Zentner, M., and Kagan, J. Infants' perception of consonance and dissonance in music. *Infant Behavior and Development*, 1998, 21, 483–492.
- Zhang, F., Wang, L.-P., Brauner, M., Liewald, J. F., et al. Multimodal fast optical interrogation of neural circuitry. *Nature*, 2007, 446, 633–639.
- Zhang, X., Salmeron, B. J., Ross, T. J., et al. Factors underlying prefrontal and insula structural alterations in smokers. *NeuroImage*, 2011, 54, 42–48.
- Zhao, Y. J., Wee, H. L., Au, W. L., et al. Selegiline use is associated with a slower progression in early Parkinson's disease as evaluated by Hoehn and Yahr stage transition times. *Parkinsonism and Related Disorders*, 2011, 17, 194–197.
- Zhong, C.-B., and Liljenquist, K. Washing away your sins: Threatened morality and physical cleansing. *Science*, 2006, 313, 1451–1452.
- Zigman, J. M., Nakano, Y., Coppari, R., Balthasar, N., et al. Mice lacking ghrelin receptors resist the development of diet-induced obesity. *Journal of Clinical Investigation*, 2005, 115, 3564–3572.
- Zihl, J., Von Cramon, D., Mai, N., and Schmid, C. Disturbance of movement vision after bilateral posterior brain damage. Further evidence and follow up observations. *Brain*, 1991, 114, 2235–2252.
- Zinman, L., and Cudkovic, M. Emerging targets and treatments in amyotrophic lateral sclerosis. *Lancet Neurology*, 2011, 10, 481–490.
- Zlokovic, B. V. The blood–brain barrier in health and chronic neurodegenerative disorders. *Neuron*, 2008, 57, 178–201.
- Zorrilla, E. P., Iwasaki, S., Moss, J. A., Chang, J., et al. Vaccination against weight gain. *Proceedings of the National Academy of Sciences, USA*, 2006, 103, 12961–12962.
- Zubieta, J.-K., Bueller, J. A., Jackson, L. R., Scott, D. J., et al. Placebo effects mediated by endogenous opioid activity on μ -opioid receptors. *Journal of Neuroscience*, 2005, 25, 7754–7762.