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## Biography

My academic journey began at Monash University where I was awarded a BSc (Psychology, Pharmacology). My first employment was as a research assistant in Clinical Pharmacology (Austin Hospital, Heidelberg, VIC). I moved to the United States and completed a MSc and PhD in Behavioural Pharmacology at the University of Michigan, Ann Arbor. After completing a post-doctoral placement there, I returned to Australia and completed a second post-doctoral appointment at Monash University (Physiology). I was appointed as a Lecturer in the School of Psychology where I taught undergraduate and post-graduate students and convened the Bachelor of Behavioural Neuroscience degree. My current appointment is at Spectrum Personality Disorder Service (Eastern Health) as Head of Research & Innovation. I have an Adjunct Clinical Associate Professor appointment at Monash University.

My overarching research interests concern brain and behaviour, with specialisation in mental health, psychopharmacology, neuroendocrinology and substance use. I am currently committed to researching topics related to personality disorder and complex trauma.

## Qualifications

Biological Psychology, PhD, Cocaine Self-Administration and Hypothalamic-Adrenal-Pituitary (HPA) Axis Activity in Rhesus Monkeys, University of Michigan  
1 Sept 1993 → 5 Jan 1999  
Award Date: 10 May 1999

## Employment

### ADJUNCT CLINICAL ASSOCIATE PROFESSOR

Eastern Health Clinical School Research  
MONASH UNIVERSITY  
1 Mar 2019 → present

### Senior Research Fellow, Spectrum

Eastern Health  
Box Hill, Australia  
2 Dec 2013 → present

## Research outputs

### Exploring the Utility of Neurostimulation Therapies in the Treatment of Borderline Personality Disorder: A Systematic Literature Review

Zou, M., Broadbear, J. H. & Rao, S., 1 Sept 2023, In: The Journal of Electroconvulsive Therapy. 39, 3, p. 151-157 7 p.

### Late manifestation of borderline personality disorder: Characterization of an under-recognized phenomenon

Jo, R., Broadbear, J. H., Hope, J. & Rao, S., May 2023, In: Personality and Mental Health. 17, 2, p. 165-175 11 p.

### Mental health support for and telehealth use by Australians living with borderline personality disorder during the onset of the COVID-19 pandemic: A national study

Heidari, P., Broadbear, J. H., Brown, R., Dharwadkar, N. P. & Rao, S., 1 Jan 2023, In: Digital Health. 9, p. 1-12 12 p.

### Are there underlying differences between sexually diverse and non-sexually diverse people diagnosed with Borderline Personality Disorder?

Nolan, J., Mildred, H., Broadbear, J. H., Knight, T. & Rao, S., 2023, In: Psychology and Sexuality. 14, 2, p. 371-382 12 p.

**Emergency department utilisation by patients with a diagnosis of borderline personality disorder: An acute response to a chronic disorder**

Broadbear, J. H., Rotella, J. A., Lorenze, D. & Rao, S., Oct 2022, In: EMA - Emergency Medicine Australasia. 34, 5, p. 731-737 7 p.

**Comparison of the Phenomenology of Hallucination and Delusion Characteristics in People Diagnosed With Borderline Personality Disorder and Schizophrenia**

Merrett, Z., Castle, D. J., Thomas, N., Toh, W. L., Beatson, J., Broadbear, J., Rao, S. & Rossell, S. L., 1 Aug 2022, In: Journal of Personality Disorders. 36, 4, p. 413-430 18 p.

**Disjunction in the subjective and objective measurement of co-occurring depression in borderline personality disorder – Implications for diagnosis**

Cheney, L., Broadbear, J. H. & Rao, S., Aug 2022, In: Australasian Psychiatry. 30, 4, p. 481-485 6 p.

**The impact of COVID-19 lockdown on the well-being of clients of a specialist personality disorder service**

Heidari, P., Broadbear, J. H., Cheney, L., Dharwadkar, N. P. & Rao, S., Apr 2022, In: Australasian Psychiatry. 30, 2, p. 235-238 4 p.

**Assessment of peer-conceptualised, written and led single-session group interventions for carers supporting a person with borderline personality disorder**

Brown, R., Heidari, P., Taylor, K., Veltkamp, J., Broadbear, J. H. & Rao, S., 2022, In: Advances in Mental Health. 20, 2, p. 134-145 12 p.

**Development and Preliminary Evaluation of a Rapid Screening Tool for Detecting Borderline Personality Disorder in People Aged over 60 Years**

Broadbear, J. H., Beatson, J. A., Moss, F., Jayaram, H., George, K., Planinic, A., Rodrigo, K. & Rao, S., 2022, (Accepted/In press) In: Clinical Gerontologist. 11 p.

**The impact of COVID-19 lockdown on the well-being of mental healthcare providers working in a specialist clinic for personality disorder**

Heidari, P., Broadbear, J., Cheney, L., Dharwadkar, N. P. & Rao, S., 2022, In: Australian Psychologist. 57, 1, p. 21-27 7 p.

**Confidence of psychiatry trainees in meeting the needs of borderline personality disorder in comparison with schizophrenia**

Nithianandan, M., Heidari, P., Broadbear, J. & Rao, S., Dec 2021, In: Australasian Psychiatry. 29, 6, p. 690-694 5 p.

**Discriminative stimulus properties of the 5-HT<sub>1A</sub> receptor biased agonists NLX-101 and F13714, in rats trained to discriminate 8-OH-DPAT from saline**

Broadbear, J. H., Depoortere, R. Y., Vacy, K., Ralph, D., Tunstall, B. J. & Newman-Tancredi, A., Dec 2021, In: Behavioural Pharmacology. 32, 8, p. 652-659 8 p.

**Ten-week Intensive Group Program (IGP) for borderline personality disorder: Making the case for more accessible and affordable psychotherapy**

Gec, D., Broadbear, J. H., Bourton, D. & Rao, S., Feb 2021, In: Evidence-Based Mental Health. 24, 1, 7 p., e1.

**Coroners' investigations of suicide in Australia: The hidden toll of borderline personality disorder**

Broadbear, J. H., Dwyer, J., Bugeja, L. & Rao, S., Oct 2020, In: Journal of Psychiatric Research. 129, p. 241-249 9 p.

**Developments in diagnosis and treatment of people with borderline personality disorder**

Rao, S., Heidari, P. & Broadbear, J. H., Sept 2020, In: Current Opinion in Psychiatry. 33, 5, p. 441-446 6 p.

**Avoiding Misdiagnosis When Auditory Verbal Hallucinations Are Present in Borderline Personality Disorder**

Beatson, J. A., Broadbear, J. H., Duncan, C., Bourton, D. & Rao, S., Dec 2019, In: Journal of Nervous and Mental Disease. 207, 12, p. 1048-1055 8 p.

**Borderline personality disorder and depressive disorder**

Rao, S. & Broadbear, J., Dec 2019, In: *Australasian Psychiatry*. 27, 6, p. 573-577 5 p.

**An exploration of self-compassion and self-criticism in the context of personal recovery from borderline personality disorder**

Donald, F., Lawrence, K. A., Broadbear, J. H. & Rao, S., 1 Feb 2019, In: *Australasian Psychiatry*. 27, 1, p. 56-59 4 p.

**Reviewing the clinical significance of 'fear of abandonment' in borderline personality disorder**

Palihawadana, V., Broadbear, J. H. & Rao, S., Feb 2019, In: *Australasian Psychiatry*. 27, 1, p. 60-63 4 p.

**What is the clinical significance of chronic emptiness in borderline personality disorder?**

Elsner, D., Broadbear, J. H. & Rao, S., Feb 2018, In: *Australasian Psychiatry*. 26, 1, p. 88-91 4 p.

**Hallucinations in BPD: more prevalent than community sample study suggests?**

Beatson, J., Broadbear, J. H., Lubman, D. I. & Rao, S., 1 Oct 2017, In: *The British Journal of Psychiatry*. 211, 4, p. 250-251 2 p.

**Evaluation of a novel risk assessment method for self-harm associated with Borderline Personality Disorder**

Rao, S., Broadbear, J. H., Thompson, K., Correia, A., Preston, M., Katz, P. & Trett, R., Oct 2017, In: *Australasian Psychiatry*. 25, 5, p. 460-465 6 p.

**Clinician perspectives on recovery and borderline personality disorder**

Donald, F., Duff, C., Lawrence, K., Broadbear, J. & Rao, S., 2017, In: *The Journal of Mental Health, Training, Education and Practice: Issues for Workforce Development*. 12, 3, p. 199-209 11 p.

**Consumer perspectives on personal recovery and borderline personality disorder**

Donald, F., Duff, C., Broadbear, J., Rao, S. & Lawrence, K., 2017, In: *The Journal of Mental Health, Training, Education and Practice: Issues for Workforce Development*. 12, 6, p. 350-359 10 p.

**Evaluation of changes in prescription medication use after a residential treatment programme for borderline personality disorder**

Broadbear, J. H., Nesci, J., Thomas, R., Thompson, K., Beatson, J. & Rao, S., Dec 2016, In: *Australasian Psychiatry*. 24, 6, p. 583-588 6 p.

**Missed diagnosis: The emerging crisis of borderline personality disorder in older people**

Beatson, J., Broadbear, J. H., Sivakumaran, H., George, K., Kotler, E., Moss, F. & Rao, S., Dec 2016, In: *Australian and New Zealand Journal of Psychiatry*. 50, 12, p. 1139-1145 7 p.

**Long-term antihyperalgesic and opioid-sparing effects of 5-day ketamine and morphine Infusion ("Burst Ketamine") in diabetic neuropathic rats**

Mak, P., Broadbear, J. H., Kolosov, A. & Goodchild, C. S., 2015, In: *Pain Medicine*. 16, 9, p. 1781 - 1793 13 p.

**Risky drug use and effects on sleep quality and daytime sleepiness**

Ogeil, R. P., Phillips, J., Rajaratnam, S. M. W. & Broadbear, J. H., 2015, In: *Human Psychopharmacology*. 30, 5, p. 356 - 363 8 p.

**Dysfunctional overnight memory consolidation in ecstasy users**

Smithies, V., Broadbear, J. H., Verdejo-Garcia, A. J. & Conduit, R., 2014, In: *Journal of Psychopharmacology*. 28, 8, p. 751 - 762 12 p.

**Guest Editorial: The role of oxytocin in positive affect and drug-related reward**

Buisman-Pijlman, F. T. A., Broadbear, J. H. & Sarnyai, Z., 2014, In: *Pharmacology Biochemistry and Behavior*. 119, April 2014, p. 1 - 2 2 p.

**Oxytocinergic regulation of endogenous as well as drug-induced mood**

Broadbear, J. H., Kabel, D., Tracy, L. & Mak, P., 2014, In: *Pharmacology Biochemistry and Behavior*. 119, p. 61 - 71 11 p.

**Male and female ecstasy users: differences in patterns of use, sleep quality and mental health outcomes**

Ogeil, R. P., Rajaratnam, S. M. W. & Broadbear, J. H., 2013, In: *Drug and Alcohol Dependence*. 132, 1-2, p. 223 - 230 8 p.

**Disturbed sleep in ecstasy users reported by partners/roommates**

Ogeil, R. P., Rajaratnam, S. M. W. & Broadbear, J. H., 2012, In: *Australian and New Zealand Journal of Psychiatry*. 46, 6, p. 587 - 588 2 p.

**Ecstasy and sleep disturbance: progress towards elucidating a role for the circadian system**

Ogeil, R. P., Rajaratnam, S. M. W. & Broadbear, J. H., 2012, In: *Sleep and Biological Rhythms*. 10, 1, p. 3 - 13 11 p.

**Fumaroylamino-4,5-epoxymorphinans and related opioids with irreversible (Mu) opioid receptor antagonist effects**

Moynihan, H. A., Derrick, I., Broadbear, J. H., Greedy, B. M., Aceto, M. D., Harris, L. S., Purington, L., Thomas, M. P., Woods, J. H., Traynor, J. R., Husbands, S. M. & Lewis, J. W., 2012, In: *Journal of Medicinal Chemistry*. 55, 22, p. 9868 - 9874 7 p.

**MDMA induces Per1, Per2 and c-fos gene expression in rat suprachiasmatic nuclei**

Ogeil, R. P., Kennaway, D. J., Salkeld, M. D., Rajaratnam, S. M. W. & Broadbear, J. H., 2012, In: *Psychopharmacology*. 220, 4, p. 835 - 843 9 p.

**Modulation of anxiety behavior in the elevated plus maze using peptidic oxytocin and vasopressin receptor ligands in the rat**

Mak, P., Broussard, C., Vacy, K. & Broadbear, J. H., 2012, In: *Journal of Psychopharmacology*. 26, 4, p. 532 - 542 11 p.

**Are females more sensitive to MDMA-related discriminative stimuli?**

Broadbear, J., Tunstall, B. & Beringer, K., 2011, In: *The Open Addiction Journal*. 4, special issue, p. 10 - 11 2 p.

**Assessing sleep disturbance in ecstasy users: A questionnaire study**

Ogeil, R., Rajaratnam, S. M. W. & Broadbear, J., 2011, In: *The Open Addiction Journal*. 4, special issue, p. 32 - 33 2 p.

**Ecstasy use and self-reported disturbances in sleep**

Ogeil, R., Rajaratnam, S. M. W., Phillips, J., Redman, J. & Broadbear, J., 2011, In: *Human Psychopharmacology*. 26, 7, p. 508 - 516 9 p.

**Evaluating the contribution of serotonin receptor subtypes and 'binge' 3,4-methylenedioxymethamphetamine (MDMA) exposure to the discriminative stimulus effects of MDMA in rats**

Smithies, V. & Broadbear, J., 2011, In: *The Open Addiction Journal*. 4, special issue, p. 55 - 56 2 p.

**Examining the role of oxytocin in the interoceptive effects of 3,4-methylenedioxymethamphetamine (MDMA, 'ecstasy') using a drug discrimination paradigm in the rat**

Broadbear, J., Tunstall, B. & Beringer, K., 2011, In: *Addiction Biology*. 16, p. 202 - 214 12 p.

**Second International MDMA 'Ecstasy' Conference in Australasia: Monash University, Melbourne Australia**

Broadbear, J. & Parrott, A., 2011, In: *The Open Addiction Journal*. 4, p. 1 - 2 2 p.

**Acute MDMA administration alters the distribution and circadian rhythm of wheel running activity in the rat**

Ogeil, R., Rajaratnam, S. M. W., Redman, J. & Broadbear, J., 2010, In: *Brain Research*. 1359, C, p. 128 - 136 9 p.

**Assessing the antidepressant-like effects of carbetocin, an oxytocin agonist, using a modification of the forced swimming test**

Chaviaras, S., Mak, P., Ralph, D., Krishnan, L. & Broadbear, J., 2010, In: *Psychopharmacology*. 210, 1, p. 35 - 43 9 p.

**14beta-Arylpropionylamino-17-cyclopropylmethyl-7,8-dihydronormorphinones and related opioids. Further examples of pseudoirreversible micro opioid receptor antagonists**

Nieland, N. P. R., Rennison, D., Broadbear, J. H., Purington, L., Woods, J. H., Traynor, J. R., Lewis, J. W. & Husbands, S. M., 2009, In: *Journal of Medicinal Chemistry*. 52, p. 6926 - 6930 5 p.

**14beta-O-Cinnamoylnaltrexone and related dihydrocodeinones are mu opioid receptor partial agonists with predominant antagonist activity**

Moynihan, H., Jales, A. R., Greedy, B. M., Rennison, D., Broadbear, J., Purington, L., Traynor, J., Woods, J., Lewis, J. & Husbands, S., 2009, In: *Journal of Medicinal Chemistry*. 52, 6, p. 1553 - 1557 5 p.

**MDMA: Neurohormonal, neurocognitive, and psychobiological aspects of recreational ecstasy**

Parrott, A. C., Broadbear, J. H., Bruno, R. B., Degenhardt, L., Morefield, K. & Scholey, A. B., 2009, In: *The Open Addiction Journal*. 2, p. 24 - 27 4 p.

**Neuroendocrine and subjective responses to pharmacological challenge with citalopram: A controlled study in male and female ecstasy/MDMA users**

Allott, K. A., Canny, B. J., Broadbear, J. H., Stepto, N. K., Murphy, B. & Redman, J. R., 2009, In: *Journal of Psychopharmacology*. 23, 7, p. 759 - 774 16 p.

**Effects of modafinil on simulator driving and self-assessment of driving following sleep deprivation**

Gurtman, C. G., Broadbear, J. H. & Redman, J. R., 2008, In: *Human Psychopharmacology*. 23, 8, p. 681 - 692 12 p.

**Oxytocin as a mediator of the unique interoceptive effects of 3,4-Methylenedioxymethamphetamine (MDMA, "Ecstasy") in the rat**

Beringer, K. & Broadbear, J. H., 2008, *Proceedings of the 43rd APS Annual Conference*. Voudouris, N. & Mrowinski, V. (eds.). Melbourne: Australian Psychological Society, Vol. 1. p. 31 - 35 5 p.

**Corticotropin-releasing hormone in nonhuman primates.**

Broadbear, J. H., 2006, In: *Frontiers in Bioscience*. 11, 1, p. 2303 - 2335 33 p.

**Structural determinants of opioid activity in derivatives of 14-aminomorphinones: effect of substitution in the aromatic ring of cinnamoylaminomorphinones and codeinones**

Nieland, N. P. R., Moynihan, H. A., Carrington, S., Broadbear, J. H., Woods, J. H., Traynor, J. R., Husbands, S. M. & Lewis, J. W., 2006, In: *Journal of Medicinal Chemistry*. 49, p. 5333 - 5338 6 p.

**BU74, a complex oripavine derivative with potent kappa opioid receptor agonism and delayed opioid antagonism**

Husbands, S. M., Neilan, C. L., Broadbear, J. H., Grundt, P., Breeden, S., Aceto, M. D., Woods, J. H., Lewis, J. W. & Traynor, J. R., 2005, In: *European Journal of Pharmacology*. 509, p. 117 - 125 9 p.

**Prostate specific antigen (PSA) near patient testing for diagnosis and management of prostate cancer**

Abdulwadud, O. A., Clavisi, O., Parkhill, A., King, S. T., Broadbear, J. H. & Dalton, A., 2005, Australia: Commonwealth Government of Australia. 1 p.

**Role of sex and sex steroids in mediating pituitary-adrenal responses to acute buspirone treatment in sheep**

Broadbear, J. H., Pierce, B. N., Clarke, I. J. & Canny, B. J., 2005, In: *Journal of Neuroendocrinology*. 17, 12, p. 804 - 810 7 p.

**Self-administration of methohexital, midazolam and ethanol: effects on the pituitary-adrenal axis in rhesus monkeys**

Broadbear, J. H., Winger, G. & Woods, J. H., 2005, In: *Psychopharmacology*. 178, 1, p. 83 - 91 9 p.

**Antidepressants, sex steroids and pituitary-adrenal response in sheep**

Broadbear, J. H., Nguyen, T., Clarke, I. J. & Canny, B. J., 2004, In: *Psychopharmacology*. 175, 2, p. 247 - 255 9 p.

**Corticotropin-releasing hormone antagonists, astressin B and antalarmin: differing profiles of activity in rhesus monkeys**  
Broadbear, J. H., Winger, G., Rivier, J., Rice, K. C. & Woods, J. H., 2004, In: Neuropsychopharmacology. 29, p. 1112 - 1121 10 p.

**Noncontingent and response-contingent intravenous ethanol attenuates the effect of naltrexone on hypothalamic-pituitary-adrenal activity in rhesus monkeys**

Williams, K. L., Broadbear, J. H. & Woods, J. H., 2004, In: Alcoholism: Clinical and Experimental Research. 28, 4, p. 566 - 571 6 p.

**Self-administration of fentanyl, cocaine and ketamine: effects on the pituitary-adrenal Axis in rhesus monkeys**

Broadbear, J. H., Winger, G. & Woods, J. H., 2004, In: Psychopharmacology. 176, p. 398 - 406 9 p.

**Sex differences in the pituitary-adrenal response following acute antidepressant treatment in sheep**

Broadbear, J. H., Hutton, L. C., Clarke, I. J. & Canny, B. J., 2004, In: Psychopharmacology. 171, p. 450 - 457 8 p.

**Antalarmin, a putative CRH-R1 antagonist, has transient reinforcing effects in rhesus monkeys**

Broadbear, J. H., Winger, G., Rice, K. C. & Woods, J. H., 2002, In: Psychopharmacology. 164, p. 268 - 276 9 p.

Cinnamoyl derivatives of 7 $\alpha$ -amino- and 7 $\alpha$ -(aminomethyl)- N-(cyclopropylmethyl)-6,14-endo-ethanotetrahydronoropavines are high-potency opioid antagonists

Derrick, I., Husbands, S. M., Broadbear, J., Traynor, J. R., Woods, J. H. & Lewis, J. W., 2000, In: Helvetica Chimica Acta. 83, 12, p. 3122-3130 9 p.

**Methocinnamox is a potent, long-lasting, and selective antagonist of morphine-mediated antinociception in the mouse: comparison with clocinnamox, -funaltrexamine, and -chlornaltrexamine**

Broadbear, J. H., Sumpter, T. L., Burke, T. F., Husbands, S. M., Lewis, J., Woods, J. H. & Traynor, J. R., 2000, In: Journal of Pharmacology and Experimental Therapeutics. 294, 3, p. 933 - 940 8 p.

Cocaine-reinforced responding in rhesus monkeys: Pharmacological attenuation of the hypothalamic-pituitary-adrenal axis response

Broadbear, J. H., Winger, G. & Woods, J. H., Sept 1999, In: Journal of Pharmacology and Experimental Therapeutics. 290, 3, p. 1347-1355 9 p.

Effects of response contingent and noncontingent cocaine injection on hypothalamic-pituitary-adrenal activity in rhesus monkeys

Broadbear, J. H., Winger, G., Cicero, T. J. & Woods, J. H., Jul 1999, In: Journal of Pharmacology and Experimental Therapeutics. 290, 1, p. 393-402 10 p.

Effects of self-administered cocaine on plasma adrenocorticotrophic hormone and cortisol in male rhesus monkeys

Broadbear, J. H., Winger, G., Cicero, T. J. & Woods, J. H., Jun 1999, In: Journal of Pharmacology and Experimental Therapeutics. 289, 3, p. 1641-1647 7 p.

Glucocorticoid-reinforced responding in the rhesus monkey

Broadbear, J. H., Winger, G. & Woods, J. H., 1999, In: Psychopharmacology. 147, 1, p. 46-55 10 p.

3-Alkyl ethers of clocinnamox: Delayed long-term  $\mu$ -antagonists with variable  $\mu$  efficacy

Husbands, S. M., Sadd, J., Broadbear, J. H., Woods, J. H., Martin, J., Traynor, J. R., Aceto, M. D., Bowman, E. R., Harris, L. S. & Lewis, J. W., 27 Aug 1998, In: Journal of Medicinal Chemistry. 41, 18, p. 3493-3498 6 p.

Analgesic, respiratory and heart rate effects of cannabinoid and opioid agonists in rhesus monkeys: Antagonist effects of SR 141716A<sup>1,2</sup>

Vivian, J. A., Kishioka, S., Butelman, E. R., Broadbear, J., Lee, K. O. & Woods, J. H., 1998, In: Journal of Pharmacology and Experimental Therapeutics. 286, 2, p. 697-703 7 p.

6N-cinnamoyl- $\beta$ -naltrexamine and its p-nitro derivative. High efficacy  $\kappa$ -opioid agonists with weak antagonist actions  
Derrick, I., Moynihan, H. A., Broadbear, J., Woods, J. H. & Lewis, J. W., 23 Jan 1996, In: Bioorganic and Medicinal Chemistry Letters. 6, 2, p. 167-172 6 p.

Potential irreversible ligands for opioid receptors. Cinnamoyl derivatives of  $\beta$ -naltrexamine  
Lewis, J. W., Moynihan, H. A., Broadbear, J. & Woods, J. H., 1996, In: Journal of Pharmacy and Pharmacology. 48, 2, p. 192-196 5 p.

Opioid Agonist Effects on Mouse Writhing After Irreversible Mu Receptor Blockade With Clocinnamox  
Zernig, G., Broadbear, J., Lewis, J. W., Brine, G. A. & Woods, J. H., Nov 1995, In: Experimental and Clinical Psychopharmacology. 3, 4, p. 323-329 7 p.

Receptor reserve and affinity of mu opioid agonists in mouse antinociception: correlation with receptor binding  
Zernig, G., Issaevitch, T., Broadbear, J. H., Burke, T. F., Lewis, J. W., Brine, G. A. & Woods, J. H., 27 Oct 1995, In: Life Sciences. 57, 23, p. 2113-2125 13 p.

Methoclocinnamox: A  $\mu$  partial agonist with pharmacotherapeutic potential for heroin abuse  
Woods, J. H., Lewis, J. W., Winger, G., Butelman, E., Broadbear, J. & Zernig, G., 1995, In: NIDA Research Monograph. 147, p. 195-219 25 p.

Postural hypotension in elderly patients given carvedilol  
Krum, H., Conway, E. L., Broadbear, J. H., Howes, L. G. & Louis, W. J., 24 Sept 1994, In: The BMJ. 309, 6957, p. 775 1 p.

Differential effects of systemically administered nor-binaltorphimine (nor-BNI) on  $\kappa$ -opioid agonists in the mouse writhing assay  
Broadbear, J. H., Stevens Negus, S., Butelman, E. R., de Costa, B. R. & Woods, J. H., Jul 1994, In: Psychopharmacology. 115, 3, p. 311-319 9 p.

Pharmacokinetic comparison of a combination tablet of enalapril and hydrochlorothiazide with enalapril and hydrochlorothiazide tablets administered together and separately  
Howes, L. G., Conway, E. L., Phillips, P. A., Broadbear, J., Drummer, O. H. & Louis, W. J., Aug 1991, In: Biopharmaceutics & Drug Disposition. 12, 6, p. 447-455 9 p.

#### **Role of metabolic risk factors in cardiovascular prognosis of systemic hypertension**

Louis, W. J., Howes, L. G., Straznicki, N., Krum, H., Phillips, P., Broadbear, J. & McNeil, J. J., 2 May 1990, In: The American Journal of Cardiology. 65, 17

Quality of life--treatment of hypertension. The role of indapamide.

Louis, W. J., Howes, L. G., Krum, H., Frauman, A., Broadbear, J. & McNeil, J. J., 7 Oct 1989, In: South African Medical Journal. Suppl, p. 26-27 2 p.