

STATE OF SOUTH CAROLINA

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IN THE FAMILY COURT
THIRTEENTH JUDICIAL

COUNTY OF GREENVILLE

)

South Carolina Department of
Social Services,

)

Plaintiff,

)

AFFIDAVIT OF CARL HART,
Ph.D. IN SUPPORT OF
DEFENDANTS' ANSWER TO
COMPLAINT FOR

INTERVENTION

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(S.C. Code Section 63-7-1650)

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PERSONALLY appeared before me Carl Hart, Ph.D., who after being duly sworn
deposes and says that:

1. I am an experimental psychologist/neuroscientist with specialized training in neuropsychopharmacology and substance abuse. I completed my undergraduate studies at the University of Maryland and doctoral training at the National Institutes of Health and the University of Wyoming. In addition, I completed post-doctoral training in human substance abuse at the medical schools of the University of California (San Francisco), Yale and Columbia Universities.
2. Currently, I am an Associate Professor of Psychology in both the Departments of Psychiatry and Psychology at Columbia University, and Director of the

Residential Studies and Methamphetamine Research Laboratories at the New York State Psychiatric Institute. A major focus of my research is to understand complex interactions between psychoactive drugs (alcohol, cocaine, marijuana, methamphetamine) and the neurobiology and environmental factors that mediate human behavior (including cognitive function) and physiology. My research with psychoactive drugs has the potential to: 1) develop new theories about the neurochemical basis of several human behaviors; 2) inform public policy about the benefits and risks of drug use; and 3) guide the development of treatment medications for psychiatric disorders.

3. As can be seen from my attached curriculum vita, I am the author or co-author of more than 50 peer-reviewed scientific articles in the area of neuropsychopharmacology, co-author of the textbook, *Drugs, Society, and Human Behavior*, and a member of a National Institutes of Health grant review committee. Recently, I was elected to Fellow status by the American Psychological Association (Division 28) for my outstanding contribution to the field of psychology, specifically psychopharmacology. In addition to my substantial research responsibilities, I teach courses on substance use and behavioral pharmacology to undergraduate and graduate students as well as to medical residents (in Psychiatry) and physicians who specialize in addiction medicine. Indeed, I was recently awarded Columbia University's highest teaching award.
4. Below I present information that lead me to conclude the following: 1) recreational marijuana use does not compromise an individual's ability to perform

parental duties and responsibilities and 2) a marijuana positive urine test does not provide any information about cognitive functioning or ability of the user.

5. Based upon my 13 years of experience testing individuals during and post drug-induced intoxication under carefully controlled conditions, it is my opinion that casual, recreational marijuana use does not interfere with one's ability to provide effective and responsible parental care. As is the case with alcohol, during marijuana intoxication some cognitive operations (e.g., response time) may be temporarily slowed (as measured in seconds), but the intoxicated individual is able to respond to environmental stimuli in an appropriate manner. Marijuana intoxication lasts no more than 2-4 hours, depending upon the individual's level of experience with the drug. It is important to understand that even during the period of intoxication, the user is able to carry out her/his usual behavioral repertoire, e.g., engage in appropriate social behaviors, including responding to emergencies.
6. After the intoxicating effects of marijuana have dissipated, there are no detectable physiological or behavioral effects of the drug in recreational and causal users. This is similar to what is observed following alcohol intoxication. In fact, many of the individuals who have served as research participants in my studies on marijuana (during which they were administered the drug) are responsible members of their communities. They are graduate students, actors, schoolteachers, waiters/waitresses, professors, and lawyers, among other professionals.

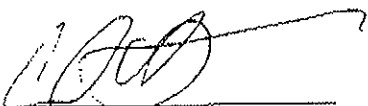
7. Although marijuana-induced intoxication is relatively short-lived, marijuana metabolites (by-products that form as the liver destroys the active components of marijuana) can remain in the body for as long as 2-4 weeks. This fact enhances the convenience of using urine sample tests to determine if an individual has used marijuana in the past several weeks (The metabolites of no other psychoactive drug remain detectable for this long duration). However, it is critically important to note that, even though marijuana metabolites can remain in the body for weeks following use of the drug, a marijuana positive urine test does not provide any information about the user's current level of intoxication or their ability to function. This is so, in part, because the amount of metabolites in the body does not reflect brain levels, which is a more important factor in determining drug effects on behavior and physiology.
8. Over the past 10 years, I have administered comprehensive cognitive tests to more than 100 individuals whose urine samples were positive for marijuana metabolites and have found no evidence that marijuana urine screening provides any information about one's ability to function or perform cognitive operations. Before participants are enrolled in my studies on marijuana, unbeknownst to them, they must give a urine sample that is positive for marijuana metabolites, indicating that they have previously used the drug. Then, they are required to complete a cognitive battery, on which they must score within their age- and education-matched normal range before being enrolled into a study. Less than 2% of study candidates fail to meet this requirement, even though they all give a urine sample that is positive for marijuana metabolites. It is critical to note also

that all individuals who failed to meet our cognitive performance inclusion criterion did so for reasons unrelated to their marijuana use (e.g., Dyslexia).

9. In summary, the information reviewed above and the totality of the weight of the scientific literature on marijuana-related effects in human recreational users, lead me to conclude that recreational use of marijuana does not undermine responsible parenting. Many of the participants in my studies are not only responsible parents, but they are also respectable and productive members of their communities. The evidence also leads me to conclude that a marijuana positive urine test provides no information about an individual's physiology or their ability to function. The following illustrates this point. Increased pulse (or heart rate) is the most dramatic and consistent physiological effect observed immediately after smoking a marijuana cigarette. The peak amount of increased pulse rate occurs approximately 10 minutes after initiating marijuana smoking. Then, pulse rate declines back to baseline (or starting point) levels within two hours. Of course, during this period the user's urine will test positive for marijuana metabolites. Importantly however, the user's urine will also test positive for marijuana metabolites over the next several days (and maybe weeks), even though the individual's pulse will not be elevated as a result of marijuana. The same is true with regard to an individual's functioning or cognitive ability. Thus, a marijuana positive urine test tells us nothing about the individual's physiological response, level of behavioral functioning, or ability to parent.


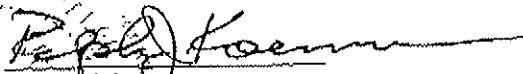
I declare under penalty of perjury that the foregoing is correct to the best of my knowledge and belief.

Executed on July 13, 2009



Carl Hart, Ph.D.

Sworn to and Subscribed before me
this 13th day of July, 2009

Notary Public

RALPH J. KOERBER
Notary Public - State of New York
NO. 01KO4686575
Qualified in Richmond County
Certificate filed in New York County
My Commission Expires March 30, 2011

Date Prepared: 7/13/09

Personal Data

Name: Carl L. Hart
Birthdate: 10/30/66
Birthplace: Miami, Florida
Citizenship: USA

Academic Training

B.S. 1991: University of Maryland (Psychology)
M.S. 1994: University of Wyoming (Psychology/Neuroscience)
Ph.D. 1996: University of Wyoming (Psychology/Neuroscience)
Thesis Title: Role of the L-type calcium channel in nicotine-induced locomotion in rats
Sponsor: Charles Ksir
Citation: Hart C, Kisro NA, Robinson SL, Ksir C (1996) Effects of the calcium channel blocker nimodipine on nicotine-induced locomotion in rats. *Psychopharmacology* 128, 359-361.

Traineeship

1994-1995: Predoctoral Fellowship in Neurological Sciences, Clinical Neuroscience Branch, National Institutes of Health / National Institute of Neurological Disorders and Stroke
1996-1997: Postdoctoral Fellowship in Substance Abuse, Department of Psychiatry, University of California at San Francisco
1997-1998: Postdoctoral Fellowship in Substance Abuse, Department of Psychiatry, Yale University
1998-1999: Postdoctoral Fellowship in Substance Abuse, Department of Psychiatry, Columbia University

Military Service

1984-1988: United States Air Force

Academic Appointments

1999-2006: Assistant Professor of Clinical Neuroscience, Department of Psychiatry, Columbia University
2003-2006: Adjunct Assistant Professor of Psychology, Department of Psychology, Columbia University
1999-present: Research Scientist III-V, Division on Substance Abuse, New York State Psychiatric Institute
2004-present: Affiliated Faculty, The Institute for Research in African-American Studies, Columbia University
2006-present: Associate Professor (in Psychiatry), Departments of Psychology and Psychiatry, Columbia University (**Tenure Granted: 2009**)

Honors

- 2007: Fellow, American Psychological Association (Division 28, Psychopharmacology and Substance Abuse)
- 2008: Presidential Teaching Award (Columbia University)

Grant Support*Current Funding*

- 2004-2009: Principal Investigator, National Institute on Drug Abuse Grant Award (5R01 DA03476), "Drug Effects on Behavior: Workplace Implications," Direct Funds: \$2,190,747
- 2005-2010 Principal Investigator, National Institute on Drug Abuse Grant Award (1R01 DA019559), "Intranasal Methamphetamine: A Pharmacotherapy Model," Direct Funds: \$1,942,000
- 2007-2012: Senior Faculty, National Institute on Drug Abuse Grant Award (5T32 DA007294), "Research Fellowship in Substance Abuse Disorders," Direct Funds: \$1,106,140
- 2006-2011: Co-Investigator, National Institute on Drug Abuse Grant Award (5R01DA022541), "The Neural Bases of Affect Regulation in Drug Abuse," Direct Funds: \$1,125,000
- 2004-2009: Co-Investigator, National Institute on Drug Abuse Grant Award (5R01 DA19239), "Medications Development for Marijuana Relapse," Direct Funds: \$1,807,972
- 2004-2009: Co-Investigator, National Institute on Drug Abuse Grant Award (5P50 DA09236), "Novel Medication Approaches for Substance Abuse," Direct Funds: \$9,851,475

Past Funding

- 1993-1995: Principal Investigator, National Institute of Mental Health/Society for Neuroscience Predoctoral Fellowship
- 1999-2000: Principal Investigator, Division on Substance Abuse, Columbia University Pilot Grant Award, "Memantine Effects on Methamphetamine Discrimination in Humans," Direct Funds: \$5,000
- 1999-2005: Co-Investigator, National Institute on Alcohol Abuse and Alcoholism Grant Award (5R01 AA012599), "Medications Development for Alcohol Abuse: NMDA Agents," Direct Funds: \$1,860,000
- 2000-2005: Co-Investigator, National Institute on Drug Abuse Grant Award (5R01 DA012698), "THC and Marijuana: Effects in Individuals with HIV/AIDS," Direct Funds: \$1,086,00
- 2002-2004: Principal Investigator, National Institute on Drug Abuse Grant Award (2R01 DA03476), "Drug Effects on Behavior: Workplace Implications," Direct Funds: \$737,478
- 2002-2005: Co-Investigator, National Institute on Drug Abuse Grant Award (5R01 DA010755), "Novel Cocaine Pharmacotherapies: Lab Studies," Direct Funds: \$1,800,00

2002-2005: Principal Investigator, National Institute on Drug Abuse Grant Award (R43), "Marijuana Effects on Human Cognition," (Alan Gevins, Ph.D. Principal Investigator), Direct Funds: \$32,000

Departmental and University Service

2005-present: Task Force on Diversity in Science and Engineering at Columbia University
2005-present: Office of the Vice Provost for Diversity Initiatives, Subcommittee on Search Culture and Hiring Practices
2006-present: Director of Undergraduate Studies, Department of Psychology
2006-present: Curriculum Committee, Department of Psychology

Teaching Experience and Responsibilities

1992-1994: Teaching assistant: Drugs and Behavior, University of Wyoming,
1994-1996: Instructor: Drugs and Behavior, University of Wyoming
1999-2003 Course Director: Substance Abuse Postdoctoral Fellows Seminar, Department of Psychiatry, Columbia University
2003 Instructor: Drugs and Society, Hunter College, The City University of New York
2003-present: Instructor: Drugs and Behavior, Department of Psychology, Columbia University
2004-present: Instructor: Topics in Neurobiology and Behavior, Department of Psychology, Columbia University
2004-present: Faculty Member, Supervised Individual Research (1-4 pts)
2004-2005: Team Taught: Drugs and Society, School of Public Health, Columbia University
2005-present: Team Taught: Graduate Level Proseminar, Department of Psychology, Columbia University
2006: Team Taught: Neuropsychopharmacology (G9625), Department of Pharmacology, Columbia University
2008-present: Team Taught: PGYII Substance Abuse, Department of Psychiatry, Columbia University

National Professional Activities

National Committees

2006-present: National Institutes of Health, Biobehavioral Regulation, Learning and Ethology Study Section
2004-present: National Institute on Drug Abuse, African-American Researchers and Scholars Workgroup
2001-2008: College on Problems of Drug Dependence's Under-represented Populations Committee (Chair 2003-06)
2005-2006: APA Division 28's Liaison to the Science Directorate

Scientific Advisory Board

2007-present: Board of Directors, Drug Policy Alliance
2007-present: National Advisory Council, Students for a Sensible Drug Policy
2005-2010: Morgan State University, National Institute on Drug Abuse Grant Award (R24DA01980), "The Center for the Study and Prevention of Drug Use", (Fernando Wager, Ph.D., Principal Investigator)

- 2004-2009: California Pacific Medical Center Research Institute, National Institute on Drug Abuse Grant Award (1P50 DA018179), "Methamphetamine Pharmacotherapy Development Center", (John Mendelson, M.D., Principal Investigator)
- 2004-2009: National Health Promotion Associates, Center for Substance Abuse Prevention Grant Award, "LifeSkills Workplace Prevention Program", (Christopher Williams, Ph.D., Principal Investigator)
- 2004: Ad hoc Consultant, Medications Development for Cannabis Dependence, National Institute on Drug Abuse

Published Refereed Articles

1993

1. Hakan RL, Hart C, Eyl C (1993) Specific neurophysiological effects of systemic nicotine on neurons in the nucleus accumbens. *Synapse* 15, 191-197.

1995

2. Ksir C, Mellor G, Hart C, Gerhardt GA (1995) Nicotine enhances dopamine clearance in rat nucleus accumbens. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 19, 151-156.
3. Pacak K, Palkovits M, Kvetnansky R, Matern P, Hart C, Kopin IJ, Goldstein DS (1995) Catecholaminergic inhibition by hypercortisolemia in the paraventricular nucleus of conscious rats. *Endocrinology* 136, 4814-4819.

1996

4. *Hart C, Ksir C (1996) Nicotine effects on dopamine clearance in rat nucleus accumbens. *Journal of Neurochemistry* 66, 216-221.
5. *Hart C, Kisro NA, Robinson SL, Ksir C (1996) Effects of the calcium channel blocker nimodipine on nicotine-induced locomotion in rats. *Psychopharmacology* 128, 359-361.

2000

6. *Hart CL, Jatlow PI, Sevarino KA, McCance-Katz EF (2000) Comparison of intravenous cocaethylene and cocaine in humans. *Psychopharmacology* 149, 153-162.
7. *Hart CL, Haney M, Foltin RW, Fischman MW (2000) Alternative reinforcers differentially modify cocaine self-administration by humans. *Behavioural Pharmacology* 11, 87-91.

2001

8. Haney M, Ward AS, Comer SD, Hart CL, Foltin RW, Fischman MW (2001) Bupropion SR worsens mood during marijuana withdrawal in humans. *Psychopharmacology* 155, 171-179.
9. Comer SD, Hart CL, Ward AS, Haney M, Foltin RW, Fischman MW (2001) Effects of repeated oral methamphetamine administration in humans. *Psychopharmacology* 155, 397-404.
10. *Hart CL, Ward AS, Haney M, Foltin RW, Fischman MW (2001) Methamphetamine self-administration by humans. *Psychopharmacology* 157, 75-81.

* First-authored articles

11. *Hart CL, van Gorp WG, Haney M, Foltin RW, Fischman MW (2001) Effects of acute smoked marijuana on complex cognitive performance. *Neuropsychopharmacology* 25, 757-765.
- 2002
12. *Hart CL, Haney M, Ward AS, Fischman MW, Foltin RW (2002) Effects of oral THC maintenance on smoked marijuana self-administration. *Drug and Alcohol Dependence* 67, 301-309.
13. *Hart CL, Haney M, Foltin RW, Fischman MW (2002) Effects of the NMDA antagonist memantine on human methamphetamine discrimination. *Psychopharmacology* 164, 376-384.
14. *Hart CL, Ward AS, Haney M, Comer SD, Foltin RW, Fischman MW (2002) Comparison of smoked marijuana and oral Δ^9 -tetrahydrocannabinol in humans. *Psychopharmacology* 164, 407-415.
- 2003
15. Haney M, Hart CL, Ward AS, Foltin RW (2003) Nefazodone decreases anxiety during marijuana withdrawal in humans. *Psychopharmacology* 165, 157-65.
16. Foltin RW, Ward AS, Haney M, Hart CL, Collins ED (2003) The effects of escalating doses of smoked cocaine in humans. *Drug and Alcohol Dependence* 70, 149-157.
17. Foltin RW, Ward AS, Collins ED, Haney M, Hart CL, Fischman MW (2003) The effects of venlafaxine on the subjective, reinforcing and cardiovascular effects of cocaine in opioid-dependent and non-opioid-dependent humans. *Experimental and Clinical Psychopharmacology* 11, 123-130.
18. *Hart CL, Ward AS, Haney M, Nasser J, Foltin RW (2003) Methamphetamine attenuates disruptions in performance and mood during simulated night shift work. *Psychopharmacology* 169, 42-51.
19. *Hart CL, Ward AS, Haney M, Foltin RW (2003) Zolpidem-related effects on performance and mood during simulated night-shift work. *Experimental and Clinical Psychopharmacology* 11, 259-268.
20. Collins ED, Vosburg SK, Hart CL, Haney M, Foltin RW (2003) Amantadine does not modulate the reinforcing, subjective, or cardiovascular effects of cocaine in humans. *Pharmacology, Biochemistry and Behavior* 76, 401-407.
- 2004
21. Haney M, Hart CL, Vosburg SK, Nasser J, Bennett A, Zubaran C, Foltin RW (2004) Marijuana withdrawal in humans: effects of oral THC or divalproex. *Neuropsychopharmacology* 29, 158-170.
22. *Hart CL, Ward AS, Collins ED, Haney M, Foltin RW (2004) Gabapentin maintenance decreases smoked cocaine-related subjective effects, but not self-administration by humans. *Drug and Alcohol Dependence* 73, 279-287.
- 2005
23. McCance-Katz EF, Hart CL, Boyarsky B, Kosten TR, Jatlow PI (2005) Gender effects following repeated administration of cocaine and alcohol in humans. *Substance Use and Misuse* 40, 511-528.
-

24. *Hart CL, Lynch WJ (2005) Developing pharmacotherapies for cannabis and cocaine use disorders. *Current Neuropharmacology* 3, 95-114.
25. Pace-Schott EF, Stickgold R, Muzur A, Wigren PE, Ward AS, Hart CL, Clarke D, Morgan A, Hobson JA. (2005) Sleep quality deteriorates over a binge-abstinence cycle in chronic smoked cocaine users. *Psychopharmacology* 179, 873-883.
26. Vosburg SK, Hart CL, Haney M, Foltin RW (2005). An evaluation of the reinforcing effects of memantine in cocaine-dependent humans. *Drug and Alcohol Dependence* 79, 257-260.
27. *Hart CL, Haney M, Nasser J, Foltin RW (2005) Combined effects of methamphetamine and zolpidem on behavior of shift workers. *Pharmacology, Biochemistry and Behavior* 81, 559-568.
28. Haney M, Hart C, Collins ED, Foltin RW (2005) Smoked cocaine discrimination in humans: Effects of gabapentin. *Drug and Alcohol Dependence* 80: 53-61.
29. *Hart CL, Haney M, Vosburg SK, Comer SD, Foltin RW (2005) Reinforcing effects of oral Δ^9 -THC in male marijuana smokers in a laboratory choice procedure. *Psychopharmacology* 181, 237-243.
30. Pace-Schott EF, Stickgold R, Muzur A, Wigren PE, Ward AS, Hart CL, Walker M, Edgar C, Hobson JA. (2005) Cognitive performance by humans during a smoked cocaine binge-abstinence cycle. *American Journal of Drug and Alcohol Abuse* 31, 571-591.
31. *Hart CL (2005) Increasing treatment options for cannabis dependence: a review of potential pharmacotherapies. *Drug and Alcohol Dependence* 80, 147-159.

2006

32. *Hart CL, Haney M, Vosburg SK, Comer SD, Gunderson EW, Foltin RW (2006) Modafinil attenuates disruptions in cognitive performance during simulated night shift work. *Neuropsychopharmacology* 31, 1526-1536.
33. Haney M, Hart CL, Foltin RW (2006) Effects of baclofen on cocaine self-administration: Opioid-dependent and non-opioid dependent volunteers. *Neuropsychopharmacology* 31, 1814-1821.
34. Vadhan NP, Hart CL, Roe B, Colley J, Haney M, Foltin RW (2006) Substance use and psychosocial outcomes following participation in residential laboratory studies of marijuana, methamphetamine and zolpidem. *American Journal of Drug and Alcohol Abuse* 32, 589-97.

2007

35. *Hart CL, Haney M, Collins ED, Rubin E, Foltin RW (2007) Smoked cocaine self-administration by humans is not reduced by large gabapentin maintenance doses. *Drug and Alcohol Dependence* 86, 274-277.
36. *Hart CL, Haney M, Vosburg SK, Rubin E, Foltin RW (2007) Gabapentin does not reduce smoked cocaine self-administration: Employment of a novel self-administration procedure. *Behavioural Pharmacology* 18, 71-75.

37. ¹Vadhan NP, Hart CL, van Gorp WG, Haney M, Gunderson EW, Foltin RW (2007) Acute effects of smoked marijuana on decision-making, as assessed by a modified gambling task, in experienced marijuana users. *Journal of Clinical and Experimental Neuropsychology* 29, 357-364.
38. Haney M, Gunderson EW, Rabkin J, Hart CL, Vosburg SK, Comer SD, Foltin RW (2007) Dronabinol and marijuana in HIV+ marijuana smokers: Caloric intake, mood and sleep. *Journal of Acquired Immune Deficiency Syndrome* 45, 545-554.
39. Vadhan NP, Carpenter KL, Copersino ML, Hart CL, Foltin RW, Nunes EV (2007) Attentional bias towards cocaine-related stimuli: relationship to treatment-seeking for cocaine dependence. *American Journal of Drug and Alcohol Abuse* 33, 727-736.

2008

40. Pace-Schott EF, Morgan PT, Malison RT, Hart CL, Edgar C, Walker M, Stickgold R. (2008) Cocaine users differ from normals on cognitive tasks which show poorer performance during drug abstinence. *American Journal of Drug and Alcohol Abuse* 34, 109-121.
41. *Hart CL, Haney M, Vosburg SK, Rubin E, Foltin RW (2008) Smoked cocaine self-administration is decreased by modafinil. *Neuropsychopharmacology* 33, 761-768.
42. ¹Perez A, Kirkpatrick MG, Gunderson EW, Marrone G, Silver R, Foltin RW, Hart CL (2008) Residual effects of intranasal methamphetamine on sleep, mood, and performance. *Drug and Alcohol Dependence* 94, 258-262.
43. ¹Kirkpatrick MG, Metcalfe J, Greene MJ, Hart CL (2008) Effects of intranasal methamphetamine on metacognition of agency. *Psychopharmacology* 197, 137-144.
44. Haney M, Hart CL, Vosburg SK, Comer SD, Reed S, Foltin RW (2008) Effects of THC and Lofexidine in a Human Laboratory Model of Marijuana Withdrawal and Relapse. *Psychopharmacology* 197, 157-168.
45. *Hart CL, Gunderson EW, Perez A, Kirkpatrick MG, Thurmond A, Comer SD, Foltin RW (2008) Acute physiological and behavioral effects of intranasal methamphetamine in humans. *Neuropsychopharmacology* 33, 1847-1855.
46. ¹Perez GA, Haney M, Foltin RW, Hart CL (2008) Modafinil decreases food intake in humans subjected to simulated shift work. *Pharmacology, Biochemistry and Behavior* 90, 717-722.
47. Gray KM, Hart CL, Christie DK, Upadhyaya HP (2008) Tolerability and effects of oral Δ^9 -tetrahydrocannabinol in older adolescents with marijuana use disorders. *Pharmacology, Biochemistry and Behavior* 91, 67-70.

2009

¹ Papers published with trainees (undergraduates to postdoctoral fellows) in my laboratory

48. ¹Kirkpatrick MG, Haney M, Vosburg SK, Comer SD, Foltin RW, Hart CL (2009) Methamphetamine self-administration by humans subjected to abrupt shift and sleep schedule changes. *Psychopharmacology* 203, 771-80.
49. Vadhan NP, Hart CL, Haney M, van Gorp WG, Foltin RW (2009) Decision-making in long-term cocaine users: Effects of a cash monetary contingency on Gambling task performance. *Drug and Alcohol Dependence* 102, 95-101.

Articles in Press

50. Mariani J, Haney M, Hart CL, Vosburg SK, Levin FR (*in press*) Effects of Research Setting on Observed Depressive Symptoms in Marijuana Users. *Journal of Substance Abuse Treatment*
51. ¹Marrone GF, Pardo J, Krauss RM, Hart CL (*in press*) Amphetamine analogs methamphetamine and 3,4-methylenedioxymethamphetamine (MDMA) differentially affect speech. *Psychopharmacology*

Chapters and Books

2001

1. *Hart C, McCance-Katz EF, Kosten TR (2001) Pharmacotherapies used in common substance use disorders. In: FM Tims, CG Leukefeld, JJ Platt. *Relapse and Recovery in Addictions*. Yale University Press: New Haven, 303-333.

2005

2. Ksir C, Hart CL, Ray O (2005) *Drugs, Society, and Human Behavior*, 11th Edition. McGraw-Hill: New York (**Textbook**)

2006

3. Ksir C, Hart CL, Ray O (2006) *Drugs, Society, and Human Behavior*, 12th Edition. McGraw-Hill: New York (**Textbook**)

2008

4. Hart CL, Ksir C, Ray O (2008) *Drugs, Society, and Human Behavior*, 13th Edition. McGraw-Hill: New York (**Textbook**)

In press

5. ¹Kober H, Turza AC, Hart CL (*in press*) Risk factors for substance use, abuse, and dependence: Learning. In: HR Kranzler and P Korsmeyer. *Encyclopedia of Drugs, Alcohol, and Addictive Behavior*, 3rd edition. Macmillan Reference USA
6. Hart CL, Shytle RD (*in press*) Potential pharmacotherapies for cannabis dependence. In: B Johnson. *Addiction Medicine: Science and Practice*. Springer: New York

Case Reports/Letters/Commentaries

2002

1. ¹Ginzburg V, Hart CL (2002) Acupuncture for the treatment of cocaine addiction. *JAMA* 287, 1800.
2. ¹Gunderson EW, Vosburg SK, Hart CL (2002) Does marijuana use cause long-term cognitive deficits? *JAMA* 287, 2652-2654.

2005

3. ¹Mariani JJ, Hart CL (2005) Psychosis associated with modafinil and shift work. *The American Journal of Psychiatry* 162, 1983.

2006

4. ¹Accordino M, Hart CL (2006) Neuropsychological deficits in long-term frequent cannabis users. *Neurology* 67, 1902.
5. ¹Nordstrom BR, Hart CL (2006) Assessing cognitive functioning in cannabis users: cannabis use history an important consideration. *Neuropsychopharmacology* 31, 2798-2799.

2007

6. ¹Nordstrom BR, Hart CL (2007) Colorblindness: A missed opportunity to address the negative impact of being black in America. *The American Journal on Addictions* 16, 138-139.

2008

7. Mendelson J, Rawson R, Newton T, Galloway G, de Wit H, Dewey SL, Hart CL, Epstein DH (2008) Treatment of methamphetamine dependence. *Mayo Clinic Proceedings* 83, 369-370.
8. Hart CL, Krauss RM (2008) Human drug addiction is more than faulty decision-making. *Behavioral and Brain Sciences* (Invited Commentary) 31, 448-449.

Selected Recent Abstracts

2000

1. *Hart CL, Comer SD, Ward AS, Haney M, Foltin RW, Fischman MW (2000) Behavioral and subjective effects of methamphetamine administered to humans in a residential laboratory. *NIDA Research Monograph*
 2. Ward AS, Haney M, Comer SD, Hart CL, Foltin RW, Fischman MW (2000) Oral THC vs. smoked marijuana: a within-subjects comparison of effects. *NIDA Research Monograph*
 3. Haney M, Ward AS, Comer SD, Hart CL, Foltin RW, Fischman MW (2000) Effects of bupropion on abstinence symptoms following smoked marijuana in humans. *Drug and Alcohol Dependence* 61, S84-S85.
 4. *Hart CL, Haney M, Pudiak C, Foltin RW, Fischman MW (2000) Methamphetamine discrimination by humans under a novel response procedure: effects of the NMDA antagonist memantine. *Drug and Alcohol Dependence* 61, S86.
-

5. Ward AS, Hart CL, Haney M, Foltin RW, Fischman MW (2000) Zolpidem effects on sleep and behavior of shift workers. *Drug and Alcohol Dependence* 61, S231-S232.
- 2001
6. Foltin RW, Lewis S, Haney M, Hart CL, Ward AS, Fischman MW (2001) Effects of smoked marijuana in African-Americans and non-hispanic caucasian males. *Drug and Alcohol Dependence* 63, S48.
 7. *Hart CL, Haney M, Foltin RW, Fischman MW (2001) Discriminative stimulus effects of methamphetamine are disrupted by the NMDA antagonist memantine. *American College of Neuropsychopharmacology Abstracts*.
 8. Foltin RW, Hart CL, Haney M, Fischman MW (2001) Venlafaxine decreases the subjective effects of smoked cocaine in methadone-maintained volunteers. *American College of Neuropsychopharmacology Abstracts*.
 9. Wigren P, Ward AS, Pace-Schott EF, Hart CL, Stickgold RL, Fischman MW, Hobson JA (2001) Effects of cocaine and cocaine abstinence on sleep and cognition. *Drug and Alcohol Dependence* 63, Supplement 1 S169.
 10. Ward AS, Haney M, Hart CL, Foltin RW, Fischman MW (2001) Gabapentin reduces the subjective effects of smoked cocaine in humans. *Drug and Alcohol Dependence* 63, Supplement 1 S166.
 11. McCance-Katz EF, Boyarsky BK, Hart CL, Sarlo J, Rogers CM, Murphy MK, Kosten TR, Jatlow PI (2001) Repeated administration of cocaine and alcohol to humans: Gender effects. *Drug and Alcohol Dependence* 63, Supplement 1 S101.
 12. *Hart CL, Ward AS, Haney M, Nasser J, Foltin RW, Fischman MW (2001) Effects of methamphetamine on behavior of shift workers. *Drug and Alcohol Dependence* 63, Supplement 1 S63.
 13. Haney M, Ward AS, Hart CL, Nasser J, Foltin RW, Fischman MW (2001) Effects of nefazodone on marijuana withdrawal in humans. *Drug and Alcohol Dependence* 63, S62.
- 2002
14. *Hart CL, van Gorp WG, Vosburg SK, Foltin RW (2002) Human performance on a gambling task during marijuana intoxication *Drug and Alcohol Dependence* 66, Supplement 1 S76.
 15. *Hart CL, Haney M, Foltin RW (2002) Methamphetamine attenuates disruptions in performance and mood during simulated night shift work. *American College of Neuropsychopharmacology Abstracts*.
- 2003
16. *Hart CL, Haney M, Foltin RW (2003) Combined effects of methamphetamine and zolpidem on behavior of shift workers. *American College of Neuropsychopharmacology Abstracts*.
- 2004
17. *Hart CL, Haney M, Comer SD, Evans SE, Foltin RW (2004) Combined effects of methamphetamine and zolpidem on performance and mood during simulated night shift work. *International Journal of Neuropsychopharmacology* 7, Suppl. 1 S310.

18. Foltin RW, Hart CL, Evans SE, Haney M (2004) Intranasal cocaine in humans: acute tolerance, subjective and cardiovascular effects. *International Journal of Neuropsychopharmacology* 7, Suppl. 1 S136.
19. *Hart CL (2004) Drug effects on behaviour: Workplace implications. *West Indian Medical Journal* 53 Suppl. 4 36.
20. *Hart CL, Haney M, Vosburg SK, Comer SD, Foltin RW (2004) Zolpidem does not serve as a reinforcer in humans subjected to simulated shift work. *American College of Neuropsychopharmacology Abstracts*.

2005

21. *Hart CL, Haney M, Vosburg SK, Comer SD, Gunderson EW, Foltin RW (2005) Modafinil attenuates disruptions in cognitive performance during simulated night shift work. *American College of Neuropsychopharmacology Abstracts*.

Conferences Organized

2007

1. Drug Abuse and Cognition Conference: Neuropsychopharmacological analysis as a tool to understand human cognition. Columbia University

Recent Selected Invited Talks

2009

1. Grand Rounds, Department of Psychiatry, University of California – San Francisco, CA
2. International Harm Reduction Association Conference, Bangkok, Thailand

2008

1. Global Conference on Methamphetamine, Prague, Czech Republic
2. Treatment Research Center, University of Pennsylvania, Philadelphia, PA
3. Sackler Institute for Developmental Psychobiology, Weill Medical College of Cornell University, New York, NY
4. Methamphetamine Form on Capital Hill, Washington, DC
5. A Mini Medical School on Addiction, Morehouse School of Medicine, Atlanta, GA

2007

6. Behavioral Pharmacology Research Seminar Series, Johns Hopkins University, Baltimore, MD
7. Division on Substance Abuse Seminar Series, Yale University, New Haven, CT
8. The International Drug Policy Reform Conference, New Orleans, LA

2006

9. Annual Dr. Lonnie E. Mitchell National Historically Black Colleges and Universities (HBCU) Substance Abuse and Mental Health Conference, Baltimore, MD

2005

10. The American Psychiatric Association Annual Meeting, Atlanta, GA
11. The International Drug Policy Reform Conference, Long Beach, CA

12. Keynote Speaker, The Henry Cornwell Fifth Distinguished Lecture Series, Lincoln University, PA.
- 2004
13. The 24th Annual Convention of the Caribbean Association of Pharmacists, Belize City, Belize
14. American Society of Addiction Medicine Review Course in Addiction Medicine, Toronto, Canada

Ad hoc Journal Referee

American Journal of Psychiatry
American Journal of Psychology
Archives of General Psychiatry
Behavioural Pharmacology
Biological Psychiatry
BioMed Central: Clinical Pharmacology
Canadian Medical Association Journal
Drug and Alcohol Dependence
Experimental and Clinical Psychopharmacology
Journal of Clinical Psychiatry
Journal of International Neuropsychological Society
Journal of Neurochemistry
Journal of Pharmacology And Experimental Therapeutics
Neuroimage
Neuropsychopharmacology
Pharmacology, Biochemistry and Behavior
Psychology of Addictive Behaviors
Psychopharmacology

Ad hoc Grant Referee

National Institute on Drug Abuse Director's Avant-Garde Grant Review Committee
National Institute on Drug Abuse, Biobehavioral Regulation, Learning and Ethology Study Section
National Institute on Drug Abuse, Extramural Program
National Institute on Drug Abuse, Behavioral Science Track Award for Rapid Transition (B-START) Program
National Institute on Drug Abuse, Intramural Research Program (Served as external reviewer for submitted protocols)
The Wellcome Trust, United Kingdom

Professional Organizations and Societies

1999-present: Behavioural Pharmacology Society (Member)
2000-present: American Psychological Association (Member to Fellow)
Division 28, Psychopharmacology and Substance Abuse
2000-present: College on the Problem of Drug Dependence (CPDD; Associate to Regular Member)

- 2001-present: The International Study Group Investigating Drugs as Reinforcers (Member)
- 2003-present: Sleep Research Society (Member)
- 2006-present: American College of Neuropsychopharmacology (Associate Member)
- 2007-present: Association for Psychological Science (Member)