

CURRICULUM VITAE

JANE STEWART

Distinguished Professor Emeritus
Center for Studies in Behavioral Neurobiology
Department of Psychology
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EDUCATION

1956	B.A.	Queen's University	Psychology, Biology
1959	Ph.D.	University of London	Psychology
1992	D.Sc.	Queen's University	Honorary

RESEARCH AREAS AND SPECIAL INTERESTS:

Neurobiology of motivation; Physiological and environmental interactions in control of motivated behavior; Brain, behavior and drug interactions; The psychopharmacology and neurochemistry of drugs of abuse; Neural and hormonal basis of sex differences in behavior; The nature of the university; Science education; Science policy.

POSITIONS HELD:

1959-63 Senior Research Biologist, Central Nervous System Pharmacology, Ayerst Laboratories, Montreal
1962-63 Part-time instructor in Psychology, Sir George Williams University
1963-69 Associate Professor in Psychology, Sir George Williams University
1969-75 Professor and Chairman, Dept. of Psychology, Sir George Williams University (now Concordia University)
1975- Professor, Department of Psychology, Concordia University
1990-97 Director, Center for Studies in Behavioral Neurobiology, Concordia University
2006-13 Concordia University Research Chair in Behavioral Neuroscience
2009- Distinguished Professor Emeritus

TEACHING

Physiological, Comparative, Hormones and Behavior, Sexual Differentiation, Personality, Social, Experimental, Contemporary Issues, Introductory, Graduate Seminars (Central Problems in Experimental Psychology, Sexual Differentiation, Neuroendocrinology)

HONOURS

1978 Elected Fellow of the Canadian Psychological Association
1983 Elected Fellow of the American Psychological Association
1986 Elected Fellow of the American Association for the Advancement of Science
Elected Fellow of the Association for Psychological Science
1988 Distinguished Psychopharmacology Award, Canadian Psychological Association
1992 Doctoris honoris causae (D.Sc.), Queen's University
1996 Elected Fellow of the Royal Society of Canada, Academy of Sciences
1999 Heinz Lehmann Award in Psychopharmacology (CCNP)

- 2000 University Research Award (Concordia University)
- 2000 Hebb Award, Canadian Brain Behaviour and Cognitive Sciences Society
- 2002 The American Journal on Addictions' Distinguished Basic Science Scholar on the Addictions for the year 2002
- 2005 Distinguished Achievement Award of the European Behavioural Pharmacology Society
- 2007 Elected Officer of the Order of Canada

EDITORIAL BOARDS:

- 1979-81 Canadian Psychology
- 1985-95 Canadian Journal of Experimental Psychology
- 1985-96 Psychobiology
- 1990-96 Journal of Psychopharmacology
- 1991-2004 Behavioral Neuroscience
- 1995-2002 Physiology & Behavior
- 1995-2000 Hormones and Behavior
- 1999-2009 Behavioural Brain Research
- 2000-2008 Psychopharmacology
- 2003-2010 Current Psychiatry Reviews

GRANTING COUNCIL ACTIVITIES:

- 1978-79 Member, Scientific Review Committee, Non Medical Use of Drugs Directorate, Department of Health and Welfare, Canada
- 1979 Member, Comité d'appréciation, Biologie, Le Programme de Formation de Chercheurs et d'Action Concertée, Ministère de l'Éducation du Québec
- 1979-82 Member, NSERC Grants Review Committee for Psychology
- 1981-82 Chairman, NSERC Grants Review Committee for Psychology
- 1982-88 Member, MRC Grants Review Committee for Behavioral Sciences
- 1986-89 Member, MRC Working Group on Research Involving Animals
- 1990-94 Member, NSERC Committee on Research Grants
- 1991-94 Group Chairman, NSERC, Life Sciences
- 1997-98 Member Reallocation Committee, NSERC Committee for Psychology
- 1996, 1998 Member Canada Gold Medal for Science Selection Committee NSERC
- 1999-2000 Member NSERC University Faculty Awards Selection Committee
- 2000 Member CFI review panel
- 2000` College of Reviewers for the Canada Research Chairs (CRC) Program
- 2001-2004 CIHR representative at Concordia University
- 2002-2004 President, Montreal Chapter of the Society for Neuroscience
- 2002-2004 Coordinator of RSMNQ Axe on Drug abuse and other addictions (FRSQ)
- 2003-2004 Canada Research Chairs Interdisciplinary Adjudication Committee (IAC)
- 2003-2007 Member Advisory Board of Institute for Neuroscience Mental Health & Addiction CIHR
- 2003 Chair CFI Review Committee Health Sciences
- 2004-2005 Member FRSQ review committee for Chercheurs Boursiers

SOCIETY MEMBERSHIPS:

- Fellow Royal Society of Canada, Academy of Sciences
- Fellow: Canadian Psychological Association
- Fellow: American Psychological Association
- Fellow: American Association for the Advancement of Science

Fellow Association for Psychological Science
Member: New York Academy of Sciences
Member: Society for Neuroscience
Member Canadian Behavior, Brain and Cognitive Science Society
Member Society for Behavioral Neuroendocrinology
Member European Behavioural Pharmacology Society

REFEREED PUBLICATIONS

- Stewart, J., & Blackburn, J. Tensions between English-speaking and French-speaking Canadians. Contribution à l'Etudes des Sciences de l'Homme, 1956, 3, 145-167.
- Stewart, J., & Hurwitz, H.M.B. Studies in light-reinforced behaviour III. The effects of continuous, zero and fixed-ratio reinforcement. Quarterly Journal of Experimental Psychology, 1958, 10, 56-61.
- Stewart, J. Reinforcing effects of light as a function of intensity and reinforcement schedule. Journal of Comparative and Physiological Psychology, 1960, 53, 187-193.
- Herr, F., Stewart, J., & Charest, M.P. Tranquilizers and antidepressants: A pharmacological comparison. Arch. Int. Pharmacodyn., 1961, 134, 328-342.
- Stewart, J. Some behaviour characteristics of maze-bright and maze-dull animals. Canadian Journal of Psychology, 1961, 15, 75-80.
- Stewart, J. Differential responses based on the physiological consequences of pharmacological agents. Psychopharmacologia, 1962, 3, 132-138.
- Winthrop, S.O., Davis, M.A., Herr, F., Stewart, J., & Gaudry, R. New psychotropic agents. II. Derivatives of 5,6-dihydrodibenz(b,e)azepine (5,6-dihydromorphanthridine). Journal of Medicinal and Pharmaceutical Chemistry, 1962, 5, 1199-1206
- Winthrop, S.O., Davis, M.A., Herr, F., Stewart, J., & Gaudry, R. New psychotropic agents. III. Derivatives of 6,11-dihydrodibenz(b,e)oxepine and 6,11-dihydrodibenzo(b,e)thiepine. Journal of Medicinal and Pharmaceutical Chemistry, 1962, 5, 1207-1215.
- Davis, M.A., Winthrop, S.O., Stewart, J., Sunahara, F.A., & Herr, F. New psychotropic agents. V. Derivatives of 5-cyano- and 5-carboxamido-dibenzo(a,d)cycloheptadiene. Journal of Medicinal Chemistry, 1963, 6, 251-255.
- Stewart, J., Charest, M.P., & Herr, F. A pharmacological investigation of potential antidepressants of the amitriptyline-type. Journal of Medicinal Chemistry, 1963, 6, 338-339.
- Winthrop, S.O., Davis, M.A., Herr, F., Stewart, J., & Gaudry, R. New psychotropic agents. IV. Derivatives of dibenzo(a,d)(1,4)cyclo-octadiene. Journal of Medicinal Chemistry, 1963, 6, 130-132.
- Melzack, R., Stewart, J., & Bambridge, R. Infrared thermograph studies of cortical circulation: Evaluation of the method. Electroencephalography and Clinical Neurophysiology, 1966, 20, 614-617.
- Stewart, J., Krebs, W.H., & Kaczender, E. State-dependent learning produced with steroids. Nature, 1967, 216, 1223-1224.
- Stewart, J., & Palfai, T. Castration, androgens, and dominance status in the rat. Psychonomic Science, 1967, 7, 1-2.
- Stewart, J., & Kaczender-Henrik, E. Male copulatory behavior in the male rat after perinatal treatment with an antiandrogenic steroid. Hormones and Behavior, 1971, 2, 255-264.

- Stewart, J., Pottier, J., & Kaczender-Henrik, E. Male copulatory behavior in the female rat after perinatal treatment with an antiandrogenic steroid. Hormones and Behavior, 1971, 2, 247-254.
- Arnkoff, D.B., & Stewart, J. The effectiveness of modeling and videotape feedback on personal problem solving. Behavior Research and Therapy, 1975, 13, 127-133.
- Stewart, J., Skvarenina, A., & Pottier, J. Effects of neonatal androgens on open-field behavior and maze learning in the prepubescent and adult rat. Physiology and Behavior, 1975, 14, 291-295.
- Einon, D., Stewart, J., Atkinson, S., & Morgan, M. Effect of isolation on barbiturate anaesthesia in the rat. Psychopharmacology, 1976, 50, 85-88.
- McNaughton, N., James, D.T.D., Stewart, J., Gray, J.A., Valero, I., & Drewnowski, A. Septal driving of hippocampal theta rhythm as a function of frequency in the male rat: Effects of drugs. Neuroscience, 1977, 2, 1019-1027.
- Stewart, J., & Atkinson, S. Effects of septal lesions on the lordotic behavior of weanling male and female rats. Hormones and Behavior, 1977, 9, 99-106.
- Stewart, J., Atkinson, S., & Cygan, D. Effects of septal lesions on shock thresholds in weanling male and female rats. Physiology & Behavior, 1977, 19, 693-696.
- Valero, I., Stewart, J., McNaughton, N., & Gray, J.A. Septal driving of the hippocampal theta rhythm as a function of frequency in the male rat: Effect of adrenopituitary hormones. Neuroscience, 1977, 2, 1029-1032.
- Olioff, M., & Stewart, J. Sex differences in the play behavior of prepubescent rats. Physiology & Behavior, 1978, 20, 113-115.
- Stewart, J., & Eikelboom, R. Pre-exposure to morphine and the attenuation of conditioned taste aversion in rats. Pharmacology Biochemistry & Behavior, 1978, 9, 639-645.
- Eikelboom, R., & Stewart, J. Conditioned temperature effects using morphine as the unconditioned stimulus. Psychopharmacology, 1979, 61, 31-38.
- Meaney, M.J., & Stewart, J. Environmental factors influencing the affiliative behavior of male and female rats (Rattus norvegicus). Animal Learning & Behavior, 1979, 7(3), 397-405.
- Stewart, J., & Eikelboom, R. Stress masks the hypothermic effect of naloxone in rats. Life Sciences, 1979, 25, 1165-1172.
- Stewart, J., Vallentyne, S., & Meaney, M.J. Differential effects of testosterone metabolites in the neonatal period on open-field behavior and lordosis in the rat. Hormones and Behavior, 1979, 13, 282-292.
- Stewart, J., & Cygan, D. Ovarian hormones act early in development to feminize adult open-field behavior in the rat. Hormones and Behavior, 1980, 14, 20-32.
- de Wit, H., & Stewart, J. Reinstatement of cocaine-reinforced responding in the rat. Psychopharmacology, 1981, 75, 134-143.
- Eikelboom, R., & Stewart, J. Hypophysectomy increases the sensitivity of rats to naloxone-induced hypothermia. Life Sciences, 1981, 28, 1047-1052.
- Eikelboom, R., & Stewart, J. Temporal and environmental cues in conditioned hypothermia and hyperthermia associated with morphine. Psychopharmacology, 1981, 72, 147-153.
- Eikelboom, R., & Stewart, J. Conditioned temperature effects using amphetamine as the unconditioned stimulus. Psychopharmacology, 1981, 75, 96-97.

- Meaney, M.J., & Stewart, J. A descriptive study of social development in the rat (*Rattus norvegicus*). Animal Behaviour, 1981, 29, 34-45.
- Meaney, M.J., & Stewart, J. Neonatal androgens influence the social play of prepubescent rats. Hormones and Behavior, 1981, 15, 197-213.
- Stewart, J., & Eikelboom, R. Interaction between the effects of stress and morphine on body temperature in rats. Life Sciences, 1981, 28, 1041-1045.
- Eikelboom, R., & Stewart, J. Conditioning of drug-induced physiological responses. Psychological Review, 1982, 89, 507-528.
- Meaney, M.J., Stewart, J., & Beatty, W.W. The influence of glucocorticoids during the neonatal period on the development of play-fighting in Norway rat pups. Hormones and Behavior, 1982, 16, 475-491.
- Sandberg, D., David, S., & Stewart, J. Effects of estradiol benzoate on the pattern of eating and ethanol consumption. Physiology & Behavior, 1982, 29, 61-65.
- Sandberg, D., & Stewart, J. Effects of estradiol benzoate and MER-25 on ethanol consumption in the ovariectomized rat. Journal of Comparative and Physiological Psychology, 1982, 96, 635-648.
- Sandberg, D., Stewart, J., & Amit, Z. Changes in ethanol consumption during pregnancy of the rat. Journal of Studies on Alcohol, 1982, 43(1), 137-145.
- de Wit, H., & Stewart, J. Drug reinstatement of heroin-reinforced responding in the rat. Psychopharmacology, 1983, 79, 29-31.
- Meaney, M.J., Stewart, J., Poulin, P., & McEwen, B.S. Sexual differentiation of social play in rat pups is mediated by the neonatal androgen-receptor system. Neuroendocrinology, 1983, 37, 85-90.
- Stewart, J. Conditioned and unconditioned drug effects in relapse to opiate and stimulant drug self-administration. Progress in Neuro-psychopharmacology and Biological Psychiatry, 1983, 7, 591-597.
- Stewart, J. Reinstatement of heroin and cocaine self-administration behavior in the rat by intracerebral application of morphine in the ventral tegmental area. Pharmacology Biochemistry & Behavior, 1984, 20, 917-923.
- Stewart, J., de Wit, H., & Eikelboom, R. Role of unconditioned and conditioned drug effects in the self-administration of opiates and stimulants. Psychological Review, 1984, 91, 251-268.
- Vezina, P., & Stewart, J. Conditioning and place-specific sensitization of increases in activity induced by morphine in the VTA. Pharmacology Biochemistry & Behavior, 1984, 20, 925-934.
- Vezina, P., & Stewart, J. Hyperthermia induced by morphine administration to the VTA of the rat brain: An effect dissociable from morphine-induced reward and hyperactivity. Life Sciences, 1985, 36, 1095-1105.
- Rochford, J., & Stewart, J. Activation and expression of endogenous pain control mechanisms in rats given repeated nociceptive tests under the influence of naloxone. Behavioral Neuroscience, 1987, 101, 87-103.
- Rochford, J., & Stewart, J. Morphine attenuation of conditioned autoanalgesia: Implications for theories of situation-specific tolerance to morphine analgesia. Behavioral Neuroscience, 1987, 101, 690-700.
- Stewart, J., & Vezina, P. Environment-specific enhancement of the hyperactivity induced by systemic or intra-VTA morphine injections in rats preexposed to amphetamine. Psychobiology, 1987, 15(2), 144-153.
- Vezina, P., Kalivas, P.W., & Stewart, J. Sensitization occurs to the locomotor effects of morphine and the specific m opioid receptor agonist, DAGO, administered repeatedly to the ventral tegmental area but not to the nucleus accumbens. Brain Research, 1987, 417, 51-58.

- Vezina, P., & Stewart, J. Conditioned locomotion and place preference elicited by tactile cues paired exclusively with morphine in an open field. Psychopharmacology, 1987, 91, 375-380.
- Vezina, P. & Stewart, J. Morphine conditioned place preference and locomotion: the effect of confinement during training. Psychopharmacology, 1987, 93, 257-260.
- Kalant, N., Stewart, J., & Kaplan, R. Effect of diet restriction on glucose metabolism and insulin responsiveness in aging rats. Mechanisms of Aging and Development, 1988, 46, 89-104.
- Stewart, J. Current themes, theoretical issues, and preoccupations in the study of sexual differentiation and gender-related behaviors. Psychobiology, 1988, 16, 315-320.
- Stewart, J., & Kolb, B. The effects of neonatal gonadectomy and prenatal stress on cortical thickness and asymmetry in rats. Behavioral and Neural Biology 1988, 49, 344-360.
- Stewart, J., Meaney, M.J., Aitken, D., Jensen, L., & Kalant, N. The effects of acute and life-long food restriction on basal and stress-induced serum corticosterone levels in young and aged rats. Endocrinology, 1988, 123, 1934-1941.
- Stewart, J., & Rochford, J. Behavior change without a theory of learning? Behavioral and Brain Sciences, 1988, 11, 469-470.
- Stewart, J., & Vezina, P. A comparison of the effects of intra-accumbens injections of amphetamine and morphine on reinstatement of heroin intravenous self-administration behavior. Brain Research, 1988, 457, 287-294.
- Mitchell, J.B., & Stewart, J. Effects of castration, steroid replacement, and sexual experience on mesolimbic dopamine and sexual behaviors in the male rat. Brain Research, 1989, 491, 116-127.
- Stewart, J., Mitchell, J., & Kalant, N. The effects of life-long food restriction on spatial memory in young and aged Fischer 344 rats measured in the eight-arm radial and the Morris water mazes. Neurobiology of Aging, 1989, 10, 669-675.
- Stewart, J., Vezina, P. Microinjections of Sch-23390 into the ventral tegmental area and substantia nigra pars reticulata attenuate the development of sensitization to the locomotor activating effects of systemic amphetamine. Brain Research, 1989, 495, 401-406.
- Vezina, P., Giovino, A.A., Wise, R.A., & Stewart, J. Environment-specific cross-sensitization between the locomotor activating effects of morphine and amphetamine. Pharmacology Biochemistry & Behavior, 1989, 32, 581-584.
- Vezina, P., & Stewart, J. The effect of dopamine receptor blockade on the development of sensitization to the locomotor activating effects of amphetamine and morphine. Brain Research, 1989, 499, 108-120.
- Leyton, M., & Stewart, J. Preexposure to foot-shock sensitizes the locomotor response to subsequent systemic morphine and intra-nucleus accumbens amphetamine. Pharmacology Biochemistry & Behavior, 1990, 37, 303-310.
- Meaney, M.J., Lozos, E., & Stewart, J. Infant-carrying by nulliparous, female vervet monkeys (*Cercopithecus Aethiops*). Journal of Comparative Psychology, 1990, 104, 377-381.
- Mitchell, J.B., & Stewart, J. Facilitation of sexual behaviors in the male rat in the presence of stimuli previously paired with systemic injections of morphine. Pharmacology Biochemistry & Behavior, 1990, 35, 367-372.
- Mitchell, J.B., & Stewart, J. Facilitation of sexual behaviors in the male rat associated with intra-VTA injections of opiates. Pharmacology Biochemistry & Behavior, 1990, 35, 643-650.

- Nencini, P., & Stewart, J. Chronic systemic administration of amphetamine increases food intake to morphine, but not to U50-488H, microinjected into the ventral tegmental area in rats. Brain Research, 1990, 527, 254-258.
- Veza, P., & Stewart, J. Amphetamine administered to the ventral tegmental area but not to the nucleus accumbens sensitizes rats to systemic morphine: lack of conditioned effects. Brain Research, 1990, 516, 99-106.
- Kalivas, P.W., & Stewart, J. Dopamine transmission in the initiation and expression of drug- and stress-induced sensitization of motor activity. Brain Research Reviews, 1991, 16, 223-244.
- Kolb, B., & Stewart, J. Sex-related differences in dendritic branching of cells in the prefrontal cortex of rats. Journal of Neuroendocrinology, 1991, 3, 95-99.
- Stewart, J., Kühnemann, S., & Rajabi, H. Neonatal exposure to gonadal hormones affects the development of monoamine systems in rat cortex. Journal of Neuroendocrinology, 1991, 3, 85-93.
- Stewart, J., & Veza, P. Extinction procedures abolish conditioned stimulus control but spare sensitized responding to amphetamine. Behavioural Pharmacology, 1991, 2, 65-71.
- Badiani, A., & Stewart, J. The kappa-opioid, U-50,488H, suppresses the initiation of nocturnal spontaneous drinking in normally hydrated rats. Psychopharmacology, 1992, 106, 463-473.
- Funk, D., & Stewart, J. The effects of lesions of the habenular nuclei on the development of sensitization to the behavioral activation effects of repeatedly administered morphine in the rat. Brain Research, 1992, 583, 127-136.
- Leyton, M., Rajabi, H., & Stewart, J. U-50,488H into A10 reduces haloperidol-induced elevations of accumbens dopamine. NeuroReport, 1992, 3, 1127-1130.
- Leyton, M., & Stewart, J. The stimulation of central k opioid receptors decreases male sexual behavior and locomotor activity. Brain Research, 1992, 594, 56-74.
- Rochford, J., & Stewart, J. Naloxone-induced hypoalgesia: Lack of effect of the GABA-benzodiazepine receptor complex. Pharmacology Biochemistry & Behavior, 1992, 43, 321-328.
- Stewart, J., & Wise, R.A. Reinstatement of heroin self-administration habits: morphine prompts and naltrexone discourages renewed responding after extinction. Psychopharmacology, 1992, 108, 79-84.
- Altier, N., & Stewart, J. Intra-VTA infusions of the substance P analogue, DiMe-C7, and intra-accumbens infusions of amphetamine induce analgesia in the formalin test for tonic pain. Brain Research, 1993, 628, 279-285.
- Badiani, A., & Stewart, J. Enhancement of the prothymic but not of the antidipsogenic effect of U-50,488H after chronic amphetamine pretreatment. Pharmacology Biochemistry & Behavior, 1993, 44, 77-86.
- Druhan, J.P., Deschamps, S.-E., & Stewart, J. D-amphetamine-like stimulus properties are produced by morphine injections into the ventral tegmental area but not into the nucleus accumbens. Behavioural Brain Research, 1993, 59, 41-51.
- Druhan, J.P., Jakob, A., & Stewart, J. The development of behavioral sensitization to apomorphine is blocked by MK-801. European Journal of Pharmacology, 1993, 243, 73-77.
- Forge, M.L., & Stewart, J. Sex differences in amphetamine-induced locomotor activity in adult rats: Role of testosterone exposure in the neonatal period. Pharmacology Biochemistry and Behavior, 1993, 46, 637-645.

- Rochford, J., Dawes, P., & Stewart, J. Naloxone potentiation of novelty-induced hypoalgesia: Characterization of the alpha noradrenergic receptor subtype. Pharmacology Biochemistry & Behavior, 1993, 44, 381-386.
- Stewart, J., & Badiani, A. Tolerance and sensitization to the behavioral effects of drugs. Behavioural Pharmacology, 1993, 4, 289-312.
- Stewart, J., & Druhan, J.P. Development of both conditioning and sensitization of the behavioral activating effects of amphetamine is blocked by the non-competitive NMDA receptor antagonist, MK-801. Psychopharmacology, 1993, 110, 125-132.
- Forgie, M.L., & Stewart, J. Sex differences in the locomotor-activating effects of amphetamine: Role of circulating testosterone in adulthood. Physiology & Behavior, 1994, 55, 639-644.
- Forgie, M.L., & Stewart, J. Effect of prepubertal ovariectomy on amphetamine-induced locomotor activity in adult female rats. Hormones and Behavior, 1994, 28, 241-260.
- Shaham, Y., Rodaros, D., & Stewart, J. Reinstatement of heroin-reinforced behavior following a long-term extinction: Implications for the treatment of relapse to drug-taking. Behavioural Pharmacology, 1994, 5(3), 360-364.
- Shaham, Y., & Stewart, J. Exposure to mild stress enhances the reinforcing efficacy of intravenous heroin self-administration in rats. Psychopharmacology, 1994, 14, 523-527.
- Stewart, J., Deschamps, S.-E., & Amir, S. Inhibition of nitric oxide synthase does not block the development of sensitization to the behavioral activating effects of amphetamine. Brain Research, 1994, 641, 141-144.
- Stewart, J., & Kolb, B. Dendritic branching in cortical pyramidal cells in response to ovariectomy in adult female rats: suppression by neonatal exposure to testosterone. Brain Research, 1994, 654, 149-154.
- Stewart, J., & Rajabi, H. Estradiol derived from testosterone in prenatal life affects the development of catecholamine systems in the frontal cortex in the male rat. Brain Research, 1994, 646, 157-160.
- Badiani, A., Leone, P., Noel, M.B., & Stewart, J. Ventral tegmental area opioid mechanisms and modulation of ingestive behavior. Brain Research, 1995, 670, 264-276.
- Badiani, A., Leone, P., & Stewart, J. Intra-VTA injections of the mu-opioid antagonist CTOP enhance locomotor activity. Brain Research, 1995, 690, 112-116.
- Kolb, B., & Stewart, J. Changes in the neonatal gonadal hormonal environment prevent behavioral sparing and alter cortical morphogenesis after early frontal cortex lesions in male and female rats. Behavioral Neuroscience, 1995, 109(2), 285-294.
- Shaham, Y., Kelsey, J.E., & Stewart, J. Temporal factors in the effect of restraint stress on morphine-induced behavioral sensitization in the rat. Psychopharmacology, 1995, 117, 102-109.
- Shaham, Y., & Stewart, J. Stress reinstates heroin-seeking in drug-free animals: an effect mimicking heroin, not withdrawal. Psychopharmacology, 1995, 119, 334-341.
- Shaham, Y., & Stewart, J. Effects of restraint stress and intra-ventral tegmental area injections of morphine and methyl naltrexone on the discriminative stimulus effects of heroin in the rat. Pharmacology Biochemistry & Behavior, 1995, 51, 491-498.
- Altier, N., & Stewart, J. Opioid receptors in the ventral tegmental area contribute to stress-induced analgesia in the formalin test for tonic pain. Brain Research, 1996, 718, 203-206.
- Amir, S., & Stewart, J. Resetting of the circadian clock by a conditioned stimulus. Nature, 1996, 379, 542-545.

- Badiani, A., Jakob, A., Rodaros, D. & Stewart, J. Sensitization of stress-induced feeding in rats repeatedly exposed to brief restraint: the role of corticosterone. Brain Research, 1996, 710, 35-44
- Druhan, J., Rajabi, H., & Stewart, J. MK-801 increases locomotor activity without elevating extracellular dopamine levels in the nucleus accumbens. Synapse, 1996, 24, 135-146.
- Emmi, A., Rajabi, H., & Stewart, J. Behavioral and neurochemical recovery from partial 6-hydroxydopamine lesions of the substantia nigra is blocked by daily treatment with glutamate receptor antagonists, MK-801 and CPP. Journal of Neuroscience, 1996, 16, 5216-5224.
- Erb, S., Shaham, Y. & Stewart, J. Stress reinstates cocaine-seeking behavior after prolonged extinction and drug-free periods. Psychopharmacology, 1996, 128, 408-412.
- Funk, D. & Stewart, J. Role of catecholamines in the frontal cortex in the modulation of basal and stress-induced autonomic output in rats. Brain Research, 1996, 741, 220-229.
- Leyton, M., & Stewart, J. Acute and repeated activation of male sexual behavior by tail-pinch: opioid and dopaminergic mechanisms. Physiology & Behavior, 1996 60, 77-85.
- Shaham, Y., Rajabi, H., & Stewart, J. Relapse to heroin seeking in rats under opioid maintenance: the effects of stress, heroin priming and withdrawal. Journal of Neuroscience, 1996, 16, 1957-1963.
- Shaham, Y. & Stewart, J. Effects of opioid and dopamine receptor antagonists on relapse induced by stress and re-exposure to heroin in rats. Psychopharmacology, 1996, 125, 385-391.
- Stewart, J. Knowledge, affect, habit: an effective parsing of addiction? Commentary on "Addictive drugs as reinforcers: multiple partial actions on memory systems," by N. M. White for Addiction, 1996, 91, 955-957.
- Stewart, J., & Rajabi, H. Initial increases in extracellular dopamine in the ventral tegmental area provide a mechanism for the development of desipramine-induced sensitization within the midbrain dopamine system. Synapse, 1996, 23, 258-264.
- Stewart, J., Woodside, B., & Shaham, Y. Changes in ovarian hormones do not affect the initiation and maintenance of intravenous self-administration of heroin in the female rat. Psychobiology, 1996, 24, 154-159.
- Altier, N. & Stewart, J. Tachykinin NK-1 and NK-3 selective agonists induce analgesia in the formalin test for tonic pain following intra-VTA or intra-accumbens microinfusions. Behavioural Brain Research. 1997, 89, 151-165
- Altier, N., & Stewart, J. Neuropeptide FF in the VTA blocks the analgesic effects of both intra-VTA morphine and exposure to stress, Brain Research, 1997, 758, 250-254
- Dewar, K., Rompré, P.-P., Stewart, J. & Warren, R.A. Excitotoxic lesions of the prefrontal cortex reduce D1-like receptors in the ventral tegmental area. European Journal of Pharmacology, 1997, 336, 155-158.
- Emmi, A., Rajabi, H., & Stewart, J. Behavioral and neurochemical recovery from partial 6-hydroxydopamine lesions of the substantia nigra is blocked by daily treatment with with D1/D5, but not D2, dopamine receptor antagonists, Journal of Neuroscience, 1997, 17, 3840-3846.
- Kolb, B., Stewart, J., & Sutherland, R.J. Recovery of function is associated with increased spine density in cortical pyramidal cells after frontal lesions and/or noradrenaline depletion in neonatal rats. Behavioural Brain Research, 1997, 89, 61-70.
- Shaham, Y., Funk, D., Erb, S., Brown, T.J. Walker, C. D & Stewart, J. Corticotropin-releasing factor, but not corticosterone, is involved in stress-induced relapse to heroin-seeking in rats, Journal of Neuroscience, 1997, 17, 2605-2614.

- Shaham, Y., Puddicombe, J & Stewart, J. Sexually arousing events do not induce relapse to heroin-seeking in sexually experienced male rats. Physiology & Behavior, 1997, 61,337-341.
- Smith, W.J., Stewart, J., & Pfaus, J.G. Tail pinch induces fos immunoreactivity within several regions of the male rat brain: effect of age. Physiology & Behavior, 1997, 61, 717-723
- Altier, N. & Stewart, J. Dopamine receptor antagonists in the nucleus accumbens attenuate analgesia induced by ventral tegmental area substance P or morphine, and by nucleus accumbens amphetamine. Journal of Pharmacology and Experimental Therapeutics, 1998, 285, 208-215.
- Amir, S., Robinson, B., Ratovitski, T., Rea, M.A., Stewart, J., & Simantov, R. A role for serotonin in the circadian system revealed by the distribution of serotonin transporter and light-induced Fos immunoreactivity in the suprachiasmatic nucleus and intergeniculate leaflet. Neuroscience, 1998, 84(4), 1059-1073.
- Amir, S., & Stewart, J. Induction of Fos expression in the circadian system by un signaled light is attenuated after prior experience with signaled light: a role for Pavlovian conditioning. Neuroscience, 1998, 83, 657-661.
- Amir, S., & Stewart, J. Conditioned fear suppresses light-induced resetting of the circadian clock. Neuroscience, 1998, 86, 345-351.
- Amir, S., & Stewart, J. Conditioning in the circadian system. Chronobiology International, 1998, 15, 447-456.
- Erb, S. Shaham, Y., & Stewart, J. The role of corticotropin-releasing factor and corticosterone in stress- and cocaine-induced relapse to cocaine seeking in rats. The Journal of Neuroscience, 1998, 18(14), 5529-5536.
- Flores, C., Rodaros, D., & Stewart, J. Long-lasting induction of astrocytic basic fibroblast growth factor by repeated injections of amphetamine: Blockade by concurrent treatment with glutamate antagonist. The Journal of Neuroscience, 1998, 18, 9547-9555.
- Shaham, Y., Erb, S., Leung, S., Buczek, Y., & Stewart, J. CP-154,526, a selective, non peptide antagonist of the corticotropin-releasing factor type 1 receptor attenuates stress-induced relapse to drug seeking in cocaine- and heroin-trained rats. Psychopharmacology, 1998, 137, 184-190.
- Spanagel, R., Sillaber, I., Zieglgänsberger, W., Corrigall, W.A., Stewart, J., & Shaham, Y. Acamprosate suppresses the expression of morphine-induced sensitization in rats but does not affect heroin self-administration or relapse induced by heroin or stress. Psychopharmacology, 1998, 139, 391-401.
- Stewart, J. Female and flexible? Behavioral and Brain Sciences. 1998, 21, 338.
- Altier, N., & Stewart, J. The role of dopamine in the nucleus accumbens in analgesia. Life Sciences, 1999, 65, 2269-2287.
- Altier, N., & Stewart, J. The tachykinin NK-1 receptor antagonist, RP 67580, infused into the ventral tegmental area prevents stress-induced analgesia in the formalin test. Physiology and Behavior, 1999, 66, 717-721.
- Amir, S., Cain, S., Sullivan, J., Robinson, B., & Stewart, J. Olfactory stimulation enhances light-induced phase shifts in free-running activity rhythms and Fos expression in the suprachiasmatic nucleus. Neuroscience, 1999, 92, 1165-1170.
- Amir, S., Cain, S., Sullivan, J., Robinson, B. and Stewart, J. In rats, odor-induced Fos in the olfactory pathways depends on the phase of the circadian clock. Neuroscience Letters, 1999, 273, 175-178.
- Amir, S., & Stewart, J. The effectiveness of light on the circadian clock is linked to its emotional value. Neuroscience, 1999, 88, No.2, 339-345.
- Amir, S. & Stewart, J. Conditioned and unconditioned aversive stimuli enhance light-induced fos expression in the primary visual cortex. Neuroscience, 1999, 89, 323-327.

- Badiani, A., & Stewart, J. Long-lasting sensitization to the accelerating effects of amphetamine on the speed of an internal clock. Behavioural Brain Research, 1999, 100, 217-223.
- Buczek, Y., Lê, A.D., Wang, A., Stewart, J., & Shaham, Y. Stress reinstates nicotine seeking, but not sucrose solution seeking in rats. Psychopharmacology, 1999, 144, 183-188.
- Erb, S., & Stewart, J. A role for the bed nucleus of the stria terminalis, but not the amygdala, in the effects of corticotropin-releasing factor on stress-induced reinstatement of cocaine seeking. Journal of Neuroscience, 1999, 19, RC35: 1-6.
- Flores, C., Salmaso, N., Cain, S., Rodaros, D., & Stewart, J. Ovariectomy of adult rats leads to increased expression of astrocytic basic fibroblast growth factor in the ventral tegmental area and in dopaminergic projection regions of the entorhinal and prefrontal cortex. The Journal of Neuroscience, 1999, 19, 8665-8673.
- Stewart, J. Thoughts on the interpretation of responses to drug-related stimuli. Addiction, 1999, 94, 341-351.
- Stewart, J., & Rodaros, D. The effects of gonadal hormones on the development and expression of the stimulant effects of morphine in male and female rats. Behavioural Brain Research, 1999, 102, 89-98.
- Arvanitogiannis, A., Stewart, J., & Amir, S. Conditioned stimulus control in the circadian system: two tales tell one story. Journal of Biological Rhythms, 2000, 15, 292-293; discussion 294-295.
- Erb, S., Hitchcott, P.K., Rajabi, H., Mueller, D., Shaham, Y., & Stewart, J. Alpha-2 adrenergic receptor agonists block stress-induced reinstatement of cocaine seeking. Neuropsychopharmacology, 2000, 23, 138-150.
- Flores, C., Samaha, A-N., & Stewart, J. Requirement of endogenous basic fibroblast growth factor for sensitization to amphetamine. Journal of Neuroscience, 2000, 20, RC55, 1-5.
- Flores, C., & Stewart, J. Changes in astrocytic basic fibroblast growth factor expression during and after a prolonged exposure to escalating doses of amphetamine. Neuroscience, 2000, 98, 287-293.
- Flores, C., & Stewart, J. Basic fibroblast growth factor as a mediator of the effects of glutamate in the development of sensitization to stimulant drugs: studies in the rat. Psychopharmacology, 2000, 151, 152-165.
- Highfield, D., Clements, A., Shalev, U., McDonald, R., Featherstone, R., Stewart, J., & Shaham, Y. Involvement of the medial septum in stress-induced relapse to heroin seeking in rats. European Journal of Neuroscience, 2000, 12, 1705-1713.
- Mueller, D., & Stewart, J. Cocaine-induced conditioned place preference: reinstatement by priming injections of cocaine after extinction. Behavioural Brain Research, 2000, 115, 39-47.
- Shaham, Y., Erb, S., & Stewart, J. Stress-induced relapse to heroin and cocaine seeking in rats: a review. Brain Research Reviews, 2000, 33, 13-33.
- Shaham, Y., Highfield, D., Delfs, J., Leung, S., & Stewart, J. Clonidine blocks stress-induced reinstatement of heroin seeking in rats: an effect independent of the locus coeruleus noradrenergic neurons. European Journal of Neuroscience, 2000, 12, 292-302.
- Stewart, J. Pathways to relapse: the neurobiology of drug- and stress-induced relapse to drug taking. Journal of Psychiatry and Neuroscience, 2000, 25, 125-136.
- Badiani, A., Rajabi, H., Nencini, P., & Stewart, J. Modulation of food intake by the kappa opioid agonist U-50,488H: evidence for an effect on satiation. Behavioural Brain Research, 2001, 118, 181-188.

- Erb, S., Salmaso, N., Rodaros, D., & Stewart, J. A role for the CRF-containing pathway from central nucleus of the amygdala to bed nucleus of the stria terminalis in stress-induced reinstatement of cocaine seeking in rats. *Psychopharmacology*, 2001, 158, 360-365.
- Leri, F., & Stewart, J. Drug-induced reinstatement to heroin and cocaine seeking: a rodent model of relapse in poly drug use. *Experimental and Clinical Psychopharmacology*, 2001, 9, 297-306.
- Erb, S., Shaham, Y., & Stewart, J. Stress-induced relapse to drug seeking in the rat: role of the bed nucleus of the stria terminalis and amygdala. *Stress*, 2001, 4, 289-303.
- Stewart, J. Modulation of the subjective and physiological effects of drugs by contexts and expectations – Search for mechanisms: comment on Alessi, Roll, Reilly, and Johanson. *Experimental and Clinical Psychopharmacology*, 2002, 10, 96-98.
- Amir, S. Beaulé, C. Arvanitogiannis, A. and Stewart, J. Modes of plasticity within the mammalian circadian system. *Progress in Brain Research*, 2002, 138, 191-203.
- Leri, F., Flores, J., Rodaros, D., & Stewart, J. Blockade of stress-induced, but not cocaine-induced reinstatement, by infusion of noradrenergic antagonists into the bed nucleus of the stria terminalis or the central nucleus of the amygdala. *Journal of Neuroscience*, 2002, 22, 5713-5718.
- Flores, C., Stewart, J., Salmaso, N., Zhang, Y., & Boksa, P. Astrocytic basic fibroblast growth factor expression in dopaminergic regions after perinatal anoxia. *Biological Psychiatry*, 2002, 52, 362-370.
- Mueller, D, Perdikaris, D., & Stewart, J. (2002) Persistence and drug-induced reinstatement of a morphine-induced conditioned place preference. *Behavioural Brain Research*, 2002, 136, 389-397.
- Leri, F., & Stewart, J. The consequences of different “lapses” on relapse to heroin seeking in rats. *Experimental and Clinical Psychopharmacology*, 2002, 10, 339-349.
- Leri, F., & Stewart, J. Response to commentaries: Advantages and disadvantages of studying the process of relapse in rats. *Experimental and Clinical Psychopharmacology*, 2002, 10, 364-366.
- Ellenbogen, M.A., Schwartzman, A.E., Stewart, J., & Walker, C.-D. Stress and selective attention: the interplay of mood, cortisol levels, and emotional information processing. *Psychophysiology*, 2002, 39, 723-732.
- Shaham, Y., Shalev, U., Lu, L., De Wit, H., & Stewart, J. The reinstatement model of drug relapse: history, methodology and major findings. *Psychopharmacology*, 2003, 168, 3-20.
- Capriles, N., Rodaros, D., Sorge, R. & Stewart, J. A role for the prefrontal cortex in stress- and cocaine-induced reinstatement of cocaine seeking in rats. *Psychopharmacology*, 2003, 168, 66-74.
- Leri, F., Bruneau, J. & Stewart, J. Understanding poly-drug use: heroin and cocaine. *Addiction*, 2003, 98, 7-22.
- Stewart, J. Stress and relapse to drug seeking: studies in laboratory animals shed light on mechanisms and sources of long-term vulnerability. *American Journal on Addictions*, 2003, 12, 1-17.
- Moroz, I., Rajabi, H., Rodaros, D., & Stewart, J. Effects of sex and hormonal status on astrocytic basic fibroblast growth factor-2 and tyrosine hydroxylase immunoreactivity after medial forebrain bundle 6-hydroxydopamine lesions of the midbrain dopamine neurons. *Neuroscience*, 2003, 118, 463-476.
- Stewart, J. Studies in laboratory animals contribute to an understanding of the neurobiological basis of relapse to drug use. In *Addictions: Impact on Canada, Transactions 2002, Royal Society of Canada*. On-line publication.
- Leri, F., Flores, J., Rajabi, H. & Stewart, J. Effects of cocaine in rats exposed to heroin. *Neuropsychopharmacology*, 2003, 28, 2102-2116.

- Leri, F., Stewart, J., Tremblay, A. & Bruneau, J. Heroin and cocaine co-use in a group of injection drug users in Montreal. Journal of Psychiatry and Neuroscience, 2004, 29, 40-47.
- Amir, S., Waddington-Lamont, E., Robinson, B. and Stewart, J. A circadian rhythm in the expression of PERIOD2 protein reveals a novel SCN-controlled oscillator in the oval nucleus of the bed nucleus of the stria terminalis. Journal of Neuroscience, 2004, 24, 781-790.
- Stewart, J. Disentangling the sources of opioid withdrawal responses: commentary on McDonald and Siegel. Experimental and Clinical Psychopharmacology, 2004, 12, 20-22.
- Leri, F., Tremblay, A., Sorge, R.E. & Stewart, J. Methadone maintenance reduces heroin-, and cocaine-induced relapse without affecting stress-induced relapse in a rodent model of poly-drug use. Neuropsychopharmacology, 2004, 29, 1312-1320.
- Stewart, J. Pathways to relapse: factors controlling the reinitiation of drug seeking after abstinence. Nebraska Symposium on Motivation, 2004, 50, 197-234.
- Moroz, I.A., Peciña, S., Schallert, T. & Stewart, J. Sparing of behavior and basal extracellular dopamine after 6-hydroxydopamine lesions of the nigrostriatal pathway in rats exposed to a pre-lesion sensitizing regimen of amphetamine. Experimental Neurology, 2004, 189, 78-93.
- Flores, C., Manitt, C., Rodaros, D., Thompson, K.M., Rajabi, H., Kelvin C. Luk, K.C., Tritsch, N., Sadikot, A. Stewart, J. & Kennedy, T.E. Netrin receptor deficient mice exhibit functional reorganization of dopaminergic systems and do not sensitize to amphetamine. Molecular Psychiatry, 2005, 10, 606-612.
- Lamont, E.W., Renteria Diaz, L., Barry Shaw, J., Stewart, J. and Amir, S. Daily Restricted Feeding Rescues a Rhythm of Period2 Expression in the Arrhythmic Suprachiasmatic Nucleus. Neuroscience, 2005, 132, 245-248.
- Lamont, E.W., Robinson, B., Stewart, J. and Amir, S. The central and basolateral nuclei of the amygdala exhibit diametrically opposite circadian rhythms in expression of the clock protein Period2. Proceedings of the National Academy of Sciences, USA, 2005, 102, 4180-4184.
- Sorge, R.E., Rajabi, H. & Stewart, J. Rats maintained chronically on buprenorphine show reduced responding for heroin and cocaine in tests of extinction and drug-induced reinstatement. Neuropsychopharmacology, 2005, 30, 1681-1692.
- Flores, G., Alquicer, G., Silva-Gómez, A.B., Zaldivar, G., Stewart, J., Quirion, R. Srivastava, L.K. Alterations in dendritic morphology of prefrontal cortical and nucleus accumbens neurons in adult rats after neonatal excitotoxic lesions of the ventral hippocampus. Neuroscience, 2005, 133, 463-470.
- Leri, F., Stewart, J., Fisher, B., Jurgens, R., Marsh, C.D., Brissette, S., Bruneau, J., El-Guebaly, N., Noel, L., Wild, C.T. Patterns of opioid and cocaine co-use: a descriptive study in a Canadian sample of untreated opioid-dependent individuals. Experimental and Clinical Psychopharmacology, 2005, 13, 303-310.
- Sorge, R.E., & Stewart, J. The contribution of drug history and time since termination of drug taking to stress-induced cocaine seeking in rats. Psychopharmacology, 2005, 183, 210-217.
- Mueller, D., Chapman, C.A., & Stewart, J. Amphetamine induces dendritic growth in ventral tegmental area dopaminergic neurons *in vivo* via basic fibroblast growth factor. Neuroscience, 2006, 137, 727-735.
- Ellenbogen, M. A., Schwartzman, A. E., Stewart, J. and Walker, C. D. Automatic and effortful emotional information processing regulates different aspects of the stress response. Psychoneuroendocrinology, 2006, 31, 373-387.

- Forget, C. Stewart, J., & Trudeau, L.-E. Impact of basic FGF expression in astrocytes on dopamine neuron synaptic function and development. European Journal of Neuroscience, 2006, 23, 608-616.
- Segall, L.A., Perrin, J.S., Walker, C.-D., Stewart, J. & Amir, S. Glucocorticoid rhythms control the rhythm of expression of the clock protein, *Period2*, in oval nucleus of the bed nucleus of the stria terminalis and central nucleus of the amygdala in rats. Neuroscience, 2006, 140, 753-757.
- Hernandez, G., Hamdani, S., Rajabi, H., Conover, K., Stewart, J., Arvanitogiannis, A. & Shizgal, P. Prolonged rewarding stimulation of the rat medial forebrain bundle: neurochemical and behavioral consequences. Behavioral Neuroscience, 2006, 120, 888-904.
- Botreau, F., Paolone, G., & Stewart, J. D-Cycloserine facilitates extinction of a cocaine-induced conditioned place preference. Behavioural Brain Research, 2006, 172, 173-174
- Sorge, R.E., & Stewart, J. The effects of long-term chronic buprenorphine treatment on the locomotor and nucleus accumbens dopamine response to acute heroin and cocaine in rats. Pharmacology, Biochemistry & Behavior, 2006, 84, 300-305.
- Sorge, R.E. & Stewart, J. The effects of chronic buprenorphine on intake of heroin and cocaine in rats and its effects on nucleus accumbens dopamine levels during self-administration, Psychopharmacology, 2006, 188, 28-41.
- Augustyniak, P.N., Kourrich, S., Rezazadeh, S.M., Stewart, J., & Arvanitogiannis, A. Differential behavioral and neurochemical effects of cocaine after early exposure to methylphenidate in an animal model of attention deficit hyperactivity disorder. Behavioural Brain Research, 2006, 167, 379-382.
- Epstein, D.H., Preston, K.L, Stewart, J. & Shaham, Y. Toward a model of drug relapse: An assessment of the validity of the reinstatement procedure. Psychopharmacology, 2006, 189, 1-16.
- Caruana, D.A., Sorge, R.E., Stewart, J., & Chapman, C.A. Dopamine has bidirectional effects on synaptic responses to cortical inputs in layer II of the lateral entorhinal cortex. Journal of Neurophysiology, 2006, 96, 3006-3015.
- Waddington Lamont, E., Harbour, V. L., Barry-Shaw, J., Renteria Diaz, L., Robinson, B., Stewart, J., & Amir, S. Restricted access to food, but not sucrose, saccharine, or salt synchronizes the expression of *period2* protein in the limbic forebrain. Neuroscience , 2007, 144, 402-411.
- Samaha, A. N., Seeman, P., Stewart, J., Rajabi, H. and Kapur, S. "Breakthrough" dopamine supersensitivity during ongoing antipsychotic treatment leads to treatment failure over time. Journal of Neuroscience, 2007, 27, 2979-2986.
- Leri, F., Sorge, R.E., Cummins, E., Woehrling, D., Pfaus, J.G. & Stewart, J. High dose methadone maintenance in rats: effects on cocaine self-administration and behavioral side effects. Neuropsychopharmacology, 2007, 32, 2290-2300.
- Hood, S., Sorge, R.E., & Stewart, J. Chronic buprenorphine reduces the response to sucrose-associated cues in non food-deprived rats. Pharmacology, Biochemistry & Behavior, 2007, 86, 566-575.
- Verwey, M., Khoja, Z. Stewart, J. & Amir, S. Differential regulation of the expression of *Period2* protein in the limbic forebrain and dorsomedial hypothalamus by daily limited access to highly palatable food in food-deprived and free-fed rats. Neuroscience, 2007, 147, 277-285.
- Rodaros, D., Caruana, D. A., Amir, S. & Stewart, J. Corticotropin-releasing factor projections from limbic forebrain and paraventricular nucleus of the hypothalamus to the region of the ventral tegmental area. Neuroscience, 2007, 150, 8-13.

- Grant, A., Hoops, D., Labelle-Dumais, C., Prevost, M., Rajabi, H., Kolb, B., et al. Netrin-1 receptor-deficient mice show enhanced mesocortical dopamine transmission and blunted behavioural responses to amphetamine. European Journal of Neuroscience, 2007, 26, 3215-3228.
- Hernandez, G., Haines, E., Rajabi, H., Stewart, J., Arvanitogiannis, A. & Shizgal, P. Predictable and unpredictable rewards produce similar changes in dopamine tone. Behavioral Neuroscience, 2007, 121, 887-895.
- Hernandez, G., Rajabi, H., Stewart, J., Arvanitogiannis, A., Shizgal, P. Dopamine tone increases similarly during predictable and unpredictable administration of rewarding brain stimulation at short inter-train intervals. Behavioural Brain Research, 2008, 188, 227-232.
- Gavrila, A.M., Robinson, B., Hoy, J., Stewart, J., Bhargava, A. and Amir, S. Double-stranded RNA-mediated suppression of PER2 expression in the suprachiasmatic nucleus disrupts circadian locomotor activity in rats. Neuroscience, 2008, 154, 409-414.
- Stewart, J. Psychological and neural mechanisms of relapse. Philosophical Transactions of the Royal Society, 'B', Biological Sciences, 2008, 363, 3147-3158.
- Verwey, M., Khoja, Z., Stewart, J., and Amir, S. Region-specific modulation of PER2 expression in the limbic forebrain and hypothalamus by nighttime restricted feeding in rats. Neuroscience Letters, 2008, 440, 54-58.
- Placenza, F.M., Rajabi, H., and Stewart, J. Chronic buprenorphine treatment in rats increases levels of glutamate in the nucleus accumbens and blocks the expression of cocaine-induced behavioral sensitization. Psychopharmacology, 2008, 200, 347-355.
- Paolone, G., Botreau, F., and Stewart, J. The facilitative effects of D-cycloserine on extinction of a cocaine-induced conditioned place preference can be long lasting and resistant to reinstatement, Psychopharmacology, 2009, 202, 403-409.
- Afonso, V. M., Mueller, D., Stewart, J., & Pfaus, J. G. Amphetamine pretreatment facilitates appetitive sexual behaviors in the female rat. Psychopharmacology, 2009, 205, 35-43.
- Amir, S., & Stewart, J. Motivational modulation of rhythms of the expression of the clock protein PER2 in the limbic forebrain. Biological Psychiatry, 2009, 65, 829-834.
- Amir, S., & Stewart, J. Behavioral and hormonal regulation of expression of the clock protein, PER2, in the central extended amygdala. Progress in Neuropsychopharmacology & Biological Psychiatry 2009, 33, 1321-1328.
- Hood, S., Cassidy, P., Cossette, M.-P., Verwey, M., Robinson, B., Stewart, J., & Amir, S. Endogenous dopamine regulates the rhythm of expression of the clock protein PER2 in the rat dorsal striatum via daily activation of D2 dopamine receptors. Journal of Neuroscience, 2010, 30, 14046-58.
- Hood, S., Cassidy, P., Mathewson, S., Stewart, J., Amir, S. Daily morphine injection and withdrawal disrupt 24-h wheel running and PERIOD2 expression patterns in the rat limbic forebrain. Neuroscience, 2011, 186, 65-75.

BOOKS and BOOK CHAPTERS:

- Bindra, D, & Stewart, J. (Eds.), Readings in Motivation. Harmondsworth, England. Penguin Books, 1st Edition, 1966; 2nd Edition, 1971.
- In translation: La Motivazione. Readings di psicologica, Boringhieri, Torino, 1969, 1970.

- Meaney, M.J., Stewart, J., & Beatty, W.W. Sex differences in social play: The socialization of sex roles. In J.S. Rosenblatt, C. Beer, M.-C. Busnel, & P.J.B. Slater (Eds.), Advances in the Study of Behavior, Vol. 15, New York: Academic Press, Inc., 1985, pp. 1-58.
- Stewart, J., & de Wit, H. Reinstatement of drug-taking behavior as a method of assessing incentive motivational properties of drugs. In M.A. Bozarth (Ed.), Methods of Assessing the Reinforcing Properties of Abused Drugs, New York: Springer-Verlag, 1987, pp. 211-227.
- Stewart, J., & Eikelboom, R. Conditioned drug effects. In L.L. Iversen, S.D. Iversen & S.H. Snyder (Eds.), Handbook of Psychopharmacology, Volume 19, New York: Plenum Publishing Corp., 1987, pp. 1-57.
- Stewart, J., & Vezina, P. Conditioning and behavioral sensitization. In P.W. Kalivas & C.D. Barnes (Eds.), Sensitization in the Nervous System. Caldwell, NJ: Telford Press, 1988, pp. 207-224.
- Stewart, J. Conditioned stimulus control of the expression of sensitization of the behavioral activating effects of opiate and stimulant drugs. In I. Gormezano & E.A. Wasserman (Eds.), Learning and Memory: Behavioral and Biological Substrates, Hillsdale, NJ: Lawrence Erlbaum Publishers, 1992, pp. 129-151.
- Stewart, J., Neurobiology of conditioning to drugs of abuse. In P.W. Kalivas & H.H. Samson (Ed.), The Neurobiology of Drug & Alcohol Addiction (Annals of the New York Academy of Sciences, Vol. 654), New York: The New York Academy of Sciences, 1992, pp. 335-346.
- Stewart, J. Tolleranza e sensibilizzazione comportamentale ai farmaci. (Tolerance and sensitization to the behavioral effects of drugs.) In P. Nencini (Ed.) Il controllo farmacologico del comportamento. UTET Edizioni Scientifiche S.p.A.: Torino. 1992, pp. 161-183.
- Stewart, J. Tolleranza e sensibilizzazione farmacologica. Enciclopedia Medica Italiana, Estratto dal quarto volume dell' "Aggiornamento I****", 1993, pp. 7055-7061, USES Edizioni Scientifiche Firenze.
- Stewart, J. How does incentive motivational theory apply to sexual behavior? In J. Bancroft (Ed.), The pharmacology of sexual function and dysfunction. Proceedings of the Esteve Foundation Symposium VI. Amsterdam: Excerpta Medica (Elsevier Science B.V.), 1995, pp. 3-11.
- Stewart, J. The neurobiology of relapse. In The neurobiology of Addiction. Eds T.W. Robbins, B.J. Everitt, & D.J. Nutt. Oxford University Press, 2010.

UNREFEREED PUBLICATIONS

- Hurwitz, H.M.B., Stewart, J., & Wasservogel, E. Weight loss of rats during prolonged feeding-fasting scheduling. Psychological Reports, 1958, 4, 333-334.
- Meaney, M.J., & Stewart, J. The influence of exogenous testosterone and corticosterone on the social behavior of prepubertal male rats. Bulletin of the Psychonomic Society, 1983, 21, 232-234.