

Profiles
July2, 2015

BIBLIOGRAPHY

(papers, chapters)

February 18, 2015

John H. Krystal, M.D.

Robert L. McNeil, Jr. Professor of Translational Research
Chair, Department of Psychiatry
Professor of Neurobiology
300 Yale University School of Medicine
Chief of Psychiatry, Yale-New Haven Hospital

Department of Psychiatry
Yale University School of Medicine
300 George St., Suite #901
New Haven, CT 06511

T: 203-785-6396

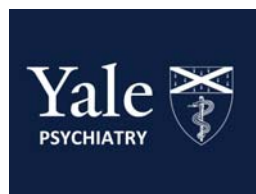
F: 203-785-6196

Director, Clinical Neuroscience Division
VA National Center for PTSD
VA Connecticut Healthcare System (151-D)
950 Campbell Ave.
West Haven, CT 06516

T: 203-937-4790

F: 203-937-3472

E: john.krystal@yale.edu



+

BIBLIOGRAPHY

Original Articles:

1. Krystal JH, Redmond DE JR: A preliminary description of acute physical dependence on morphine in the vervet monkey. *Pharmacol Biochem Behav* 1983;18:289-91.
2. Redmond DE Jr, Krystal JH: Multiple mechanisms of withdrawal from opioid drugs. *Ann Rev Neurosci*, 1984;7:443-78.
3. van der Kolk B, Greenberg M, Boyd H, Krystal J: Inescapable shock, neurotransmitters, and addiction to trauma: Toward a psychobiology of post traumatic stress. *Biological Psychiatry* 1985;20:314-25.
4. Krystal JH, Giller EL Jr, Cichetti DV: Assessment of alexithymia in post-traumatic stress disorder and somatic illness: Introduction of a reliable measure. *Psychosom Med*, 1986;48:84-94.
5. Woods SW, Krystal JH, D'Amico CL, Heninger GR, Charney DS: A review of behavioral and pharmacologic studies relevant to the application of CO₂ as a human subject model of anxiety. *Psychopharm Bull* 1988;24:149-153.
6. Woods SW, Koster K, Krystal JH, Smith EO, Zubal IG, Hoffer PB, Charney DS: Yohimbine alters regional cerebral blood flow in panic disorder. (Letter) *Lancet*, 1988;ii:678.
7. Krystal JH, Kosten TR, Perry BD, Southwick S, Mason JW, Giller EL Jr: Neurobiological aspects of PTSD: Review of clinical and preclinical studies. *Behav Ther*, 1989;20:177-198.
8. Woods S, Krystal JH, Charney DS, Heninger GR: Alprazolam but not clonidine attenuates carbon dioxide-induced anxiety in healthy subjects. *Life Sci*, 1989;45:233-242.
9. Krystal JH, Walker MW, Heninger GR: Intermittent naloxone attenuates physical dependence on methadone in rhesus monkeys. *Eur J Pharmacol*, 1989;160:331-338.
10. Nagy LM, Krystal JH, Woods SW, Charney DS: Long-term efficacy of alprazolam in panic disorder: A 2.5-year follow-up study. *Arch Gen Psychiatry*, 1989;46:993-999.

11. Krystal JH, Woods SW, Levesque M, Heninger GR: The effects of carbon dioxide inhalation on plasma MHPG, plasma hormones, respiratory rate, and behavior in the rhesus monkey. *Life Sci*, 1989;45:1657-1663.
12. Price LH, Ricaurte GA, Krystal JH, Heninger GR: Neuroendocrine and mood responses to intravenous L-tryptophan in 3,4-methylenediamphetamine (MDMA) users: Preliminary observations. *Arch Gen Psychiatry*, 1989;46:20-22.
13. McDougle CJ, Goodman WK, Price LH, Delgado PL, Krystal JH, Charney DS, Heninger GR: Neuroleptic addition in fluvoxamine-refractory OCD. *Am J Psychiatry*, 1990;147:652-654.
14. Rasmussen K, Beitner D, Krystal J, Aghajanian G, Nestler E: Opiate withdrawal and the rat locus coeruleus: Behavioral, electrophysiological and biochemical correlates. *J. Neurosci*, 1990;10:2308-2317.
15. Goodman WK, Price LH, Delgado PL, Palumbo J, Krystal JH, Rasmussen SA, Heninger GR, Charney DS: Specificity of serotonin reuptake inhibitors in the treatment of obsessive-compulsive disorder: Comparison of fluvoxamine and desipramine. *Arch Gen Psychiatry*, 1990;47:577-585.
16. Price LH, Charney DS, Delgado PL, Goodman WK, Krystal JH, Wood SW, Heninger GR: Clinical studies of 5-HT function using I.V. L-Tryptophan. *Prog Neuro-Psychopharmacol & Biological Psychiatry* 1990;14:459-472
17. Price LH, Charney DS, Delgado PL, Goodman WK, Krystal JH, Woods SW, Heninger GR: The role of serotonin in the mechanism(s) of action of antidepressant drugs: Clinical data. *J Clin Psychiatry*, 1990;51(4,Suppl):44-50.
18. Kosten TR, Krystal JH, Charney DS, Price L, Morgan G, Kleber H: Opiate antagonist challenges in buprenorphine maintained patients. *Drug Alc Dep* 1990;25:73-78
19. Charney DS, Woods SW, Nagy LM, Southwick SM, Krystal JH, Heninger GR: Noradrenergic function in panic disorder. *J Clin Psychiatry* 1990;51(12, suppl A):5-11.
20. Woods SW, Charney DS, Silver JM, Krystal JH, Heninger GR: Benzodiazepine receptor responsiveness in panic disorder. II. Behavioral, biochemical, and cardiovascular responses to the benzodiazepine receptor antagonist flumazenil. *Psychiatry Res* 1991;36:115-127
21. Satel SL, Palumbo JM, McDougle CJ, Krystal JH, Gawin F, Charney DS, Heninger GR, Kleber HD, Price LH: The clinical phenomenology and neurobiology of cocaine abstinence: A prospective inpatient study. *Am J Psychiatry* 1991;148:1712-1716

22. Krystal JH, Woods SW, Hill CL, Charney DS: Characteristics of panic attack subtypes: Assessment of spontaneous panic, situational panic, sleep panic, and limited symptom attacks. *Compr Psychiatry* 1991;32:1-7
23. Woods SW, Hegeman IM, Zubal IG, Krystal JH, Koster K, Smith EO, Heninger GR, Hoffer PB: Visual stimulation increases Tc-99m HMPAO distribution in human visual cortex. *J Nucl Med* 1991;32:210-215
24. Rasmussen K, Krystal JH, Aghajanian GK: Excitatory amino acids and morphine withdrawal: differences between central versus peripheral kynurate administration. *Psychopharmacology* 1991;105:508-512
25. Deutch AY, Moghaddam B, Innis RB, Krystal JH, Bunney BS, Charney DS: Mechanisms of action of atypical antipsychotic drugs: Implications for novel therapeutic strategies for schizophrenia. *Schizophrenia Res* 1991;4:121-156
26. Woods SW, O'Malley SS, Martini BL, McDougle CJ, Price LH, Krystal JH, Hoffer PB, Kosten TR: SPECT regional cerebral blood flow and neuropsychological testing in non-demented HIV positive drug abusers. *Prog Neuro-Psychopharmacol & Biological Psychiatry* 1991;15:649-662
27. Seibyl JP, Krystal JH, Price LH, Woods SW, D'Amico C., Heninger GR, Charney DS: Effects of ritanserin on the behavioral, neuroendocrine and cardiovascular responses to m-chlorophenylpiperazine in healthy human subjects. *Psychiatry Res* 1991;38:227-236
28. Delgado PL, Price LH, Miller HL, Salomon RM, Licinio J, Krystal JH, Heninger GR, Charney DS: Rapid serotonin depletion as a provocative challenge test for patients with major depression: relevance to antidepressant action and the neurobiology of depression. *Psychopharmacology Bull* 1991;27:321-330
29. Gelernter J, O'Malley S, Risch N, Kranzler H, Krystal J, Merikangas K, Kennedy J, Kidd KK: Failure to replicate an association between an allele at DRD2 D2 dopamine receptor and alcoholism. *JAMA* 1991;266:1801-1807
30. Krystal J, Leaf P, Bruce M, Charney DS: Age and alcoholism effects on the prevalence of panic disorder. *Acta Psychiatrica Scand* 1992;85:77-82
31. Woods SW, Nagy LM, Koleszar AS, Krystal JH, Heninger GR, Charney DS: Controlled trial of alprazolam supplementation during imipramine treatment of panic disorder. *J Clin Psychopharmacology* 1992;12:32-38
32. Krystal JH, Price LH, Opsahl C, Ricaurte GA, Heninger GR: Subjective and neuropsychological consequences of chronic 3,4-methylenedioxymethamphetamine (MDMA) use: Preliminary findings. *Am J Drug Alc Abuse* 1992;18:331-341

33. Krystal JH, McDougle CJ, Kosten TR, Price LH, Aghajanian GK, Charney DS: Baclofen-assisted detoxification from opiates: a pilot study. *J Substance Abuse Treatment* 1992;9:139-142
34. Kosten TR, Krystal JH, Giller EL, Jr, Frank J, Dan E: Alexithymia as a predictor of treatment response in post-traumatic stress disorder. *J Traumatic Stress* 1992;5:563-574
35. Krystal JH: Invited commentary: complexities in evaluating neurobiological models for stress resistance. *J Psychopharmacology* 1992;6:12-14
36. Krystal JH, McDougle CJ, Woods SW, Price LH, Heninger GR, Charney DS: Dose-response relationship for oral idazoxan effects in healthy subjects: comparison with oral yohimbine. *Psychopharmacology* 1992;108:313-319
37. Grillon C, Ameli R, Charney DS, Krystal JH, Braff D: Schizophrenic disruption of pre-pulse inhibition of the startle reflex is independent of pre-pulse intensity. *Biological Psychiatry* 1992;32:939-943
38. Charney DS, Woods SW, Krystal JH, Nagy LM, Heninger GR: Noradrenergic neuronal dysregulation in panic disorder: the effects of intravenous yohimbine and clonidine in panic disorder patients. *Acta Psychiatrica Scand* 1992;86:273-282
39. Yehuda R, Southwick SM, Krystal JH, Charney DS, Mason JW: Enhanced suppression of cortisol following dexamethasone administration in posttraumatic stress disorder. *Am J Psychiatry* 1993;150:83-86
40. Nagy LM, Krystal JH, Charney DS, Merikangas KR, Woods SW: Long term outcome of panic disorder after short-term imipramine and behavioral group treatment: 2.9-year naturalistic follow-up study. *J. Clin Psychopharmacology* 1993;13:16-25
41. Morgan CA, Southwick SM, Grillon CM, Nagy LM, Davis M, Krystal JH, Charney DS: Yohimbine enhancement of the acoustic startle response. *Psychopharmacology* 1993;110:342-347
42. Seibyl JP, Satel SL, Anthony D, Southwick SM, Krystal JH, Charney DS: Effects of cocaine on hospital course in schizophrenia. *J Nerv Ment Dis* 1993;181:32-38
43. Charney DS, Deutch A, Krystal JH, Southwick SM, Davis M: Psychobiological mechanisms of posttraumatic stress disorder. *Arch Gen Psychiatry* 1993;50:294-305
44. Southwick SM, Krystal JH, Morgan CA, Johnson DR, Nagy LM, Nicolau A, Heninger GR, Charney DS: Abnormal noradrenergic function in post traumatic stress disorder. *Arch Gen Psychiatry* 1993;50:266-274
45. Krystal JH, Seibyl JP, Price LH, Woods SW, Heninger GR, Aghajanian GK,

- Charney DS: *m*-Chlorophenylpiperazine (MCP) effects in neuroleptic-free schizophrenic patients. *Arch Gen Psychiatry* 1993;50:624-635
46. Licinio J, Seibyl JP, Altemus M, Charney DS, Krystal JH: Elevated CSF levels of interleukin-2 in schizophrenia. *Am J Psychiatry* 1993;150:1408-1410
47. Docherty NM, Evans IM, Sledge WH, Seibyl JP, Krystal JH: Affective reactivity of language in schizophrenia. *J Nerv Ment Dis* 1994;182:98-102
48. Hillbrand M, Krystal JH, Sharpe KS, Foster HG: Clinical predictors of self-mutilation in hospitalized forensic patients. *J Nerv Ment Dis* 1994;182:9-13
49. Krystal JH, Karper LP, Seibyl JP, Freeman GK, Delaney R, Bremner JD, Heninger GR, Bowers MB Jr, Charney DS: Subanesthetic effects of the NMDA antagonist, ketamine, in humans: psychotomimetic, perceptual cognitive, and neuroendocrine effects. *Arch Gen Psychiatry* 1994; 51:199-214
50. van Dyck CH, Rosen MI, Thomas HM, McMahon TJ, Wallace EA, O'Conner PG, Sullivan M, Krystal JH, Hoffer PB, Woods SW, Kosten TR: Regional cerebral blood flow alterations in naltrexone-precipitated withdrawal from buprenorphine. *Psychiatry Research: Neuroimaging* 1994;55:181-191
51. Marder SM, Meibach RC and The Risperidone Study Group (including Krystal, JH): Risperidone in the treatment of schizophrenia. *Am J Psychiatry* 1994;151:825-835
52. Krystal JH, Webb E, Cooney NL, Kranzler H, Charney DS: Specificity of ethanol-like effects elicited by serotonergic and noradrenergic mechanisms: *m*-CPP and yohimbine effects in recently detoxified alcoholics. *Arch Gen Psychiatry* 1994;51:898-911
53. Salomon RM, Delgado PL, Miller HL, Licinio J, Krystal JH, Heninger GR, Charney DS: Effects of sleep deprivation on serotonin function in depression. *Biological Psychiatry* 1994;36:840-846
54. Satel SL, Krystal JH, Delgado PL, Kosten TR, Charney DS. Tryptophan depletion attenuates cue-induced craving for cocaine. *Am J Psychiatry* 1995;152:778-783
55. McDougale CJ, Krystal JH, Price LH, Heninger GR, Charney DS: Noradrenergic responsivity during acute ethanol intoxication in healthy human subjects: comparison with intravenous yohimbine. *Psychopharmacology* 1995;118:127-135
56. Krystal JH, Woods SW, Kosten TR, Rosen MI, Seibyl JP, Van Dyck CC, Price LH, Zubal G, Hoffer PB, Charney DS: Opiate dependence and withdrawal: preliminary assessment using single photon emission computerized tomography (SPECT). *Am J Drug Alcohol Abuse* 1995;21:47-63

57. Morgan CA III, Grillon C, Southwick SM, Nagy LM, Davis M, Krystal JH, Charney DS. Yohimbine facilitated acoustic startle in combat veterans with post traumatic stress disorder. *Psychopharmacology* 1995;117:466-471
58. Stine SM, Krystal JH, Kosten TR, Charney DS: Mazindol treatment of cocaine abuse. *Drug Alcohol Dep* 1995;39:245-252
59. Goddard AW, Charney DS, Germaine M, Woods SW, Heninger GR, Krystal JH, Price LH, Goodman WK. Serotonergic modulation of noradrenergic function in healthy human subjects. *Biological Psychiatry* 1995;38:74-85
60. Randall PK, Bremner JD, Krystal JH, Heninger GR, Nicolaou AL, Charney DS. Effects of the benzodiazepine antagonist, flumazenil, in PTSD. *Biological Psychiatry* 1995;38:319-324
61. Czobor P, Volavka J, Meibach RC, and the Principal Investigators in the Risperidone Multinational Trial (including J.Krystal). Effect of risperidone on hostility in schizophrenia. *J Clin Psychopharmacology* 1995;15:243-249
62. Krystal JH, Webb E, Cooney N, Kranzler H, Southwick SW, Heninger GR, Charney DS. Serotonergic and noradrenergic dysregulation in alcoholism: mCPP and yohimbine effects in recently detoxified alcoholics and healthy subjects. *Am J Psychiatry* 1996;153:83-92
63. Hillbrand M, Young J, Krystal JH: Recurrent self-injurious behavior in forensic patients. *Psychiatric Quarterly* 1996;67:33-45
64. Miller HL, Delgado PL, Salomon RM, Berman R, Krystal JH, Heninger GR, Charney DS. The behavioral effects of catecholamine depletion on antidepressant induced remission of depression: implications for monoamine hypotheses of antidepressant action. *Arch Gen Psychiatry* 1996;53:117-128
65. McCarthy G, Puce A, Constable RT, Krystal JH, Gore JC, Goldman-Rakic P. Activation of human prefrontal cortex during spatial and object working memory tasks measured by functional MRI. *Cerebral Cortex* 1996;6:600-611
66. Lam RW, Zis AP, Grewal A, Delgado PL, Charney DS, Krystal JH. Effects of acute tryptophan depletion in patients with seasonal affective disorder in remission with light therapy. *Arch Gen Psychiatry* 1996;53:41-44
67. Krystal JH, Compere S, Nestler EJ, Rasmussen K. Nimodipine reduction of naltrexone-precipitated locus coeruleus activation and abstinence behavior in morphine-dependent rats. *Physiol Behav* 1996;59:863-866
68. Petrakis I, Satel SL, Stine S, Kosten TR, Namanworth S, Charney DS, Krystal JH.

AMPT effects on cue-induced craving for cocaine. *Am J Addictions* 1996;5:313-320

69. Bremner JD, Southwick SM, Krystal JH, Charney DS. Neural mechanisms in dissociative amnesia for childhood abuse: relevance to the current controversy surrounding "false memory syndromes." *Am J Psychiatry* 1996;153(7-Supplement):71-82

70. Karper LP, Freeman GK, Grillon C, Morgan CA III, Charney DS, Krystal JH: Preliminary evidence of an association between sensorimotor gating deficits and increased distractibility in psychosis. *J Neuropsychiatry Clin Neurosci* 1996;8:60-66

71. Bremner JD, Krystal JH, Southwick SM, Charney DS. Noradrenergic mechanisms in stress and anxiety: I. preclinical studies. *Synapse* 1996;23:28-38

71. Laruelle M, Abi-Dargham A, van Dyck CH, Gil R, D'Souza CD, Erdos J, McCance E, Rosenblatt W, Fingado C, Zoghbi SS, Baldwin RM, Seibyl JP, Krystal JH, Charney DS, Innis RB. SPECT imaging of amphetamine-induced dopamine release in drug free schizophrenic patients. *Proceedings of the National Academy of Sciences USA* 1996;93:9235-9240

72. Bremner JD, Krystal JH, Southwick SM, Charney DS. Noradrenergic mechanisms in stress and anxiety: II. clinical studies. *Synapse* 1996;23:39-51

73. Seibyl JP, Zea-Ponce Y, Brenner L, Baldwin RM, Krystal JH, Offord S, Mochoviak S, Charney DS, Hoffer PB, Innis RB. Continuous intravenous infusion of [¹²³I]IBZM for SPECT imaging of human brain dopamine receptors: occupancy by the novel antipsychotic RWJ-37796. *J Nucl Med* 1996;37(1):11-15

74. Bremner JD, Innis RB, Ng CK, Staib L, Salomon R, Bronen RA, Markey J, Duncan J, Krystal JH, Rich D, Zubal G, Dey H, Soufer R, Charney DS: PET measurement of cerebral metabolic correlates of yohimbine administration in combat-related posttraumatic stress disorder. *Arch Gen Psychiatry* 1997;54:246-256

75. Bremner JD, Licinio J, Darnell A, Krystal JH, Owens MJ, Nemeroff CB, Charney DS: Elevated concentrations of CSF corticotropin-releasing factor in posttraumatic stress disorder. *Am J Psychiatry* 1997;154:624-629

76. Stine SM, Krystal J, Petrakis I, Jatlow P, Heninger G, Kosten T, Charney D. Effect of AMPT on response to cocaine challenge. *Biological Psychiatry* 1997;42:181-190

77. Salomon RM, Miller HL, Krystal JH, Heninger GR, Charney DS. Behavioral effects of monoamine depletion in healthy subjects. *Biological Psychiatry* 1997;41(1):58-64

78. Krystal JH, Webb E, Grillon C, Cooney N, Casal L, Morgan CAIII, Southwick

SM, Davis M, Charney DS. Evidence of acoustic startle hyperreflexia in recently detoxified alcoholics: modulation by yohimbine and *m*-chlorophenylpiperazine (mCPP). *Psychopharmacology* 1997;131:207-215

79. Southwick SM, Krystal JH, Bremner JD, Morgan CA III, Nicolaou A, Nagy LM, Johnson DR, Heninger GR, Charney DS. Noradrenergic and serotonergic function in post traumatic stress disorder. *Arch Gen Psychiatry* 1997;54:246-254

80. Bremner JD, Innis RB, Salomon RM, Staib L, Ng CK, Delgado PL, Miller HL, Bronen RA, Krystal JH, Duncan J, Rich D, Giunti M, Dey H, Soufer R, Charney DS. PET measurement of cerebral metabolic correlates of depressive relapse. *Arch Gen Psychiatry* 1997;54:364-374

81. Abi-Dargham A, Laruelle M, Aghajanian GK, Charney DS, Krystal JH. The role of serotonin in the pathophysiology and treatment of schizophrenia. *J Neuropsychiatry Clin Neurosci* 1997;9:1-17

82. Tracy K, Adler LA, Rotrosen J, Edson R, Lavori P, and the Veterans Affairs Cooperative Study #94 Study Group (including Krystal J). Interrater reliability issues in multicenter trials, Part I: Theoretical concepts and operational procedures used in Department of Veterans Affairs Cooperative Study #394. *Psychopharm Bull* 1997;33:53-57

83. Edson R, Lavori P, Tracy K, Adler LA, Rotrosen J, and the Veterans Affairs Cooperative Study #394 Study Group (including Krystal JH). Interrater reliability issues in multicenter trials, Part II: Statistical procedures used in Department of Veterans Affairs Cooperative Study #394. *Psychopharm Bull* 1997;33:53-57

84. Caligiuri MP, Lohr JB, Rotrosen J, Adler L, Lavori P, Edson R, Tracy K and the Veterans Affairs Cooperative Study #394 Study Group (including Krystal JH). Reliability of an instrumental assessment of tardive dyskinesia: results from VA Cooperative Study #394. *Psychopharmacology* 1997;132:61-66

85. Hillbrand M, Spitz RT, Foster HG, Krystal JH, Young JL. Creatine kinase elevations and aggressive behavior in hospitalized forensic patients. *Psychiatric Quarterly* 1998;69:69-82

86. Krystal JH, Karper LP, Bennett A, D'Souza DC, Abi-Dargham A, Morrissey KA, Abi-Saab D, Bremner JD, Bowers MB Jr, Suckow RF, Stetson P, Heninger GR, Charney DS. Interactive effects of subanesthetic ketamine and subhypnotic lorazepam in humans. *Psychopharmacology* 1998;135:213-229

87. Sernyak MJ, Glazer WM, Heninger GR, Charney DS, Woods SW, Petrakis IL, Krystal JH, Price LH. Naltrexone augmentation of neuroleptics in schizophrenia. *J Clin Psychopharmacology* 1998;18:248-251

88. Belger A, Puce A, Krystal J, Gore J, Goldman-Rakic P, McCarthy G. Dissociation of mnemonic and perceptual processes during spatial and non-spatial working memory using fMRI. *Human Brain Mapping* 1998;6:14-32
89. Abi-Saab W, D'Souza DC, Moghaddam B, Krystal JH. The NMDA Antagonist Model for Schizophrenia: Promises and Pitfalls. *Pharmacopsychiatry* 1998; 31(suppl 2):104-109
90. Krystal JH, Petrakis IL, Webb E, Cooney NL, Karper LP, Namanworth S, Trevisan LA, Charney DS. Dose-related ethanol-like effects of the NMDA antagonist, ketamine, in recently detoxified alcoholics. *Arch Gen Psychiatry* 1998;55:354-360
91. Abi-Dargham A, Krystal JH, Anjivel S, Scanley E, Zoghbi S, Baldwin RM, Rajeevan N, Seibyl JP, Charney DS, Laruelle M, Innis RB. Alterations of benzodiazepine receptors in type II alcoholics measured with SPECT and [¹²³I]iomazenil. *Am J Psychiatry* 1998;155:1550-1555
92. Bremner JD, Mazure CM, Putnam FW, Southwick SM, Marmar C, Hansen C, Lubin H, Roach L, Krystal JH, Charney DS. Measurement of dissociative states with the Clinician Administered Dissociative States Scale (CADSS). *J Traumatic Stress* 1998;11:125-136.
93. Abi-Dargham A, Gil R, Krystal J, Baldwin R, Seibyl JP, Bowers M, Charney DS, Innis RB, Laruelle M. Increased striatal dopamine transmission in schizophrenia: confirmation in a second cohort. *Am J Psychiatry* 1998;155:761-767
94. Fujita M, Woods SW, Verhoeff PLG, Abi-Dargham A, Baldwin RM, Zoghbi SS, Joares JC, Jatlow PA, Krystal JH, Rajeevan N, Charney DS, Seibyl JP, Innis RB. Changes in benzodiazepine receptors during chronic benzodiazepine administration in humans. *Eur J Pharmacology* 1999;368:161-172
95. Truffinet P, Tamminga CA, Fabre LF, Meltzer HY, Riviere M-E, Papillon-Downey C and the Fananserin Study Group (including J.H. Krystal). A placebo controlled study of the D4/5-HT2A antagonist fananserin in the treatment of schizophrenia. *Am J Psychiatry* 1999;156:419-425
96. Abi-Dargham A, Laruelle M, Krystal JH, D'Souza DC, Zoghbi S, Baldwin RM, Seibyl J, de Erasquin G, Charney DS, Innis RB. No evidence of altered in vivo benzodiazepine receptor binding in schizophrenia. *Neuropsychopharmacology* 1999;20:650-661
97. Behar KL, Rothman DL, Petersen KF, Hooten M, Namanworth S, Delaney R, Petroff OAC, Shulman GI, Navarro V, Petrakis IL, Charney DS, Krystal JH. Preliminary evidence of reduced cortical GABA levels in localized ¹H NMR spectra of alcohol dependent and hepatic encephalopathy patients. *Am J Psychiatry* 1999;156:952-954

98. Bunney Jr WE, Azarnoff DL, Brown BW, Cancro R, Gibbons RD, Gillon JC, Hullett S, Kilam KF, Krystal JH, Kupfer DJ, Stolley PD, French GS, Pope AM. Report of the Institute of Medicine Committee on the Efficacy and Safety of Halcion. *Arch Gen Psychiatry* 1999;56:349-352
99. Hoffman RE, Boutros N, Berman R, Roessler E, Belger A, Krystal JH, Charney DS. Transcranial magnetic stimulation of left temporoparietal cortex in three schizophrenic patients reporting hallucinated "voices." *Biological Psychiatry* 1999;46:130-132
100. Gibbons RD, Brown BWM, Azarnoff D, Bunney WE Jr, Cancro R, Gillin JC, Hullett S, Killam K, Krystal J, Kupfer D, Stolley P, Pope A, French G, Hedeker D. Assessment of the safety and efficacy data for the hypnotic Halcion: a review of the analysis and results of an Institute of Medicine Committee. *J Am Statistical Assoc* 1999;94:993-1002
101. Petrakis IL, Trevisan L, D'Souza DC, Gil R, Krasnicki S, Boutros N, Cooney N, Krystal JH. CSF monoamine metabolite and beta-endorphin levels in recently detoxified alcoholics and healthy controls: prediction of alcohol cue-induced craving. *Alcoholism: Clinical and Experimental Research* 1999;23(8):1336-1341
102. Boutros N, Belger A, D'Souza DC, Krystal JH. Comparison of four components of sensory gating in schizophrenia and healthy control subjects. *Psychiatry Res* 1999;88:119-130
103. Krystal JH, D'Souza DC, Karper LP, Bennett A, Abi-Dargham A, Abi-Saab D, Cassello K, Bowers MB Jr, Vegso S, Heninger GR, Charney DS. Interactive effects of subanesthetic ketamine and haloperidol in healthy human subjects. *Psychopharmacology* 1999; 145(2):193-204
104. Verhoeff NPLG, Soares JC, D'Souza DC, Gil R, Degen K, Abi-Dargham A, Zoghbi SS, Fujita M, Rajeevan N, Seibyl JP, Krystal JH, vanDyck CH, Charney DS, Innis RB. [¹²³I]iomazenil SPECT benzodiazepine receptor imaging in schizophrenia. *Psychiatry Research Neuroimaging*. 1999; 91; 163-173
105. Delgado PL, Miller HL, Salomon RM, Licinio J, Krystal JH, Moreno FA, Heninger GR, Charney DS: Tryptophan depletion challenge in depressed patients treated with desipramine or fluoxetine: implications for the role of serotonin in the mechanism of antidepressant action. *Biological Psychiatry* 1999;46:212-220
106. Sanacora G, Mason GF, Rothman DL, Behar KL, Hyder F, Petroff OAC, Berman R, Charney DS, Krystal JH. Reduced cortical GABA levels in depressed patients determined by 1H-magnetic resonance spectroscopy. *Arch Gen Psychiatry* 1999;56:1043-1047
107. Adler LA, Rotrosen J, Edson R, Lavori P, Lohr J, Hitzemann R, Raisch D,

Caligiuri M, Tracy K, and the Veterans Affairs Cooperative Study #394 Study Group (including J.H. Krystal). Vitamin E treatment for tardive dyskinesia. *Arch Gen Psychiatry* 1999;56:836-841

108. Krystal JH, Bennett A, Abi-Saab D, Belger A, Karper LP, D'Souza DC, Lipschitz D, Abi-Dargham A, Charney DS. Dissociation of ketamine effects on rule acquisition and rule implementation: possible relevance to NMDA receptor contributions to executive cognitive functions. *Biological Psychiatry* 2000;47:137-143

109. D'Souza, DC, Gil R, Cassello K, Abi-Saab D, White J, Sturwold R, Bennett A, Karper L, Zuzarte E, Charney DS, Krystal JH. IV glycine and oral D-cycloserine effects on plasma and CSF amino acids in healthy humans. *Biological Psychiatry* 2000;47:450-462

110. Berman RM, Cappiello A, Anand A, Oren DA, Charney DS, Krystal JH. Antidepressant effects of ketamine in depressed patients. *Biological Psychiatry* 2000;47(4):351-354

111. Anand A, Charney DS, Oren DA, Berman RM, Hu XS, Cappiello A, Krystal JH. Lamotrigine attenuates ketamine effects in humans: support for hyperglutamatergic effects of NMDA antagonists. *Arch Gen Psychiatry* 2000;57:270-276

112. Laruelle M, Abi-Dargham A, van Dyck C, Gil R, D'Souza DC, Krystal JH, Seibyl J, Baldwin R, Innis RB. Dopamine and serotonin transporters in patients with schizophrenia: an imaging study with [¹²³I]β-CIT. *Biological Psychiatry* 2000;47:371-379

113. Hoffman RE, Boutros NN, Berman RM, Krystal JH, Charney DS. Transcranial magnetic stimulation of left temporoparietal cortex in patients reporting auditory hallucinations. *Lancet* 2000;355:1074-1076

114. Boutros N, Reid C, Petrakis I, Campbell D, Torello M, Krystal JH. Similarities in the disturbances in cortical information processing in alcoholism and aging: a pilot evoked potential study. *Int Psychogeriatrics* 2000;513-526

115. Boutros N, Petrakis I, Krystal J, Campbell D, Caporale M, Kosten T. Cocaine use and the mid-latency auditory evoked response. *Psychiatry Res* 2000;96:117-126

116. Boutros NN, Lisanby SH, Tokuno H, Torello M, Campbell D, Berman R, Malison R, Krystal JH, Kosten T. Examination of cortical excitability in cocaine-dependent subjects: preliminary data. *Biological Psychiatry* 2001;49:369-373

117. Goddard AW, Mason GF, Almai A, Rothman DL, Behar KL, Petroff OAC, Charney DS, Krystal JH. Reduction in occipital cortex GABA levels in panic disorder detected with 1H-magnetic resonance spectroscopy. *Arch Gen Psychiatry* 2001;58:556-561

118. Jacobsen LK, Giedd JN, Gottschalk C, Kosten TR, Krystal JH. Quantitative morphology of the caudate and putamen in cocaine dependence. *Am J Psychiatry* 2001;158:486-489
119. Edson R, Lavori P, Bloch D, Tracy K, Adler LA, Rotrosen J, and VA Cooperative Study #394 Study Group (including J. Krystal). Inter-rater reliability of the Abnormal Involuntary Movements Scale (AIMS) in a multi-centre trial: results from the Department of Veterans Affairs Cooperative Study #394. *Int J Methods in Psych Res* 2001;9:157-164
120. Stine SM, Grillon CG, Morgan CA III, Kosten TR, Charney DS, Krystal JH. Methadone patients exhibit increased startle and cortisol response after intravenous yohimbine. *Psychopharmacology* 2001;154(3):274-281
121. Petrakis IL, Trevisan L, Boutros N, Limoncelli D, Cooney N, Krystal JH. The effect of tryptophan depletion on alcohol cue-induced craving in sober alcohol dependent patients. *Alcoholism Clin Exp Res* 2001;25(8):1151-1155
122. Krupitsky EM, Burakov AM, Romanova TN, Grinenko NI, Grinenko AY, Fletcher J, Petrakis IL, Krystal JH. Attenuation of ketamine effects by nimodipine in recently detoxified ethanol dependent men: psychopharmacologic implications of the interaction of NMDA and L-type calcium channel antagonists. *Neuropsychopharmacology* 2001;25:936-947
123. Krystal JH, Cramer JA, Kroll W, Kirk G, Rosenheck RA, and the Veterans Affairs Naltrexone Cooperative Study 425 Group. Naltrexone in the treatment of alcohol dependence. *New England Journal of Medicine* 2001;345:1734-1739
124. Petrakis IL, Buonopane A, O'Malley S, Cermik O, Trevisan L, Boutros NN, Limoncelli D, Krystal JH. The effect of tryptophan depletion on alcohol self-administration in non-treatment seeking alcoholic individuals. *Alc Clin Exp Res* 2002;26(7):969-975
125. Lappalainen J, Kranzler HR, Malison R, Price LH, Van Dyck C, Rosenheck RA, Cramer J, Southwick SM, Charney DS, Krystal JH, Gelernter J. A functional neuropeptide Y Leu7Pro polymorphism is associated with alcohol dependence in a large American population sample. *Arch Gen Psychiatry* 2002;59:825-831
126. Boutros NN, Gelernter J, Gooding DC, Cubells J, Young A, Krystal JH, Kosten T. Sensory gating and psychosis vulnerability in cocaine-dependent individuals: preliminary data. *Biological Psychiatry* 2002;51(8):683-686
127. Sanacora G, Mason GF, Rothman DL, Berman RM, Zimolo Z, Krystal JH. Cortical GABA concentrations are increased in depressed patients following treatment with serotonin reuptake inhibitors. *Am J Psychiatry* 2002;159:663-665

128. Abi-Saab W, Maggs DG, Jones T, Jacob R, Srihari V, Thompson J, Kerr D, Leone P, During MJ, Krystal JH, Spencer D, Sherwin RS. Striking differences in glucose and lactate concentrations in brain extracellular fluid and plasma in conscious human subjects. *J Cereb Blood Flow Metab* 2002;22(3):271-279
129. Stine SM, Southwick SM, Petrakis IL, Kosten TR, Charney DS, Krystal JH. Yohimbine-induced withdrawal and anxiety symptoms in opioid dependent patients. *Biological Psychiatry* 2002;51:642-651
130. Epperson CN, Mason GF, Haga K, Appel M, Sellers E, Gueorgueva R, Rothman D, Krystal JH. Differential menstrual cycle-related fluctuations in cortical -aminobutyric acid levels in women with premenstrual dysphoric disorder (PMDD) and healthy menstruating women: a ¹H-MRS study. *Arch Gen Psychiatry* 2002;59:851-858
131. Abi-Saab W, Seibyl JP, D'Souza DC, Karper LP, Gueorgueva R, Abi-Dargham A, Wong M-L, Rajhans S, Erdos JP, Heninger GR, Charney DS, Krystal JH. Ritanserin antagonism of m-chlorophenylpiperazine (mCPP) effects in neuroleptic-free schizophrenic patients: support for 5-HT₂ receptor modulation of schizophrenia symptoms. *Psychopharmacology* 2002;162:55-62
132. Jacobsen LK, Gore JC, Skudlarski P, Lacadie CM, Jatlow P, Krystal JH: Impact of intravenous nicotine on BOLD signal response to photic stimulation, *Magnetic Resonance Imaging* 2002;20:141-145
133. Krystal JH, Petrakis IL, Limoncelli D, Webb E, Gueorgueva R, D'Souza DC, Boutros NN, Trevisan L, Charney DS. Altered NMDA glutamate receptor antagonist response in recovering ethanol dependent men. *Neuropsychopharmacology* 2003;28:2020-2028
134. Hoffman RE, Hawkins K, Gueorgueva R, Boutros NN, Rachid F, Carroll K, Krystal JH. One hertz transcranial magnetic stimulation of temporoparietal cortex reduces medication-resistant auditory hallucinations. *Arch Gen Psychiatry* 2003;60:49-56
135. Blumberg HP, Leung HC, Skudlarski P, Lacadie CM, Fredericks C, Harris BC, Charney DS, Gore JC, , Krystal JH, Peterson BS. A functional magnetic resonance imaging study of bipolar disorder: State- and trait-related dysfunction in ventral prefrontal cortices. *Arch Gen Psychiatry* 2003;60:601-609
136. Sierra M, Phillips ML, Ivin G, Krystal J, David AS. A placebo-controlled, cross-over trial of lamotrigine in depersonalization disorder. *Journal of Psychopharmacology*. 2003;17(1):103-5
137. Sanacora G, Mason GF, Rothman DL, Petroff OAC, Hyder F, Ciarcia J, Ostroff R, Krystal JH. Electroconvulsive therapy increases cortical GABA concentrations in

depressed patients. *Am J Psychiatry* 2003;160:577-579

138. Blumberg HP, Martin A, Kaufman J, Leung H-C, Skudlarski P, Lacadie C, Fulbright R, Gore JC, Charney DS, Krystal JH, Peterson BS. Frontostriatal abnormalities in adolescents with bipolar disorder: preliminary observations using functional MRI. *Am J Psychiatry* 2003;160:1345-1347

139. Blumberg HP, Kaufman J, Martin A, Whiteman R, Gore JC, Charney DS, Krystal JH, Peterson BS. Amygdala and hippocampus volumes in adolescents and adults with bipolar disorder. *Arch Gen Psychiatry* 2003;60:1201-1208

140. Cramer J, Rosenheck R, Kirk G, Krol W, Krystal JH (and the VA Naltrexone Study Group 425). Usefulness of a compliance feedback and monitoring program in a multicenter treatment trial. *Value in Health* 2003;6(5):566-73

141. Qin J, Mitchell KJ, Johnson MK, Krystal JH, Southwick SM, Rasmusson AM, Allen ES. Reactions to and memories for the September 11, 2001 terrorist attacks in adults with posttraumatic stress disorder. *Applied Cognitive Psychology* 2003;17:1081-1087

142. The COMBINE Study Research Group (including J. Krystal). Testing combined pharmacotherapies and behavioral interventions in alcohol dependence: rationale and methods. *Alcohol Clin Exp Res* 2003;27:1107-1122

143. The COMBINE Study Research Group (including J. Krystal). Testing combined pharmacotherapies and behavioral interventions in alcohol dependence: a pilot feasibility study. *Alcohol Clin Exp Res* 2003;27:1123-1131

144. Lappalainen J, Sanacora G, Kranzler HR, Malison R, Hibbard ES, Price LH, Krystal JH, Gelernter J. Mutation screen of the glutamate decarboxylase-67 gene and haplotype association to unipolar depression. *Am J Med Genetics Part B: Neuropsychiatric Genetics* 2004;124B:81-86

145. Petrakis IP, Limoncelli D, Gueorguieva R, Boutros NN, Trevisan L, Gelernter J, Krystal JH. Altered NMDA glutamate receptor antagonist response in individuals with a familial vulnerability to alcoholism. *Am J Psychiatry* 2004(10):1776-1782 (cover article; see editorial, *AJP* 161(10):1741-1742)

146. Jacobsen LK, D'Souza DC, Mencl WE, Pugh KR, Skudlarski P, Krystal JH; Nicotine effects on brain function and functional connectivity in schizophrenia. *Biological Psychiatry*, 2004;55:850-858

147. Goddard AW, Mason GF, Rothman DL, Behar KL, Krystal JH. Impaired GABA neuronal response to benzodiazepine administration in panic disorder. *Am J Psychiatry* 2004;161:2186-2193

148. Lappalainen J, Kranzler HR, Petrakis I, Somberg LK, Page G, Krystal JH, Gelernter JE. Fine mapping of the chromosome 1 alcoholism risk locus. *Mol Psychiatry* 2004;9:312-319
149. Kaufman J, Yang B-Z, Douglas-Palumberi H, Houshyar S, Lipschitz D, Krystal JH, Gelernter J. Social supports and serotonin transporter gene moderate depression in maltreated children. *Proceedings of the National Academy of Sciences USA* 2004;101(49):17316-17321
150. D'Souza DC, Perry E, MacDougall L, Ammerman Y, Cooper T, Wu Y-T, Braley G, Gueorguieva R, Krystal JH. The psychotomimetic effects of intravenous delta-9-tetrahydrocannabinol in healthy individuals: implications for psychosis. *Neuropsychopharmacology* 2004;29 (8): 1558-1572
151. Petrakis IL, O'Malley S, Rounsaville B, Poling J, McHugh-Strong C, Krystal JH. And the VA Naltrexone Study Collaboration Group. Naltrexone augmentation of neuroleptic in alcohol abusing patients with schizophrenia. *Psychopharmacology* 2004;172:291-297
152. Jacobsen LK, Pugh KR, Mencl WE, Skudlarski P, Krystal JH. Preliminary evidence of hippocampal dysfunction in adolescent MDMA ('Ecstasy') users: possible relationship to neurotoxic effects. *Psychopharmacology* 2004;173:383-390
153. Belger A, Kirino E, Vita L, McCarthy G, D'Souza DC, Gore J, Krystal JH. FMRI and ERP evidence of inferior prefrontal cortex mediation of novelty bias and distractibility in schizophrenia. *Biological Psychiatry* in revision.
154. Krystal JH, Abi-Saab W, Perry E, D'Souza DC, Liu N, Gueorguieva R, McDougall L, Hunsberger T, Belger A, Levine L, Breier A. Preliminary evidence of attenuation of the disruptive effects of the NMDA glutamate receptor antagonist, ketamine, on working memory by pretreatment with the the group II metabotropic glutamate receptor (mGluR) agonist, LY354740, in healthy human subjects. *Psychopharmacology* 2005;179:303-309
155. Sanacora G, Gueorguieva R, Epperson CN, Wu Y-T, Appel M, Rothman DL, Krystal JH, Mason GF. Subtype specific alterations of γ -aminobutyric acid and glutamate in patients with major depression. *Arch Gen Psychiatry* 2004;61:705-713
156. Blumberg HP, Donegan NH, Sanislow CA, Collins S, Lacadie C, Skudlarski P, Gueorguieva R, Fulbright RK, McGlashan TH, Gore JC, Krystal JH. Preliminary evidence for medication effects on functional abnormalities in the amygdala and anterior cingulate in bipolar disorder. *Psychopharmacology* 2005; 183(3):308-13
157. Epperson CN, O'Malley S, Czarkowski K, Gueorguieva R, Rothman DL, Sanacora G, Krystal JH, Mason GP. Sex, GABA, and nicotine: the impact of smoking

and menstrual cycle phase on cortical GABA levels measured with 1H-MRS. *Biological Psychiatry* 2005;57(1):44-48

158. Jacobsen LK, Krystal JH, Mencl WE, Westerveld M, Frost SJ, Pugh KR. Effects of smoking and smoking abstinence on cognition in adolescent tobacco smokers. *Biological Psychiatry* 2005;57(1):56-66

159. Belger A, Fermaglich L, Vita L, Gore JC, Krystal JH. Event-related functional magnetic resonance imaging of neural networks underlying cognitive interference. *Human Brain Mapping* in revision.

160. Cavus I, Kasoff W, Cassaday M, Jakob R, Gueorguieva R, Sherwin R, Krystal JH, Spencer D, Abi-Saab W. Extracellular neurometabolites in the cortex and hippocampus of epileptic patients. *Annals of Neurology* 2005; 57(2):226-235.

161. Perry EB Jr, Miles D, Brenner L, Johnson R, Petrakis IL, Gil R, Krystal JH, D'Souza DC. Maziadol augmentation of antipsychotic treatment for patients with comorbid schizophrenia and cocaine dependence: A double-blind, randomized, placebo-controlled trial. *Journal of Dual Diagnosis* 2004;1(1):37-48

162. Kiehl KA, Stevens MC, Celone K, Kurtz M, Krystal JH. Abnormal hemodynamics in schizophrenia during an auditory oddball task. *Biological Psychiatry* 2005;57:1029-1040

163. Cho H-S, D'Souza DC, Gueorguieva R, Perry EB, Madonick S, Karper LP, Abi-Dargham A, Belger A, Abi-Saab W, Lipschitz D, Bennet A, Seibyl JP, Krystal JH. Absence of behavioral sensitization in healthy human subjects following repeated exposure to ketamine. *Psychopharmacology* 2005;179:136-143

164. D'Souza DC, Abi-Saab WM, Madonick S, Forselius-Bielen K, Doersch A, Braley G, Gueorguieva R, Cooper TB, Krystal JH. Delta-9-tetrahydrocannabinol effects in schizophrenia: implications for cognition, psychosis, and addiction. *Biological Psychiatry* 2005;57(6):594-608

165. Li C-SR, Krystal JH, Mathalon DH. Fore-period effect and stop signal reaction time. *Experimental Brain Research* 2005;167(2):305-9

166. Martinez D, Gil R, Slifstein M, Hwang D-R, Huang Y, Perez A, Kegeles L, Evans S, Krystal JH, Laruelle M, Abi-Dargham A. Alcohol dependence is associated with blunting of dopamine transmission in the ventral striatum. *Biological Psychiatry* 58(10):779-86, 2005

167. Staley JK, Gottschalk PC, Petrakis I, Zoghbi S, Verhoeff NP, Seibyl JP, Van Dyck C, Innis RB, Krystal JH. Cortical GABA-A receptors in recovery from alcohol dependence: relationship to features of alcohol dependence and cigarette smoking. *Arch Gen Psychiatry* 2005;62:877-888

168. Blumberg HP, Fredricks C, Waing F, Kalmar J, Spencer L, Papademetris X, Pittman B, Martin A, Peterson BS, Fulbright R, Krystal JH. Preliminary evidence for persistent abnormalities in amygdala volumes in adolescents with bipolar disorder. *Bipolar Disorder* 2005;7:570-576
169. Lappalainen J, Krupitsky E, Remizov M, Pchelina S, Taraskina A, Zvartau E, Somberg LK, Covault J, Kranzler HR, Krystal JH, Gelernter J. Association between alcoholism and *GABRA2* in a Russian population. *Alcoholism: Clinical & Experimental Research* 2005;29(4):493-498
170. Coric V, Taskiran S, Wayslink S, Mathalon D, Valentine G, Saksa J, Wu Y-T, Gueorguieva R, Sanacora G, Malison R, Krystal JH. Riluzole augmentation for treatment-resistant obsessive-compulsive disorder: an open label trial. *Biological Psychiatry* 2005;58:424-428
171. Krystal JH, Perry EB Jr, Belger A, Madonick SH, Abi-Dargham A, Cooper T, Casselo K, MacDougall L, Abi-Saab W, D'Souza DC. Comparative and interactive human psychopharmacologic effects of ketamine and amphetamine: implications for glutamatergic and dopaminergic model psychoses and cognitive function. *Arch Gen Psychiatry* 2005;62:985-995
172. Hoffman RE, Gueorguieva R, Hawkins KA, Varanko M, Boutros NN, Wu Y-T, Carroll K, Krystal JH. Temporoparietal transcranial magnetic stimulation for auditory hallucinations: factors influencing outcome in a fifty patient sample. *Biological Psychiatry* 2005;58(2):97-104
173. Bressan RA, Erlandsson K, Stone JM, Mulligan RS, Owens J, Krystal JH, Ell PJ, Pilowsky LS. Impact of schizophrenia and chronic antipsychotic treatment on [¹²³I]CNS-1261 binding to NMDA receptors *in vivo*. *Biological Psychiatry* 2005;58:41-46
174. Morgan CJA, Perry EB, Cho HS, Krystal JH, D'Souza DC. Greater vulnerability to the amnesic effects of ketamine in males. *Psychopharmacology* 2006;187(4):405-14
175. Sanacora G, Fenton L, Fasula D, Rothman DL, Krystal JH, Mason GF. Cortical GABA levels in depressed patients undergoing cognitive-behavioral therapy. *Biological Psychiatry* 2006;59(3):284-6
176. D'Souza DC, Gil R, MacDougall L, Cassello K, Boutros N, Innis RB, Krystal JH. GABA-serotonin interactions in healthy subjects: implications for psychosis and dissociation. *Biological Psychiatry* 2006;59(1):128-137
177. Blumberg HP, Krystal JH, Kaufman J, Martin A, Dziura J, Bansal R, Durkin K, Martin L, Gerard E, Charney DS, Peterson BS. Age, rapid-cycling and pharmacotherapy effects on ventral prefrontal cortex in bipolar disorder: A cross-sectional study. *Biological Psychiatry* 2006;59(7):611-8

178. D'Souza DC, Gil RB, Madonick S, Forselius-Bielen K, Braley G, Donahue L, Tellioglu T, Zimolo Z, Gueorguieva R, Krystal JH. Enhanced sensitivity to the euphoric effects of alcohol in schizophrenia. *Neuropsychopharmacology* 2006; 1(12):2767-2775

179. Rasmusson AM, Pinna G, Paliwal P, Weisman D, Gottschalk C, Krystal JH, Guidotti A. Decreased cerebrospinal fluid allopregnanolone levels in women with PTSD. *Biological Psychiatry* 2006;60(7):704-13

180. Mason GF, Petrakis IL, de Graaf RA, Appel M, Gueorguieva R, Ruff E, Coric V, Epperson CN, Rothman DL, Krystal JH. Cortical GABA levels and the recovery from alcohol dependence: relationship to neurotoxicity and cigarette smoking. *Biological Psychiatry* 2006;59(1):85-93

181. Krystal JH, Madonick S, Perry E, Gueorguieva R, Brush L, Wray Y, Belger A, D'Souza DC. Potentiation of low dose ketamine effects by naltrexone: potential implications for the pharmacotherapy of alcoholism. *Neuropsychopharmacology* 2006; 31(8):1793-800

182. Kaufman J, Yang B-Z, Douglas-Palumberi H, Grasso D, Houshyar S, Krystal JH, Gelernter J. BDNF and 5-HTTLPR gene interactions and environmental modifiers in the development of depression in children. *Biological Psychiatry* 2006;59:673-80

183. Epperson CN, Gueorguieva R, Czarkowski KA, Stiklus S, Sellers E, Krystal JH, Rothman DL, Mason GF. Preliminary evidence of reduced occipital GABA concentrations in puerperal women: a 1H-MRS study. *Psychopharmacology* 2006;186:425-433

184. Pilowsky LS, Bressan RA, Stone JM, Erlandsson K, Mulligan RS, Krystal JH, Ell PJ. First *in vivo* evidence of an NMDA receptor deficit in medication-free schizophrenic patients. *Mol Psychiatry* 2006;11(2):118-119

185. Neumeister A, Carson R, Henry S, Planeta-Wilson B, Binneman B, Maguire RP, D'Souza DC, Krystal JH, Frost JJ. Cerebral metabolic effects of intravenous glycine in healthy human subjects. *Journal of Clinical Psychopharmacology* 2006; 26(6):595-599

186. Anton RF, O'Malley SS, Ciraulo DA, Cisler RA, Couper D, Donovan DM, Gastfriend DR, Hosking JD, Johnson BA, LoCastro JS, Longabaugh R, Mason BJ, Mattson ME, Miller WR, Pettinati HM, Randall CL, Swift R, Weiss RD, Williams LD, Zweben A, for the COMBINE Study Group (J. Krystal Co-Investigator). Combined pharmacotherapies and behavioral interventions for alcohol dependence. The COMBINE Study: A randomized controlled trial. *Journal of the American Medical Association* 2006;295(17):2003-201

187. Lappalainen J, Krupitsky E, Kranzler HR, Luo X, Remizov M, Pchelina S, Taraskina A, Zvartau E, Räsänen P, Makikyro T, Somberg LK, Krystal JH, Stein M,

- Gelernter J. Mutation screen of the GAD2 gene and association study of alcoholism in three populations. *American Journal of Medical Genetics (Neuropsychiatric Genetics)* 2006;144B(2):183-192
188. Krupitsky E, Neznova O, Masalov D, Burakov A, Didenko T, Romanova T, Tsoy M, Bespalov A, Slavina T, Grinenko A, Petrakis I, Pittman I, Pittman B, Gueorguieva R, Zvartau EE, Krystal JH. Effect of memantine on cue-induced alcohol craving in recovering alcohol dependent patients. *American Journal of Psychiatry* 2007;164(3):519-523
189. Haile CN, Staley JK, Calhoun V, Petrakis I, Perry E, Krystal JH. A longitudinal voxel-based morphometry study of cortical gray matter changes during the recovery from alcohol dependence. *Alcoholism: Clinical and Experimental Research* 2006; in revision.
190. Krupitsky EM, Rudenko AA, Burakov AM, Slavina TY, Grinenko AA, Pittman B, Gueorguieva R, Petrakis IL, Zvartau EE, Krystal JH: Antiglutamatergic strategies for ethanol detoxification: comparison to placebo and diazepam. *Alcoholism: Clinical and Experimental Research* 2007;31(4):604-11
191. Hoffman RE, Hampson M, Wu K, Anderson A, Gore J, Varanko M, Constable T, Hawkins K, Buchanen R, Spencer D, Sahay N, Krystal JH. Cortical regions underlying genesis of verbal/auditory hallucinations delineated using fMRI-guided transcranial magnetic stimulation. *Cerebral Cortex* 2007;17(11):2733-2743
192. Kaufman J, Yang B-Z, Douglas-Palumberi H, Crouse-Artis M, Lipschitz D, Krystal JH, Gelernter J. Genetic and environmental predictors of early alcohol use. *Biol Psychiatry* 2007;61(11):1228-34
193. Belger A, Gatenby C, Kirino E, Madonick S, Gore J, Krystal JH. Subanesthetic ketamine preferentially disrupts the frontal cortical activation associated with the processing of novelty: an fMRI study in healthy humans. *Biological Psychiatry* 2006;in revision.
194. Epperson CN, Amin Z, Naftolin F, Cappiello A, Czarkowski K, Stiklus S, Anderson GM, Krystal J. The resistance to depressive relapse in menopausal women undergoing tryptophan depletion: preliminary findings. *J Psychopharmacology* 2007; 21(4):414-20
195. Gueorguieva R, Wu R, Pittman B, O'Malley S, Krystal JH. New insights into the efficacy of naltrexone based on trajectory-based reanalyses of two negative clinical trials. *Biol Psychiatry* 2007;61:1290-1295
196. Sanacora G, Kendell S, Levin Y, Simen A, Fenton L, Coric V, Krystal JH. An open-label study of riluzole augmentation in patients with treatment-resistant major depression. *Biol Psychiatry* 2007;61(6):822-5

197. Gelernter J, Gueorguieva R, Kranzler H, Zhang H, Cramer J, Rosenheck R, Krystal JH and the VA Cooperative Study #425 Study Group. Opioid receptor gene (*OPRM1*, *OPRK1*, and *OPRD1*) variants and response to naltrexone treatment for alcohol dependence: Results from the VA Cooperative Study. *Alcoholism: Clinical and Experimental Research* 2007;31(4):555-63
198. Pittman B, Gueorguieva R, Krupitsky E, Rudenko A, Krystal JH. Multidimensionality of the Alcohol Withdrawal Symptom Checklist: A factor analysis of the Alcohol Withdrawal Symptom Checklist and CIWA-Ar. *Alcoholism: Clinical and Experimental Research* 2007;31(4):612-18
199. Krishnan-Sarin S, Krystal JH, Shi J, Pittman B, O'Malley S. Family history of alcoholism influences naltrexone-induced reduction in alcohol drinking. *Biol Psychiatry* 2007; 62(6):694-7
200. Epperson CN, Pittman B, Czarkowski KA, Stiklus S, Krystal JH, Grillon C. Luteal-phase accentuation of acoustic startle response in women with premenstrual dysphoric disorder. *Neuropsychopharmacology*. 2007;32(10):2190-98
201. Stone J, Erlandsson J, Arstad E, Squassante L, Teneggi V, Bressan R, Krystal JH, Ell P, Pilowsky L. Relationship between ketamine-induced psychotic symptoms and NMDA receptor occupancy – a [123I]CNS-1261 SPET study. *Psychopharmacology* 2008;197:401-408
202. Driesen NR, Leung HC, Calhoun VD, Constable RT, Gueorguieva R, Hoffman R, Skudlarski P, Goldman-Rakic PS, Krystal JH. Impairment of working memory maintenance and response in schizophrenia: functional magnetic resonance imaging evidence. *Biol Psychiatry*. 2008;64(12):1026-34
203. Perry EB, Cramer J, Cho H-S, Petrakis I, Karper L, Krystal JH, D'Souza DC. Psychiatric safety of ketamine in clinical psychopharmacology research. *Psychopharmacology* 2007;192(2):253-60
204. Cavus I, Pan J, Hetherington H, Zaveri H, Gueorguieva R, Vives KP, Krystal JH, Spencer SS, Spencer D. Decreased hippocampal volume is associated with increased extracellular glutamate levels in MTLE patients. *Epilepsia* 2008;49(8):1358-66
205. Krystal JH. Gueorguieva R, Cramer J, Collins J, Rosenheck R. Naltrexone is associated with reduced drinking by alcohol dependent patients receiving antidepressants for mood and anxiety symptoms. Results from VA Cooperative Study #425, "Naltrexone in the treatment of alcoholism." *Alcoholism: Clinical and Experimental Research* 2008;32(1):85-91
206. Trevisan L, Petrakis IL, Pittman B, Gueorguieva R, D'Souza DC, Perry E, Limoncelli D, Krystal JH. Absence of significant interactive effects of D-cycloserine and

ethanol in healthy human subjects: preliminary implications for ethanol actions at the glycine_B site of NMDA glutamate receptors. *Alcoholism: Clinical and Experimental Research* 2008;32(1):36-42

207. Jackowski AP, Douglas-Palumberi H, Jackowski M, Win L, Schultz RT, Staib LH, Krystal JH, Kaufman J. Corpus callosum in maltreated children with PTSD: a diffusion tensor imaging study. *Psychiatry Research: Neuroimaging* 2008;162(3):256-61

208. Czermak C, Staley J, Kasserman S, Young, Henry, Seibyl J, Southwick S, Krystal JH, Neumeister A. $\alpha 4\beta 2$ Nicotinic acetylcholine receptor availability in posttraumatic stress disorder. *Int J Neuropsychopharmacology* 2008;11(3):419-24

209. Goff DC, Keefe R, Citrome L, Davy K, Krystal JH, Large C, Volavka J, Webster EL. Lamotrigine as add-on therapy in schizophrenia: results of two placebo-controlled trials. *J Clin Psychopharmacology* 2007;27(6):582-589

210. D'Souza DC, Ranganathan M, Braley G, Gueorguieva R, Zimolo Z, Cooper T, Perry E, Krystal J. Blunted psychotomimetic and amnestic effects of D-9-tetrahydrocannabinol in frequent users of cannabis. *Neuropsychopharmacology* 2008;19(3):401-408

211. Norberg MM, Krystal JH, Tolin DF. A meta-analysis of D-cycloserine and the facilitation of fear extinction and exposure therapy. *Biol Psychiatry* 2008;63(12):1118-26

212. Su YA, Wu J, Zhang L, Zhang Q, Su DM, He P, Wang B-H, Li H, Webster MJ, Traumatic Stress Brain Study Group (including J. Krystal), Rennert OM, Ursano RJ. Dysregulated mitochondrial genes and networks with drug target in postmortem brain of patients with posttraumatic stress disorder (PTSD) revealed by human mitochondria-focused cDNA microarrays. *Int J Biol Sci* 2008;4(4):223-35

213. Zhang L, Li H, Su TP, Barker JL, Maric D, Fullerton CS, Webster MJ, Hough CJ, Li XX, Traumatic Stress Brain Study Group (including J. Krystal), Ursano R. p11 is upregulated in the forebrain of stressed rats by glucocorticoid acting via two specific glucocorticoid response elements in the p11 promoter. *Neuroscience* 2008;153:1126-34

214. Zarkin GA, Bray JW, Aldridge A, Mitra D, Mills MJ, Couper DJ, Cisler RA; COMBINE Cost-Effectiveness Research Group (including J. Krystal). Cost and cost-effectiveness of the COMBINE study in alcohol-dependent patients. *Arch Gen Psychiatry* 2008;65(10):1214-21.

215. Martinez D, Slifstein M, Gil R, Hwang D-R, Huang Y, Perez A, Laruelle M, Krystal JH, Abi-Dargham A. PET imaging of the serotonin transporter and 5HT_{1A} receptor in alcohol dependence. *Biol Psychiatry* 2009;65(2):175-80.

216. Weder N, Yang BZ, Douglas-Palumberi H, Massey M, Krystal JH, Gelernter J, Kaufman J. MAOA Genotype, Maltreatment, and Aggressive Behavior: The Changing Impact of Genotype at Varying Levels of Stress. *Biol Psychiatry* 2009;65(5):417-24
217. Watson TD, Petrakis IL, Edgecome J, Perrino A, Krystal JH, Mathalon DH. Modulation of the cortical processing of novel and target stimuli by drugs affecting glutamate and GABA neurotransmission *International Journal of Neuropsychopharmacology* 2009;12(3):357-70
218. Dickerson D, Pittman B, Ralevski E, Perrino A, Limoncelli D, Edgecombe J, Acampora G, Krystal J, Petrakis I. Ethanol-like effects of thiopental and ketamine in healthy humans. *J Psychopharmacol.* 2009;epub
219. Ranganathan M, Braley G, Pittman B, Cooper T, Perry E, Krystal J, D'Souza DC. The effects of cannabinoids on serum cortisol and prolactin in humans. *Psychopharmacology (Berl)*. 2009;203(4):737-44.
220. Zuo L, Luo X, Kranzler HR, Anton RF, Stein MB, Rosenheck RA, Blumberg HP, Pearlson GD, Covault J, Charney DS, van Kammen DP, Erdos J, Price LH, Lappalainen J, Shriver MD, Cramer J, Krystal JH, Gelernter J. Population admixture modulates risk for alcohol dependence. *Human Genetics* 2009;125(5-6):605-13
221. Otto MW, Tolin DF, Simon NM, Pearlson GD, Basden S, Meunier SA, Hofmann SG, Eisenmenger K, Krystal JH, Pollack MH. Efficacy of D-cycloserine for enhancing cognitive-behavioral therapy for panic disorder. *Biol Psychiatry* 2010 Feb 15;67(4):365-70. PMID: 19811776
222. Zuo L, Luo X, Krystal JH, Cramer J, Charney DS, Gelernter J. The efficacies of clozapine and haloperidol in refractory schizophrenia are related to *DTNBPI* variation. *Pharmacogenet Genomics* 2009;19(6):437-46
223. Cosgrove KP, Krantzler E, Frohlich EB, Stiklus S, Pittman B, Tamagnan GD, Baldwin RM, Bois F, Seibyl JP, Krystal JH, O'Malley SS, Staley JK. Dopamine and Serotonin Transporter Availability During Acute Alcohol Withdrawal: Effects of Comorbid Tobacco Smoking. *Neuropsychopharmacology* 2009;34(10):2218-26 PMID: 19440191.
224. Gueorguieva R, Wu R, Donovan D, Rounsaville B, Cooper D, Krystal JH, O'Malley S. Naltrexone and combined behavioral intervention effects on trajectories of drinking in the COMBINE study. *Drug Alcohol Depend* 2010;107(2-3):221-9 PMID: 19969427
225. Landeros-Weisenberger A, Bloch MH, Kelmendi B, Wegner R, Nudel J, Dombrowski P, Pittenger C, Krystal JH, Goodman WK, Leckman JF, Coric V. Dimensional predictors of response to SRI pharmacotherapy in obsessive-compulsive disorder. *J Affective Disorders* 2010;121(1-2):175-9, PMID: 19577308

226. Zuo L, Luo X, Kranzler HR, Lu L, Rosenheck RA, Cramer J, van Kammen DP, Erdos J, Charney DS, Krystal J, Gelernter J. Association study of DTNBP1 with schizophrenia in a US sample. *Psychiatric Genetics* 2009;19(6):292-304.
226. Hu J, Henry S, Gallezot J-D, Ropchan J, Neumaier JF, Potenza M, Sinha R, Krystal JH, Huang Y, Ding Y-S, Carson RE, Neumeister A. Serotonin 1B receptor imaging in alcohol dependence. *Biol Psychiatry* 2010;67(9):800-3. PubMed PMID: 20172504.
227. Cosgrove KP, Kloczynski T, Bois F, Pittman B, Tamagnan G, Seibyl JP, O'Malley S, Krystal JH, Staley JK. Decreased beta2*-nAChR availability during prolonged ethanol withdrawal in nonhuman primates. *Drug Alcohol Dep* 2010;64(9):729-32. PubMed PMID: 20340174; PubMed Central PMCID: PMC2904861.
228. Aikins DE, Anticevic A, Kiehl KA, Krystal JH. Sex-related differences in amygdala activity influences immediate memory. *Neuroreport*. 2010;21(4):273-6. PubMed PMID: 20093991
229. Esterlis I, Cosgrove KP, Petrakis I, Bois F, Krantzler E, Stiklus SM, Perry EB, Tamagnan GD, Seibyl JP, Krystal JH, Staley JK. SPECT imaging of nicotinic acetylcholine receptors in recently abstinent non-smoking heavy alcohol drinking individuals. *Drug Alcohol Dep* 2010;108(1-2):146-50. PubMed PMID: 20074869; PubMed Central PMCID: PMC2871672.
230. Sen S, Kranzler HR, Krystal JH, Speller H, Chan G, Gelernter J, Guille C. A Prospective Cohort Study Investigating Factors Associated With Depression During Medical Internship. *Arch Gen Psychiatry* 2010;67(6):557-65. PubMed PMID: 20368500.
231. Yun R, Krystal JH, Mathalon D. Working memory overload: fronto-limbic interactions and effects on subsequent working memory function. *Brain Imaging and Behavior* 2010;4:96-108 PMID: 20503117
232. Rosenheck RA, Krystal JH, Lew R, Barnett PG, Fiore L, Valley D, Thwin SS, Liang M, for CSP 555 Investigators. A Randomized Clinical Trial of Long-Acting Injectable Risperidone and Oral Antipsychotics in Unstable Chronic Schizophrenia. *New Engl J Med* 2011;364:842-851
233. Urban N, Kegeles LS, Slifstein M, Xu X, Martinez D, Sakr E, Castillo F, O'Malley S, Krystal JH, Abi-Dargham A. Striatal dopamine release in young adults after oral alcohol challenge: a PET imaging study with [¹¹C] raclopride. *Biol Psychiatry* 2010;68(8):689-96 PMID: 20678752
234. Andrews MM, Meda SA, Thomas AD, Potenza M, Krystal JH, Worhunsky P,

Stevens MC, O'Malley S, Book GA, Pearlson GD. Individuals family history positive for alcoholism show fMRI abnormalities in reward sensitivity related to impulsivity factors. *Biol Psychiatry* 2011;69(7):675-83. PMID: 21126735

235. Hallak JEC, Bosi DC, Dursun SM, Crippa JAS, McGuire P, Krystal JH, Zuardi AW. The interplay of cannabinoid and NMDA glutamate receptor systems in humans: preliminary evidence of interactive effects of cannabidiol and ketamine in healthy human subjects. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2010; epub PMID: 21062637

236. Sewell RA, Perry EB Jr, Karper LP, Bell MD, Lysaker P, Goulet JL, Brenner L, Erdos J, d'Souza DC, Seibyl JP, Krystal JH. Clinical significance of neurological soft signs in schizophrenia: Factor analysis of the Neurological Evaluation Scale. *Schizophr Res.* 2010;124(1-3):1-12 PubMed PMID: 20855185.

237. Freeman WM, Van Guilder HD, Guidone E, Krystal JH, Grant KA, Vrana KE. Plasma proteomic alterations in a non-human primate model of chronic alcohol self-administration. *Int J Neuropsychopharmacology* 2011;14(7):899-911. PMID: 21303580

238. Valentine GW, Mason GF, Gomez R, Fasula M, Watzl J, Pittman B, Krystal JH, Sanacora G. The antidepressant effect of ketamine is not associated with changes in occipital amino acid neurotransmitter content as measured by [(1)H]-MRS. *Psychiatry Res* 2011;[Epub ahead of print] PubMed PMID: 21232924.

239. Steine IM, Krystal JH, Nordhus IH, Bjorvatn B, Harvey AG, Eid J, Grønli J, Pallesen S. Insomnia, nightmare frequency, and nightmare distress in victims of sexual abuse: the role of abuse characteristics and perceived social support. *J Interpersonal Violence* 2011; epub PMID: 22204947

240. Rosenheck RA, Krystal JH, Lew R, Barnett PG, Thwin SS, Fiore L, Valley D, Huang GD, Neal C, Vertrees JE, Liang MH. Challenges in the design and conduct of controlled clinical effectiveness trials in schizophrenia. *Clin Trials.* 2011;8(2):196-204 PubMed PMID: 21270143.

241. Barnett PG, Scott JY, Rosenheck RA; for the CSP 555 Study Group (J. Krystal, Co-Proponent and Executive Committee). How do clinical trial participants compare to other patients with schizophrenia? *Schizophr Res* 2011; 130(1-3):34-9. PMID: 21514794 [PubMed - in process]

242. Gueroquiva R, Mallinckordt C, Krystal JH. Trajectories of depression severity in duloxetine clinical trials: insights into placebo and antidepressant responses. *Arch Gen Psychiatry* 2011;68(12):1227-37 PMID: 22147842

243. Murrough JW, Czermak C, Henry S, Gallezot J-D, Nabulsi N, Planeta-Wilson B, Krystal JH, Neumaier JF, Ding Y-S, Huang H, Carson RE, Neumeister A. Reduced serotonin 1b receptor expression in posttraumatic stress disorder: relationship to trauma

exposure and major depression comorbidity. *Arch Gen Psychiatry* 2011;68(9):892-900. PMID: 21893657

244. Xie P, Kranzler HR, Krauthammer M, Cosgrove KP, Oslin D, Anton RF, Farrer LA, Picciotto MR, Krystal JH, Zhao H, Gelernter J. Rare Nonsynonymous Variants in Alpha-4 Nicotinic Acetylcholine Receptor Gene Protect Against Nicotine Dependence. *Biol Psychiatry*. 2011;70(6):528-36. PMID: 21683344 [PubMed - in process]

245. Krystal J, Rosenheck RA, Cramer JA, Vessicchio J, Jones KM, Vertrees JE, Horney RA, Huang GD, Stock C, for the Veterans Affairs Cooperative Study No. 504 Group. Adjunctive risperidone treatment for antidepressant-resistant symptoms of chronic military service-related PTSD: a randomized trial. *JAMA* 2011;306(5):493-502. PMID: 21813427

246. Murrrough JW, Huang Y, Hu J, Henry S, Williams W, Gallezot J-D, Bailey CR, Krystal JH, Carson RE, Neumeister A. Reduced amygdala serotonin transporter binding in posttraumatic stress disorder. *Biol Psychiatry* 2011;70(11):1033-8. PMID: 21855859

247. Stone J, Dietrich C, Edden R, Mehta M, De Simoni S, Reed L, Krystal JH, Nutt D, Barker G. Ketamine effects on brain GABA and glutamate levels with 1H-MRS: relationship to ketamine-induced psychopathology. *Mol Psychiatry* 2012; epub PMID: 22212598

248. Pietrzak RH, Maruff P, Woodward M, Fredrickson J, Fredrickson A, Krystal JH, Southwick SM, Darby D. Mild worry symptoms predict decline in learning and memory in healthy older adults: A 2-year prospective cohort study. *American Journal of Geriatric Psychiatry*, 2012;20(3):266-75 PMID: 22354117

249. Gueorguieva R, Wu R, Donovan D, Rounsaville BJ, Couper D, Krystal JH, O'Malley SS. Baseline trajectories of heavy drinking and their effects on postrandomization drinking in the COMBINE Study: empirically derived predictors of drinking outcomes during treatment. *Alcohol* 2012;46:121-131 PubMed PMID: 21925828.

250. Cavus I, Reinhart RMG, Roach BJ, Gueorguieva R, Teyler T, Clapp WC, Ford JM, Krystal JH, Mathalon DH. Impaired visual cortical plasticity in schizophrenia. *Biol Psychiatry* 2011; In press

251. Gunduz-Bruce H, Reinhart RM, Roach BJ, Gueorguieva R, Oliver S, D'Souza DC, Ford JM, Krystal JH, Mathalon DH. Glutamatergic Modulation of Auditory Information Processing in the Human Brain *Biol Psychiatry* 2011; epub

252. Jamadar S, DeVito E, Jiantonio R, Meda S, Stevens M, Potenza M, Krystal J, Pearlson G. Memantine an NMDA-receptor antagonist, differentially influences

response inhibition-related fMRI activity in individuals with and without a family history of alcoholism. *Psychopharmacology* 2011; in press.

253. Barnett PG, Scott JY, Krystal JH, Rosenheck RA for the CSP 555 Study Group. Cost and cost-effectiveness in a randomized trial of long-acting risperidone for schizophrenia. *J Clin Psychiatry* 2012;73(5):696-702.

254. Gomez R, Behar KL, Watzl J, Weinzimer SA, Gulanski B, Sanacora G, Koretski J, Guidone E, Jiang L, Petrakis IL, Pittman B, Krystal JH, Mason GF. Intravenous Ethanol Infusion Decreases Human Cortical α -Aminobutyric Acid and N-Acetylaspartate as Measured with Proton Magnetic Resonance Spectroscopy at 4 Tesla. *Biol Psychiatry*. 2011;[Epub ahead of print] PubMed PMID: 21855054.

255. Zuo L, Gelernter J, Zhang CK, Zhao H, Lu L, Kranzler HR, Malison RT, Li CS, Wang F, Zhang XY, Deng HW, Krystal JH, Zhang F, Luo X. Genome-Wide Association Study of Alcohol Dependence Implicates KIAA0040 on Chromosome 1q. *Neuropsychopharmacology*. 2012;37(2):581-2 PubMed PMID: 21956439.

256. Zuo L, Zhang CK, Zhao H, Malison RT, Li C-S R, Wang F, Zhang F, Krystal JH, Luo X. A Novel, Functional and Replicable Risk Gene Region for Alcohol Dependence Identified by Genome-wide Association Study. *PLoS ONE* 2011; epub

257. Urban NB, Slifstein M, Meda S, Xu X, Ayoub R, Medina O, Pearlson GD, Krystal JH, Abi-Dargham A. Imaging human reward processing with positron emission tomography and functional magnetic resonance imaging. *Psychopharmacology (Berl)*. 2011 Nov 4. [Epub ahead of print] PubMed PMID: 22052081.

258. Petrakis IL, Ralevski E, Desai N, Trevisan L, Gueorguieva R, Rounsaville B, Krystal JH. Noradrenergic vs Serotonergic Antidepressant with or without Naltrexone for Veterans with PTSD and Comorbid Alcohol Dependence. *Neuropsychopharmacology*. 2011 Nov 16. doi: 10.1038/npp.2011.283. [Epub ahead of print] PubMed PMID: 22089316.

259. Carbuto M, Sewell RA, Williams A, Forselius-Bielen K, Braley G, Elander J, Pittman B, Schnakenberg A, Bhakta S, Perry E, Ranganathan M, D'Souza DC; Yale THC Study Group (including J. Krystal). The safety of studies with intravenous Δ^9 -tetrahydrocannabinol in humans, with case histories. *Psychopharmacology (Berl)*. 2012;219(3):885-96. PubMed PMID: 21845389.

260. Zuo L, Zhang F, Zhang H, Zhang XY, Wang F, Li CS, Lu L, Hong J, Lu L, Krystal J, Deng HW, Luo X. Genome-wide search for replicable risk gene regions in alcohol and nicotine co-dependence. *Am J Med Genet B Neuropsychiatr Genet*. 2012;159B(4):437-44 doi: 10.1002/ajmg.b.32047. PubMed PMID: 22488850.

261. Pietrzak RH, Henry S, Southwick SM, Krystal JH, Neumeister A. Linking in vivo brain serotonin type 1B receptor density to phenotypic heterogeneity of

posttraumatic stress symptomatology. *Mol Psychiatry*. 2012 May 15. doi: 10.1038/mp.2012.60.

262. Hyatt CJ, Assaf M, Muska CE, Rosen RI, Thomas AD, Johnson MR, Hylton JL, Andrews MM, Reynolds BA, Krystal JH, Potenza MN, Pearlson GD. Reward-Related Dorsal Striatal Activity Differences between Former and Current Cocaine Dependent Individuals during an Interactive Competitive Game. *PLoS One*. 2012;7(5):e34917. Epub 2012 May 14. PubMed PMID: 22606228.

263. Anticevic A, Gancsos M, Murray J, Repovs G, Driesen N, Ennis D, Nicciu M, Morgan P, Surti T, Bloch M, Ramani R, Smith M, Wang XJ, Krystal JH*, Corlett P*. NMDA receptor function in large-scale anti-correlated neural systems with implications for cognition and schizophrenia. *Proc Natl Acad Sci USA* 2012;109(41):16720-5 PubMed PMID: 23012427.

264. Anticevic A, Brumbaugh MS, Winkler AM, Lombardo LE, Barrett J, Corlett PR, Kober H, Gruber J, Repovs G, Cole MW, Krystal JH, Pearlson GD, Glahn DC. Global Prefrontal and Fronto-Amygdala Dysconnectivity in Bipolar I Disorder with Psychosis History. *Biol Psychiatry* 2012;[Epub ahead of print] PubMed PMID: 22980587.

265. Zuo L, Zhang H, Malison RT, Li CS, Zhang XY, Wang F, Lu L, Lu L, Wang X, Krystal JH, Zhang F, Deng HW, Luo X. Rare ADH Variant Constellations are Specific for Alcohol Dependence. *Alcohol Alcohol*. 2012; [Epub ahead of print] PubMed PMID: 23019235.

266. Woods SW, Walsh BC, Hawkins KA, Miller TJ, Saksa JR, D'Souza DC, Pearlson GD, Javitt DC, McGlashan TH, Krystal JH. Glycine treatment of the risk syndrome for psychosis: Report of two pilot studies. *Eur Neuropsychopharmacol*. 2012 Oct 19. pii: S0924-977X(12)00272-6. doi: 10.1016/j.euroneuro.2012.09.008. [Epub ahead of print] PubMed PMID: 23089076.

267. Fryer SL, Jorgensen KW, Yetter EJ, Daurignac EC, Watson TD, Shanbhag H, Krystal JH, Mathalon DH. Differential Brain Response to Alcohol Cue Distractors across Stages of Alcohol Dependence. *Biol Psychol*. 2012 Nov 3. doi:pii: S0301-0511(12)00224-4. 10.1016/j.biopsycho.2012.10.004. [Epub ahead of print] PubMed PMID: 23131612.

268. Zuo L, Zhang XY, Wang F, Li CS, Lu L, Ye L, Zhang H, Krystal JH, Deng HW, Luo X. Genome-Wide Significant Association Signals in IPO11-HTR1A Region Specific for Alcohol and Nicotine Codependence. *Alcohol Clin Exp Res*. 2012;[Epub ahead of print] PubMed PMID: 23216389.

269. Driesen NR, McCarthy G, Bhagwagar Z, Bloch M, Calhoun V, D'Souza DC, Gueorguieva R, He G, Ramachandran R, Suckow RF, Anticevic A, Morgan PT, Krystal JH. Relationship of resting brain hyperconnectivity and schizophrenia-like

symptoms produced by the NMDA receptor antagonist ketamine in humans. *Mol Psychiatry*. 2013 Jan 22. doi: 10.1038/mp.2012.194. [Epub ahead of print] PubMed PMID: 23337947.

270. Narayanan B, Stevens MC, Jiantonio RE, Krystal JH, Pearlson GD. Effects of memantine on event-related potential, oscillations, and complexity in individuals with and without family histories of alcoholism. *J Stud Alcohol Drugs*. 2013;74(2):245-57. PubMed PMID: 23384372.

271. Gueorguieva R, Wu R, Krystal JH, Donovan D, O'Malley SS. Temporal patterns of adherence to medications and behavioral treatment and their relationship to patient characteristics and treatment response. *Addict Behav*. 2013;38(5):2119-2127. doi: 10.1016/j.addbeh.2013.01.024. PubMed PMID: 23435273.

272. Zuo L, Wang K, Zhang XY, Krystal JH, Li CS, Zhang F, Zhang H, Luo X. NKAIN1-SERINC2 is a functional, replicable and genome-wide significant risk gene region specific for alcohol dependence in subjects of European descent. *Drug Alcohol Depend*. 2013 Feb 27. doi:pii: S0376-8716(13)00055-0. 10.1016/j.drugalcdep.2013.02.006. [Epub ahead of print] PubMed PMID: 23455491.

273. Zuo L, Wang K, Zhang XY, Pan X, Wang G, Tan Y, Zhong C, Krystal JH, State M, Zhang H, Luo X. Association between common alcohol dehydrogenase gene (ADH) variants and schizophrenia and autism. *Hum Genet*. 2013 Mar 7. [Epub ahead of print] PubMed PMID: 23468174.

274. Jiang L, Gulanski BI, De Feyter HM, Weinzimer SA, Pittman B, Guidone E, Koretski J, Harman S, Petrakis IL, Krystal JH, Mason GF. Increased brain uptake and oxidation of acetate in heavy drinkers. *J Clin Invest*. 2013 Apr;123(4):1605-14. doi: 10.1172/JCI65153. Epub 2013 Mar 8. PubMed PMID: 23478412; PubMed Central PMCID: PMC3613911.

275. Devito EE, Meda SA, Jiantonio R, Potenza MN, Krystal JH, Pearlson GD. Neural Correlates of Impulsivity in Healthy Males and Females with Family-Histories of Alcoholism. *Neuropsychopharmacology*. 2013;38(10):1854-63. doi: 10.1038/npp.2013.92. PMID: 23584260

276. Zuo L, Saba L, Wang K, Zhang X, Krystal JH, Tabakoff B, Luo X. Exome-wide association study of replicable nonsynonymous variants conferring risk for alcohol dependence. *J Stud Alcohol Drugs*. 2013 Jul;74(4):622-5. PubMed PMID: 23739027.

277. Corlett PR, Cambridge V, Gardner JM, Piggot JS, Turner DC, Everitt JC, Arana FS, Morgan HL, Milton AL, Lee JL, Aitken MR, Dickinson A, Everitt BJ, Absalom AR, Adapa R, Subramanian N, Taylor JR, Krystal JH, Fletcher PC. Ketamine effects on memory reconsolidation favor a learning model of delusions. *PLoS One*. 2013 Jun 12;8(6):e65088. doi: 10.1371/journal.pone.0065088. Print 2013. PubMed PMID:

23776445; PubMed Central PMCID: PMC3680467.

278. Zuo L, Wang KS, Zhang XY, Li CS, Zhang F, Wang X, Chen W, Gao G, Zhang H, Krystal JH, Luo X. Rare SERINC2 variants are specific for alcohol dependence in individuals of European descent. *Pharmacogenet Genomics*. 2013;23(8):395-402. PubMed PMID: 23778322.

279. Anticevic A, Cole MW, Repovs G, Murray JD, Brumbaugh MS, Winkler AM, Savic A, Krystal JH, Pearlson GD, Glahn DC. Characterizing thalamo-cortical disturbances in schizophrenia and bipolar illness. *Cereb Cortex*. 2014 Dec;24(12):3116-30. doi:10.1093/cercor/bht165. Epub 2013 Jul 3. PubMed PMID: 23825317; PubMed Central PMCID: PMC4224238.

280. Xie P, Kranzler HR, Krystal JH, Farrer LA, Zhao H, Gelernter J. Deep resequencing of 17 glutamate system genes identifies rare variants in DISC1 and GRIN2B affecting risk of opioid dependence. *Addict Biol*. 2014 Sep;19(5):955-64. doi: 10.1111/adb.12072. Epub 2013 Jul 16. PubMed PMID: 23855403; PubMed Central PMCID: PMC3815683.

281. Driesen NR, McCarthy G, Bhagwagar Z, Bloch MH, Calhoun VD, D'Souza DC, Gueorguieva R, He G, Leung HC, Ramani R, Anticevic A, Suckow RF, Morgan PT, Krystal JH. The impact of NMDA receptor blockade on human working memory-related prefrontal function and connectivity. *Neuropsychopharmacology*. 2013 Dec;38(13):2613-22. doi: 10.1038/npp.2013.170. Epub 2013 Jul 16. PubMed PMID: 23856634; PubMed Central PMCID: PMC3828532.

282. Zuo L, Wang K, Zhang X, Pan X, Wang G, Krystal JH, Zhang H, Luo X. Sex chromosome-wide association analysis suggested male-specific risk genes for alcohol dependence. *Psychiatr Genet*. 2013 Dec;23(6):233-8. doi: 10.1097/YPG.0b013e328364b8c7. PubMed PMID: 23907288; PubMed Central PMCID: PMC3941913.

283. Pietrzak RH, Gallezot JD, Ding YS, Henry S, Potenza MN, Southwick SM, Krystal JH, Carson RE, Neumeister A. Association of posttraumatic stress disorder with reduced in vivo norepinephrine transporter availability in the locus coeruleus. *JAMA Psychiatry*. 2013 Nov;70(11):1199-205. doi: 10.1001/jamapsychiatry.2013.399. PubMed PMID: 24048210; PubMed Central PMCID: PMC4026855.

284. Anticevic A, Hu S, Zhang S, Savic A, Billingslea E, Wasyluk S, Repovs G, Cole MW, Bednarski S, Krystal JH, Bloch MH, Li CS, Pittenger C. Global resting-state functional magnetic resonance imaging analysis identifies frontal cortex, striatal, and cerebellar dysconnectivity in obsessive-compulsive disorder. *Biol Psychiatry*. 2014 Apr 15;75(8):595-605. doi: 10.1016/j.biopsych.2013.10.021. Epub 2013 Nov 4. PubMed PMID: 24314349; PubMed Central PMCID: PMC3969771.

285. Anticevic A, Tang Y, Cho YT, Repovs G, Cole MW, Savic A, Wang F, Krystal JH, Xu K. Amygdala connectivity differs among chronic, early course, and individuals at risk for developing schizophrenia. *Schizophr Bull.* 2014 Sep;40(5):1105-16. doi: 10.1093/schbul/sbt165. Epub 2013 Dec 22. PubMed PMID: 24366718; PubMed Central PMCID: PMC4133672.
286. Leatherman SM, Liang MH, Krystal JH, Lew RA, Valley D, Thwin SS, Rosenheck RA; CSP 555 Investigators. Differences in treatment effect among clinical subgroups in a randomized clinical trial of long-acting injectable risperidone and oral antipsychotics in unstable chronic schizophrenia. *J Nerv Ment Dis.* 2014;202(1):13-7. doi: 10.1097/NMD.0000000000000069. PubMed PMID: 24375206.
287. Castellan Baldan L, Williams KA, Gallezot JD, Pogorelov V, Rapanelli M, Crowley M, Anderson GM, Loring E, Gorczyca R, Billingslea E, Wasyluk S, Panza KE, Ercan-Sencicek AG, Krusong K, Leventhal BL, Ohtsu H, Bloch MH, Hughes ZA, Krystal JH, Mayes L, de Araujo I, Ding YS, State MW, Pittenger C. Histidine decarboxylase deficiency causes tourette syndrome: parallel findings in humans and mice. *Neuron.* 2014;81(1):77-90. doi: 10.1016/j.neuron.2013.10.052. PubMed PMID: 24411733.
288. Stefanovics EA, Krystal JH, Rosenheck RA. Symptom structure and severity: a comparison of responses to the positive and negative syndrome scale (PANSS) between patients with PTSD or schizophrenia. *Compr Psychiatry.* 2014 May;55(4):887-95. doi: 10.1016/j.comppsy.2014.01.014. Epub 2014 Jan 31. PubMed PMID: 24602497.
289. Morean ME, DeMartini KS, Leeman RF, Pearlson GD, Anticevic A, Krishnan-Sarin S, Krystal JH, O'Malley SS. Psychometrically improved, abbreviated versions of three classic measures of impulsivity and self-control. *Psychol Assess.* 2014 Sep;26(3):1003-20. doi: 10.1037/pas0000003. Epub 2014 Jun 2. PubMed PMID: 24885848; PubMed Central PMCID: PMC4152397.
290. Anticevic A, Savic A, Repovs G, Yang G, McKay DR, Sprooten E, Knowles EE, Krystal JH, Pearlson GD, Glahn DC. Ventral anterior cingulate connectivity distinguished nonpsychotic bipolar illness from psychotic bipolar disorder and schizophrenia. *Schizophr Bull.* 2015 Jan;41(1):133-43. doi: 10.1093/schbul/sbu051. Epub 2014 Apr 29. PubMed PMID: 24782562; PubMed Central PMCID: PMC4266289.
291. Yang GJ, Murray JD, Repovs G, Cole MW, Savic A, Glasser MF, Pittenger C, Krystal JH, Wang XJ, Pearlson GD, Glahn DC, Anticevic A. Altered global brain signal in schizophrenia. *Proc Natl Acad Sci U S A.* 2014 May 20;111(20):7438-43. doi: 10.1073/pnas.1405289111. Epub 2014 May 5. PubMed PMID: 24799682; PubMed Central PMCID: PMC4034208.
292. Anticevic A, Corlett PR, Cole MW, Savic A, Gancsos M, Tang Y, Repovs G,

Murray JD, Driesen NR, Morgan PT, Xu K, Wang F, Krystal JH. N-methyl-d-aspartate receptor antagonist effects on prefrontal cortical connectivity better model early than chronic schizophrenia. *Biol Psychiatry*. 2015 Mar 15;77(6):569-80. doi: 10.1016/j.biopsych.2014.07.022. Epub 2014 Jul 31. PubMed PMID: 25281999.

293. Anticevic A, Hu X, Xiao Y, Hu J, Li F, Bi F, Cole MW, Savic A, Yang GJ, Repovs G, Murray JD, Wang XJ, Huang X, Lui S, Krystal JH, Gong Q. Early-course unmedicated schizophrenia patients exhibit elevated prefrontal connectivity associated with longitudinal change. *J Neurosci*. 2015 Jan 7;35(1):267-86. doi:10.1523/JNEUROSCI.2310-14.2015. PubMed PMID: 25568120.

294. Xu K, Krystal JH, Ning Y, Chen da C, He H, Wang D, Ke X, Zhang X, Ding Y, Liu Y, Gueorguieva R, Wang Z, Limoncelli D, Pietrzak RH, Petrakis IL, Zhang X, Fan N. Preliminary analysis of positive and negative syndrome scale in ketamine-associated psychosis in comparison with schizophrenia. *J Psychiatr Res*. 2015 Feb;61:64-72. doi: 10.1016/j.jpsychires.2014.12.012. Epub 2014 Dec 24. PubMed PMID: 25560772.

295. Abdallah CG, Jiang L, De Feyter HM, Fasula M, Krystal JH, Rothman DL, Mason GF, Sanacora G. Glutamate metabolism in major depressive disorder. *Am J Psychiatry*. 2014 Dec 1;171(12):1320-7. doi: 10.1176/appi.ajp.2014.14010067. Epub 2014 Oct 31. PubMed PMID: 25073688.

296. Gallezot JD, Esterlis I, Bois F, Zheng MQ, Lin SF, Kloczynski T, Krystal JH, Huang Y, Sabri O, Carson RE, Cosgrove KP. Evaluation of the sensitivity of the novel $\alpha 4\beta 2^*$ nicotinic acetylcholine receptor PET radioligand 18F(-)-NCFHEB to increases in synaptic acetylcholine levels in rhesus monkeys. *Synapse*. 2014 Nov;68(11):556-64. doi: 10.1002/syn.21767. Epub 2014 Jul 28. PubMed PMID: 25043426; PubMed Central PMCID: PMC4224280.

297. DeLorenzo C, DellaGioia N, Bloch M, Sanacora G, Nabulsi N, Abdallah C, Yang J, Wen R, Mann JJ, Krystal JH, Parsey RV, Carson RE, Esterlis I. In Vivo Ketamine-Induced Changes in [(11)C]ABP688 Binding to Metabotropic Glutamate Receptor Subtype 5. *Biol Psychiatry*. 2014 Jul 10. pii: S0006-3223(14)00501-0. doi: 10.1016/j.biopsych.2014.06.024. [Epub ahead of print] PubMed PMID: 25156701.

298. Pietrzak RH, Rosenheck RA, Cramer JA, Vessichio JC, Tsai J, Southwick SM, Krystal JH; for the VA CSP 504 Collaborative Group. Elucidating the transdiagnostic dimensional structure of trauma-related psychopathology: Findings from VA cooperative study 504 - risperidone treatment for military service related chronic post traumatic stress disorder. *J Affect Disord*. 2014 Oct 22;172C:331-336. doi: 10.1016/j.jad.2014.10.025. [Epub ahead of print] PubMed PMID: 25451434.

299. Scott JC, Matt GE, Wrocklage KM, Crnich C, Jordan J, Southwick SM, Krystal JH, Schweinsburg BC. A quantitative meta-analysis of neurocognitive functioning in posttraumatic stress disorder. *Psychol Bull.* 2015 Jan;141(1):105-40. doi: 10.1037/a0038039. Epub 2014 Nov 3. PubMed PMID: 25365762; PubMed Central PMCID: PMC4293317.

300. Saricicek A, Chen J, Planeta B, Ruf B, Subramanyam K, Maloney K, Matuskey D, Labaree D, Deserno L, Neumeister A, Krystal JH, Gallezot JD, Huang Y, Carson RE, Bhagwagar Z. Test-retest reliability of the novel 5-HT1B receptor PET radioligand [(11)C]P943. *Eur J Nucl Med Mol Imaging.* 2015 Mar;42(3):468-77. doi: 10.1007/s00259-014-2958-5. Epub 2014 Nov 27. PubMed PMID: 25427881.

301. Cosgrove KP, McKay R, Esterlis I, Kloczynski T, Perkins E, Bois F, Pittman B, Lancaster J, Glahn DC, O'Malley S, Carson RE, Krystal JH. Tobacco smoking interferes with GABAA receptor neuroadaptations during prolonged alcohol withdrawal. *Proc Natl Acad Sci U S A.* 2014 Dec 16;111(50):18031-6. doi: 10.1073/pnas.1413947111. Epub 2014 Dec 1. PubMed PMID: 25453062; PubMed Central PMCID: PMC4273348.

302. Tsai J, Harpaz-Rotem I, Armour C, Southwick SM, Krystal JH, Pietrzak RH. Dimensional structure of DSM-5 posttraumatic stress disorder symptoms: results from the National Health and Resilience in Veterans Study. *J Clin Psychiatry.* 2014 Nov 11. [Epub ahead of print] PubMed PMID: 25562376.

303. Krishnan-Sarin S, O'Malley SS, Franco N, Cavallo DA, Morean M, Shi J, Pittman B, Krystal JH. N-Methyl-d-Aspartate Receptor Antagonism has Differential Effects on Alcohol Craving and Drinking in Heavy Drinkers. *Alcohol Clin Exp Res.* 2015 Feb;39(2):300-7. doi: 10.1111/acer.12619. Epub 2015 Feb 9. PubMed PMID: 25664775; PubMed Central PMCID: PMC4331214.

(Manuscripts under review)

Widi GA, Duckrow RB, Abi-Saab W, Krystal JH, Vives KP, Spencer DD, Cavus I. 50 Hz hippocampal stimulation in epilepsy patients: higher basal glutamate predicts increased stimulated glutamate efflux. *In review.*

Reviews, Chapters, Books:

1. van der Kolk BA, Boyd H, Krystal JH, Greenberg M: Inescapable shock, hyperreactivity and addiction to the trauma: Towards a psychobiological model of post traumatic stress. In van der Kolk BA (ed): *Adult Psychic Trauma - Psychological and*

Physiological Sequelae. Washington, D.C.: American Psychiatric Press, 1984.

2. Krystal JH: Assessing alexithymia. In Krystal H (ed): *Integration & Self-Healing: Affect, Trauma, Alexithymia*. Hillsdale: The Analytic Press, 1988, pp 286-310.
3. Kosten TR, Krystal JH: Biological mechanisms in posttraumatic stress disorder: Relevance for substance abuse. In Galanter M (ed): *Recent Developments in Alcoholism, Vol. VI*. New York: Plenum Press, 1988, pp 49-68.
4. Krystal JH, Charney DS: Advances in anxiety therapy. *IM-Intern. Med. Spec.*, 1988;9:93-111.
5. Krystal JH, Goodman WK, Woods SW, Charney DS: *Anxiety Disorders*. In Lazare A (ed): *Outpatient Psychiatry, Diagnosis and Treatment, 2nd Edition*. New York: Williams and Wilkins, 1989, pp 416-454.
6. Charney DS, Woods SW, Krystal JH, Heninger GR: Hypothesis relating serotonergic dysfunction to the etiology and treatment of panic and generalized anxiety disorders. Chapter in: *Serotonin in Major Psychiatric Disorders*, Coccaro EF, Murphy DL (eds.), American Psychiatric Press, Washington D.C., 1990, pp 129-152.
7. Krystal JH. Animal Models for Post-Traumatic Stress Disorder. In: *The Biological Assessment and Treatment of PTSD*. Giller E (ed), Washington DC, American Psychiatric Press, 1990, pp. 3-26.
8. Nagy LM, Krystal JH, Charney DS. Anxiety Disorders. In: *Clinical Psychiatry for Medical Students*. Stoudemire A (ed), New York, J.B. Lippincott 1990;199-236 [Updated for Second Edition, 1998]
9. Charney DS, Woods SW, Krystal JH: The Neurobiology of Panic Disorders. *Psychiatric Times*. Volume 6, No. 5, May, 1989.
10. Charney DS, Southwick SW, Delgado, PL, Krystal JH: Current Status of the Receptor Sensitivity Hypothesis of Antidepressant Action: Implications for the Treatment of Severe Depression. In: Amsterdam J (ed), *Pharmacotherapy of Depression: Applications for the Outpatient Practitioner*. Marcel Dekker, Inc., New York, 1990, pp 13-34
11. Charney DS, Krystal JH, Delgado PL, Heninger GR: Serotonin specific drugs for anxiety and depressive disorders. Chapter in: *Annual Review of Medicine*, Vol. 41, Cregor WP (ed), Raven Press, New York, 1990, pp 437-446.
12. Krystal J (ed.): *Initial Report of the Presidential Task Force on Curricula, Education, and Training, International Society for Traumatic Stress Studies* Kendall Press, Chicago, 1990.

13. Charney DS, Woods SW, Krystal JH, Heninger GR: Neurobiological mechanisms of human anxiety. *The Biological Basis of Psychiatric Treatment*. Pohl R, Gershon S (eds), Karger, Basel, *Prog Basic Clin Pharmacol* 1990;3:242-283
14. Charney DS, Krystal JH, Southwick SM, Nagy LM, Woods SW, Heninger GR: Serotonin function in panic and generalized anxiety disorders. *Psychiatric Annals* 1990;20:593-602.
15. Charney DS, Woods SW, Krystal JH, Heninger GR: Serotonin function and human anxiety disorders. In: *The Neuropharmacology of Serotonin*, *Ann NY Acad Sci* 1990;600:558-573.
16. Charney DS, Delgado PL, Southwick SM, Krystal JH, Price LH, Heninger GR: Current hypotheses of the mechanism of antidepressant treatments: Implications for the treatment of refractory depression. In: *Advances in Neuropsychiatry and Psychopharmacology, Volume 2: Refractory Depression*, Amsterdam JD (ed.), Raven Press, New York, 1991, pp 23-40
17. Southwick SM, Krystal JH, Johnson DR, Charney DS: Neurobiology of post-traumatic stress disorder. In: *Annual Review of Psychiatry Vol 11* American Psychiatric Press, Washington, D.C., 1992;347-367
18. Krystal JH, Southwick SM, Bremner JD, Charney DS: Clinical implications of the emerging neurobiology of posttraumatic stress disorder(PTSD). *The Psychiatric Times* August, 1992, 19-21
19. Krystal J, Leaf P, Bruce M, Charney DS: Efectos de la edad y del alcoholismo sobre la prevalencia del trastorno de panico. *Psichiatria* 1993;1:20-21
20. Karper LP, Bennett A, Erdos J, Krystal JH: Psychopharmacology and aggression: antipsychotics, lithium, benzodiazepines, beta-blockers. *J Offender Rehabilitation* 1994;21:203-222
21. Bremner JD, Davis M, Southwick SM, Krystal JH, Charney DS: Neurobiology of Posttraumatic Stress Disorder. In: *Annual Review of Psychiatry Vol 12* American Psychiatric Press, Washington, D.C., 183-204, 1993
22. American Psychiatric Association Committee on Research Training (Principal author: Leibenluft E; Committee Members: Reider RO, Gillin JC, Helzer J, Krystal JH, Yager J, Grady T, Spurlock J, Grieder T, Pincus HA, Nevin J): Women in academic psychiatry and research. *Am J Psychiatry* 1993;150:849-851
23. Charney DS, Southwick SM, Krystal JH: Post-traumatic stress disorder (PTSD), Psychobiology. In: *Neuroscience Year: Supplement 3 to the Encyclopedia of Neuroscience*. B. Smith, G. Adelman (eds.), Boston, MA: Birkhäuser, 1993;127-131

24. Charney DS, Krystal JH, Southwick SM, Delgado PL. The role of noradrenergic function in human anxiety and depression. In: *Handbook of Depression and Anxiety: A Biological Approach*. J.A. denBoer, J.M. Ad Sitsen (eds.), New York, NY: Marcel Dekker, Inc.,1994;473-497
25. Bremner JD, Davis M, Southwick SM, Krystal JH, Charney DS: Neurobiology of Posttraumatic Stress Disorder. In: *Posttraumatic Stress Disorder: A Clinical Review*. RS Pynoos (ed.), Lutherville, MD:Sidran Press, 1994;43-64
26. Charney DS, Southwick SM, Krystal JH, Deutch AY, Murburg MM, Davis M. Neurobiological mechanisms of PTSD. In: *Catecholamine Function in Posttraumatic Stress Disorder: Emerging Concepts*. M Murburg (ed.) Washington DC:American Psychiatric Press, 1994;131-158
27. Southwick SW, Bremner JD, Krystal JH, Charney DS. Psychobiological research in post-traumatic stress disorder. *Psychiatric Clin N Amer* 1994;17:251-264
28. Karper LP, Bennett A, Erdos J, Krystal JH:Psychopharmacology of aggression: antipsychotics, lithium, benzodiazepines, beta blockers. In: *The Psychobiology of Aggression: Engines, Measurement, Control*. Hilbrand M, Pallone NJ(eds.) Binghamton: Haworth 1994;203-222
29. Krystal JH, Bennett A, Bremner JD, Southwick S, Charney DS. Toward a cognitive neuroscience of dissociation and altered memory functions in post-traumatic stress disorder. In: Friedman MJ, Charney DS,Deutch AY (eds.) *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to PTSD*. New York: Raven 1995;239-269
30. Charney DS, Deutch A, Southwick SM, Krystal JH. Neural circuits and mechanisms of post traumatic stress disorder. In: Friedman MJ, Charney DS, Deutch AY (eds.) *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to PTSD*. New York: Raven, 1995:271-287
31. Bremner JD, Krystal JH, Southwick SM, Charney DS. Neuroanatomical correlates of the effects of stress on memory. *J Traumatic Stress* 1995;8:527-555
32. D'Souza DC, Charney DS, Krystal JH: Glycine site agonists of the NMDA receptor: a review *CNS Drug Reviews* 1995;1:227-260
33. McGlashan T, Krystal JH. Schizophrenia-Related Disorders and Dual Diagnosis. In: *Synopsis of Treatments of Psychiatric Disorders, 2nd Ed*. Gabbard GO, Atkinson SD (eds.), Washington D.C.: American Psychiatric Press, 1995;447-460
34. McGlashan T, Krystal JH. Schizophrenia-Related Disorders and Dual Diagnosis. In: *Treatments of Psychiatric Disorders, 2nd Ed*. APA Task Force on Treatments of Psychiatric Disorders (ed.), Washington D.C.: American Psychiatric Press, 1995;1171-

1273

35. Southwick SM, Krystal JH, Johnson DR, Charney DS. Neurobiology of PTSD. In: Everly GS Jr, Lating JM (eds.) *Psychotraumatology: Key Papers and Core Concepts in Post-Traumatic Stress*. New York: Plenum, 1995;49-72
36. D'Souza DC, Krystal JH. The neurobiology of schizophrenia. In: *Adolescent Dysfunctional Behavior: Causes, Interventions, and Prevention*. Thousand Oaks, CA: Sage Publications, 1995; 206-244
37. Krystal JH, Southwick SM, Charney DS. Post traumatic stress disorder: psychobiological mechanisms of traumatic remembrance. In: *Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past*. Schacter DL (ed.), Cambridge, MA: Harvard University Press, 1995; 150-172
38. Karper LP, Krystal JH: New approaches for augmenting antipsychotic efficacy. In: *The New Pharmacotherapy of Schizophrenia*, A. Breier (eds.), Washington DC: American Psychiatric Press, 1996;105-132
39. Berman RM, Krystal JH, Charney DS. Mechanism of action of antidepressants: monoamine hypotheses and beyond. In: *Biology of Schizophrenia and Affective Disease*. Watson SJ (ed), Washington D.C.: American Psychiatric Press, 1996;295-368
40. Krystal JH, Deutsch DN, Charney DS. The biological basis of panic disorder. *J Clin Psychiatry* 1996;57 Suppl 10:23-31;discussion 32-33
41. Krystal JH, Bennett A, Bremner JD, Southwick S, Charney DS. Recent developments in the neurobiology of dissociation: implications for post-traumatic stress disorder. In: *Handbook of Dissociation*. Michelson L, Ray WJ (eds.) 1996;163-190
42. Moghaddam B, Charney DS, Krystal JH. Basic and clinical studies implicate NMDA receptors in the associative functions of the prefrontal cortex: interactions with dopamine and relevance to schizophrenia. In: *Dopamine Disease States*. Beninger RJ, Palomo T, Archer T (eds.), Madrid, Spain: Editorial CYM 1996;493-510
43. Laruelle M, Abi-Dargham A, Krystal JH, Charney DS, Innis RB. Imaging dopamine activity in drug-free schizophrenic patients. *Schizophrenia: Latest Advances in Understanding and Drug Development*. Dirks L (ed.), International Business Communications: Southborough, MA, 1996;3.1.1-3.1.23
44. Bergherr T, Bremner JD, Southwick SM, Charney DS, Krystal JH. Neurobiological perspectives on trauma and aging. *J Geriatric Psychiatry* 1997;30:27-60
45. Krystal JH, Bremner JD, Southwick SM, Charney DS. The emerging neurobiology of dissociation: implications for the treatment of PTSD. In: *Trauma*,

Memory, and Dissociation . Bremner JD, Marmar C(eds.), Washington D.C.: American Psychiatric Press 1997;321-363

46. Krystal JH, D'Souza DC, Karper LP, Petrakis IL, CharneyDS. Clinical evaluation of NMDA antagonist models of schizophrenia: implications for therapeutics. *Schizophrenia: Latest Advances in Understanding and Drug Development*. Dirks L (ed.), International Business Communications: Southborough, MA, 1996;4.2.1-4.2.20

47. Abi-Dargham A, Laruelle M, Charney DS, Krystal JH. Serotonin and schizophrenia: a review. *Drugs of Today* 1996; 32: (2) 171-185

48. Abi-Dargham A, Charney DS, Krystal JH. Benzodiazepine receptor antagonists: possible uses in the treatment of neuropsychiatric disorders. *CNS Drug Reviews* 1997;8:244-256

49. Karper LP, Krystal JH. Pharmacotherapy of violent behavior. In: *Handbook of Antisocial Behavior*. Stoff DM, Breiling J, Maser J(eds.). New York: John Wiley & Sons. 1997;436-444

50. Institute of Medicine, Committee on Halcion. *Halcion: An Independent Evaluation*. Institute of Medicine Press, Washington, D.C.,1997

51. Southwick SM, Mogan CA III, Bremner JD, Grillon CG, KrystalJH, Nagy LM. Noradrenergic alterations in posttraumatic stress disorder. *Ann NY Acad Sci* 1997;821:125-141

52. Petrakis IL, Krystal JH. Neuroscience implications for alcoholism treatment. *Alcohol Health and Research World*.1997;21:157-160

53. Bremner JD, Vermetten E, Southwick SM, Krystal JH, Charney DS. Trauma, memory and dissociation: an integrative formulation. In: *Trauma, Memory, and Dissociation* . Bremner JD, Marmar C (eds.), Washington D.C.: American Psychiatric Press, 1997;365-402

54. Nagy LM, Riggs M, Krystal JH, Charney DS. Anxiety Disorders.In: *Clinical Psychiatry for Medical Students, 3rd Edition*. Stoudemire, A (ed), Philadelphia, PA, J.B. Lippincott, 1998; 290-342

55. Krystal JH, D'Souza DC. D-serine and the therapeutic challenge posed by the NMDA antagonist model of schizophrenia. *Biological Psychiatry* 1998;44:1075-1076

56. Trevisan L, Boutros N, Petrakis I, Krystal J. Complications of alcohol withdrawal: pathophysiological insights. *Alcohol Health and Research World*. 1998;22:61-66

57. Krystal JH, Nagy LM, Southwick SM, Charney DS. Initial clinical evidence of

genetic contributions to post-traumatic stress disorder. In: *An International Handbook of Multigenerational Legacies of Trauma*. Danieli Y (ed.), New York: Plenum Press, 1998;657-667

58. Krystal JH, Petrakis IL, Trevisan L, Epperson N. Clinical neuroscience studies of behaviors associated with alcohol consumption in alcoholism. *NIAAA Neuroscience and Behavioral Portfolio Review*. NIAAA. Bethesda, MD, 1998;1-38

59. Krystal JH, D'Souza DC, Madonick S, Petrakis IL. Toward a rational pharmacotherapy of substance abuse by schizophrenic patients. *Schiz Res* 1999;35:S35-S49

60. Zell JE, Abi-Saab W, Sernyak MJ, Krystal JH. Management of patients with schizophrenia and heart disease. *Directions in Psychiatry* 1999;19:115-131

61. Krystal JH, D'Souza DC, Petrakis IL, Belger A, Berman R, Charney DS, Abi-Saab W, Madonick S. NMDA agonists and antagonists as probes of glutamatergic dysfunction and pharmacotherapies for neuropsychiatric disorders. *Harvard Review of Psychiatry* 1999;7:125-133

62. Krystal JH, Abi-Dargham A, Laruelle M, Moghaddam B. Pharmacologic model psychoses. In: *Neurobiology of Mental Illness*. Eds. D.S. Charney. E. Nestler, B.S. Bunney. New York: Oxford University Press, 1999;214-224

63. Seibyl JP, Scanley E, Krystal JH, Innis RB. Neuroimaging methodologies utilizing radiotracers or nuclear magnetic resonance. In: *Neurobiology of Mental Illness*. Eds. D.S. Charney. E. Nestler, B.S. Bunney. New York: Oxford University Press, 1999;170-189

64. Chambers AC, Bremner JD, Moghaddam B, Southwick SM, Charney DS, Krystal JH. Glutamate and post-traumatic stress disorder: toward a neurobiology of dissociation. *Seminars in Clinical Neuropsychiatry* 1999;4:274-281

65. Krystal JH, D'Souza DC, Belger A, Anand A, Charney DS, Aghajanian GK, Moghaddam B. Therapeutic implications of the hyperglutamatergic effects of NMDA antagonists. *Neuropsychopharmacology* 1999;22:S143-S157

66. D'Souza DC, Berman RM, Krystal JH, Charney DS. Symptom provocation studies in psychiatric disorders: scientific value, risks and future. *Biological Psychiatry* 1999; 46:1060-1080

67. Southwick S, Paige S, Morgan CA III, Bremner JD, Krystal JH, Charney DS. Neurotransmitter alterations in PTSD: catecholamines and serotonin. *Seminars in Clinical Neuropsychiatry*. 1999;4:242-248

68. Bunney Jr WE, Azarnoff DL, Brown BW, Cancro R, Gibbons RD, Hullett S,

Kilam KF, Krystal JH, Kupfer DJ, Stolley PD, French GS, Pope AM. The Institute of Medicine Reports on Sleeping Pills. In: *Insomnia*. Zuba M, Digges D (eds). 1999; in press

69. Sanacora G, Rothman D, Krystal JH. Applications of magnetic resonance spectroscopy to psychiatry. *The Neuroscientist* 1999;5:192-196
70. Krystal JH, Belger A, Abi-Saab W, Moghaddam B, Charney DS, Anand A, Madonick S, D'Souza DC. Glutamatergic contributions to cognitive dysfunction in schizophrenia. In: Harvey PD, Sharma T (eds.), *Cognitive Functioning in Schizophrenia: Impairments, Importance, and Treatment Strategies*. Oxford Press, London, England. 2000;126-153
71. Sanacora G, Mason GF, Krystal JH. Impairment of GABAergic transmission in depression: new insights from neuroimaging studies. *Critical Reviews in Neurobiology* 2000;14(2):23-45
72. Krystal JH, Bremner JD, D'Souza DC, Anand A, Southwick SM, Charney DS. The emerging neurobiology of dissociative states: relevance to PTSD. In: *International Handbook of Human Response to Trauma*. Eds: Shalev A, Yehuda R, McFarlane AC. New York: Kluwer Academic/Plenum Publishers 2000;307-320
73. Abi-Dargham A, Krystal JH. Serotonin receptors as targets of antipsychotic medications. In: *Neurotransmitter receptors in actions of antipsychotic medications*. (ed.) Lidow, M. 2000;79-108
74. George TP, Krystal JH. Co-morbidity of psychiatric and substance abuse disorders. *Current Opinions in Psychiatry* 2000;13:327-331
75. Krystal JH, Petrakis IL, Trevisan L, Epperson N. Clinical neuroscience studies of behaviors associated with alcohol consumption in alcoholism. National Institute of Alcohol Abuse and Alcoholism, Research Monograph-34: Review of NIAAA's Neuroscience and Behavioral Research Portfolio 2000;357-396
76. Chambers RA, Krystal JH, Self DW. Neurobiological aspects of substance abuse comorbidity in schizophrenia. *Biological Psychiatry* 2001;50:71-83
77. Bremner JD, Southwick SM, Krystal JH, Charney DS. Posttraumatic Stress Disorder: Psychobiology. In: *Encyclopedia of Neuroscience* in press.
78. Krystal JH, D'Souza DC, Belger A, Abi-Saab W, Madonick S. Cortical information processing deficits in schizophrenia: potential therapeutic insights from the study of NMDA receptor antagonists. In: *Delusions: Proceedings of the VIIth International Conference on Issues and Controversies in Psychiatry*. (Published in Spanish).

79. Newcomer JW, Krystal JH. NMDA regulation of memory function and behavior in humans. *Hippocampus* 2001;11:529-542
80. Abi-Saab, WM, D'Souza DC, Madonick SH, Krystal JH. Targeting the glutamate system. In: *Current Issues in the Psychopharmacology of Schizophrenia*. Eds. Breier A, Tran PV, Herrera J, Bymaster F, Tollefson G, Philadelphia, PA: Lippincott Williams & Wilkins, 2001;304-332
81. Krystal JH, D'Souza DC, Sanacora G, Goddard A, Charney DS. Current perspectives on the pathophysiology of schizophrenia, affective disorder, and anxiety disorders. *Med Clin N Am* 2001;85:559-577
82. D'Souza DC, Krystal JH. Psychopharmacological challenge studies in psychiatric research. *Int Rev Psychiatry* in press.
83. Mason GF, Behar KL, Krystal JH, Rothman DL. Aplicações de ressonância magnética para a medidas espectróscopios da neurotransmissão. *Revista Brasileira de Psiquiatria* 2001;23(supl 1):6-10
84. Skolnick P, Krystal JH. Depression. In: *Therapeutic potential of glutamate receptor antagonists and modulators*. D. Lodge, W. Danysz, C.G. Parsons (Eds.). F.P. Graham and Company: Johnson, TN, 2002;71-90
85. Krystal JH, Tabakoff B. Ethanol abuse, dependence, and withdrawal: neurobiology and clinical implications. In: *Psychopharmacology: a fifth generation of progress*. Davis KL, Charney D, Coyle JT, Nemeroff C (eds), Lippincott Williams & Wilkins: Philadelphia, 2002;1425-1443
86. Krystal JH, Sanacora G, Blumberg H, Anand, A, Charney DS, Marek G, Epperson CN, Goddard A, Mason GF. Glutamate and GABA systems as targets for novel antidepressant and mood stabilizing treatments. *Mol Psychiatry* 2002;7:S71-S80
87. Krystal, J. H., Petrakis, I. L., D'Souza, D. C., Mason, G., Trevisan, L. Alcohol and glutamate neurotransmission in humans: implications for reward, dependence, and treatment. In: *Glutamate and addiction*. Herman BH, Frankenheim J, Litten RZ, Sheridan PH, Weight FF, Zuckin SR (eds), Totowa, NY: Humana Press, 2002; in press.
88. First, MB, Bell C, Cuthbert B, Krystal J, Malison R, Offord D, Reiss D, Shea T, Widiger T, Wisner K. Personality disorders and relational disorders: a research agenda for addressing crucial gaps in DSM. *APA Research Agenda for DSM-V*. Kupfer DJ, First MB, Regier DA (eds), American Psychiatric Association: Washington, D.C., 2002;123-199
89. Petrakis IL, Tabakoff B, Krystal JH. The neurobiology of alcoholism. *The Economics of Neuroscience*. 2002;3(12):29-36

90. Petrakis IL, Gonzalez-Haddad G, Rosenheck R, Krystal JH. Comorbidity of alcoholism and psychiatric disorders. *Alcohol Research and Health* 2002;26:81-89
91. Blumberg HP, Charney DS, Krystal JH. Frontotemporal neural systems in bipolar disorder. *Seminars in Clinical Neuropsychiatry* 2002;7(4):243-54
92. Krystal JH. First, do no harm; then, do some good: ethics and human psychopharmacology. *Israel Journal of Psychiatry and Related Sciences* 2002;39(2):89-91
93. Moghaddam B, Krystal JH. The neurochemistry of schizophrenia. In: *Schizophrenia*, 2nd edition, S. Hirsch and D Weinberger, editors, Blackwell Science, Oxford, UK, 2003;349-364
94. D'Souza DC, Krystal JH. Psychoactive drugs. In: *Encyclopedia of Cognitive Science*. Nadel L (ed.), Nature Press (MacMillian Reference, Ltd.), London, UK. 2003;3:778-783
95. Gueorguieva R, Krystal JH. Move over ANOVA: Progress in analytic methods for repeated measures data from psychiatric clinical trials. *Arch Gen Psychiatry* 2004;61:310-317
96. Morgan CA III, Krystal JH, Southwick SM. Toward early post-stress pharmacotherapeutic intervention. *Biological Psychiatry* 2003;53:834-843
97. Krystal JH, Petrakis IL, Mason G, D'Souza DC. NMDA glutamate receptors and alcoholism: reward, dependence, treatment, and vulnerability. *Pharmacol Therapeutics* 2003;99:79-94
98. Cho H-S, Krystal JH, D'Souza DC. Blood dyscrasias. In: Haddad P, Dursen S, Deakin WFK, *Key Adverse Syndromes Associated with Psychotropic Medications*. London: Oxford University Press, 2004;221-237
99. Kane JM, Krystal JH, Correll CU. Treatment models and designs for intervention research during the psychotic prodrome. *Schizophrenia Bulletin* 2003;29(4):747-756
100. D'Souza DC, Cho H-S, Perry E, Krystal JH. A cannabinoid "model" psychosis, dopamine cannabinoid interactions and implications for schizophrenia. In: *Cannabis and madness*. R. Murray, D. Castle (eds) In press.
101. Krystal JH, Petrakis IL, Trevisan L, D'Souza DC. NMDA receptor antagonism and the ethanol intoxication signal: From alcoholism risk to pharmacotherapy. *Ann NY Acad Sci* 2003;1003:176-184
102. Kaufman J, Aikens D, Krystal J. Neuroimaging studies in PTSD. In: *Assessing psychological trauma and PTSD – 2nd edition*. Wilson JP, Keane TM (eds), New York:

Guilford 2004;389-418

103. Krystal JH, Duman R. What's missing in PTSD research? Post-mortem studies. *Psychiatry* 2005;67(4):398-403

104. Sanacora G, Mason G, Rothman DL, Krystal JH. Clinical studies implementing glutamate neurotransmission in mood disorders. *Ann NY Acad Sci* 2003;1003:292-308

105. Krystal JH, D'Souza DC, Mathalon D, Perry E, Belger A, Hoffman R. NMDA receptor antagonist effects, cortical glutamatergic function, and schizophrenia: Toward a paradigm shift in medication development. *Psychopharmacology* 2003;169(3-4):215-33

106. Heinz A, Schäfer M, Higley JD, Krystal JH, Goldman D. Neurobiological correlates of the predisposition to and maintenance of alcoholism. *Pharmacopsychiatry* 2003;36(Suppl 3):S255-8

107. Krystal JH, D'Souza DC. Psychiatry. In: *Drug Therapy: Pocket*. I. Haessler, C. Maute (eds.), Hermosa Beach, CA: Börm Bruckmeier Publishing, 2003:221-234

108. Harvey PD, Geyer MA, Robbins TW, Krystal JH. Cognition in schizophrenia: from basic science to clinical treatment. *Psychopharmacology*. 2003;169(3-4):213-4

109. Krystal JH. Insights into the neurobiology and treatment of alcohol dependence, schizophrenia, and mood disorders emerging from human research involving NMDA glutamate receptor antagonists: the 2003 Hans-Jörg Weitbrecht Award address. *Neurology, Psychiatry, and Brain Research (Fortschritte der Neurologie-Psychiatrie)* 2004;11 (1): 45-55

110. Blumberg HP, Kaufman J, Martin A, Charney DS, Krystal JH, Peterson BS. Significance of adolescent neurodevelopment for the neural circuitry of bipolar disorder. *Annals of the New York Academy of Sciences* 2004;1021:376-383

111. Neurobiology Subcommittee, ACNP Bioterrorism Task Force (Chairman: J. Krystal; M. Davis, R. Duman, D. Goldman, S. Maier, B. McEwen, J. McGaugh, M. Meaney, C.A. Morgan III, A. Rasmusson, S. Southwick). *Report of the Neurobiology Subcommittee of the ACNP Bioterrorism Task Force*. November 6, 2003

112. Harvey PD, Geyer MA, Robbins TW, Krystal JH (co-editors of special issue) Special issue on cognition in schizophrenia: from basic science to clinical treatment. *Psychopharmacology* 2003;169(3-4)

113. Roberts L, Krystal JH (co-editors of special issue) Ethical challenges in psychopharmacology research. *Psychopharmacology* 2003;171(1)

114. Roberts LW, Krystal J. A time of promise, a time of promises: ethical issues in advancing psychopharmacologic research. *Psychopharmacology* 2003;171:1-5

115. Hoffman RE, Mathalon DH, Ford JM, Krystal JH. Cortico-thalamo-cortical interactions, gamma resonance, and auditory hallucinations in schizophrenia. *Behavioral and Brain Sciences*. 2004;27(6): 797
116. Malhotra AK, Krystal JH. Molecular genetics and psychopharmacology. *Psychopharmacology* 2004;174:439-440
117. Malhotra AK, Krystal JH (co-editors of special issue). Molecular Genetics and Psychopharmacology. *Psychopharmacology* 2004;174 (4)
118. Mason GF, Bendszus M, Meyerhoff DJ, Hetherington HP, Schweinsburg B, Ross BD, Taylor MJ, Krystal JH. Magnetic resonance spectroscopic studies of alcoholism: from heavy drinking to alcohol dependence and back again. *Alcoholism: Clinical & Experimental Research* 2005;29(1):150-158
119. Daurignac E, Jones D, Arronen H, Hommer D, Jernigan T, Krystal JH, Mathalon DM. Alcohol induced brain damage as assessed by volumetric magnetic resonance imaging and diffusion tensor imaging. *Alcoholism: Clinical and Experimental Research* 2005;29(1):159-166
120. Mason GF, Krystal JH. MR spectroscopy and drug development for the treatment of psychiatric diseases. *NMR in Biomedicine*. 2005; In revision.
121. Kendell SF. Krystal JH. Sanacora G. GABA and glutamate systems as therapeutic targets in depression and mood disorders. *Expert Opinion on Therapeutic Targets* 2005; 9(1):153-68
122. Cho RY, Ford JM, Krystal JH, Laruelle M, Cuthbert B, McCarthy G, Carter CS. Functional neuroimaging and electrophysiology biomarkers for clinical trials for cognition in schizophrenia. *Schizophrenia Bull* 31(4):865-9
123. Neumeister A, Henry S, Krystal JH. Neurocircuitry and neuroplasticity. In: PTSD: Science and practice – A comprehensive handbook. Freedman MJ, Keane TM, Resick PA (eds). Hillside, NJ: Guilford, 2007;151-165
124. Krystal JH, D'Souza DC, Gallinat J, Jacobsen L, Driesen N, Petrakis IL, Heinz A, Pearlson G. Neurobiological hypotheses for the etiology and maintenance of alcohol and substance abuse by individuals diagnosed with schizophrenia. *Neurotoxicology Research* 2006;10(3-4):235-52
125. Neumeister A, Charney DS, Sanacora G, Krystal JH. Neurobiology and treatment of depression. In: *Handbook of Contemporary Neuropharmacology*. Sibley D, Hanin I, Kuhar M, Skolnick P (eds). New York: John Wiley & Sons, 2007;769-788

126. Krystal JH, Staley J, Mason GF, Petrakis IL, Kaufman J, Harris RA, Gelernter JE, Lappalainen J. GABA_A receptors and alcoholism: Intoxication, dependence, vulnerability, and treatment. *Arch Gen Psychiatry* 2006;63:957-68
127. Pittenger C, Krystal JH, Coric V. Glutamate-modulating drugs as novel pharmacotherapeutic agents in the treatment of obsessive-compulsive disorder. *NeuroRx* 2006;3:69-81
128. Pittenger C, Kelemendi B, Bloch M, Krystal JH, Coric V. Clinical treatment of obsessive-compulsive disorder. *Psychiatry* 2005; in press.
129. Epperson CN, de Wit H, Krystal JH (editors). Advances in the Translational Neuroscience of Neurosteroids (Special Issue). *Psychopharmacology* 2006;186(3)
130. Epperson CN, de Wit H, Krystal JH. Advances in the translational neuroscience of neurosteroids (introduction). *Psychopharmacology* 2006;186:265-66
131. Keller MB, Krystal JH, Hen R, Neumeister A, Simon NM. Untangling depression and anxiety: clinical challenges. *J Clin Psychiatry* 2005;66(11):1477-84.
132. Amin Z, Mason GF, Cavus I, Krystal JH, Rothman DL, Epperson CN. The interaction of neuroactive steroids and GABA in the development of neuropsychiatric disorders in women. *Pharmacol Biochem Behav* 2006;84(4):635-43
133. Krystal JH. Biological psychiatry: a new leadership team. *Biol Psychiatry* 2006;60(8):794-5
134. Perepletchikova F, Krystal JH, Kaufman J. Adolescent alcohol use disorders: assessment and treatment issues. *Journal of Child Psychology, Psychiatry*. 2008;49(11):1131-54.
135. McDougale CJ, Krystal JH (editors) Pediatric psychopharmacology: mood, anxiety, disruptive behavior/pervasive developmental disorders (Special Issue). *Psychopharmacology* 2007;191(1)
136. McDougale CJ, Krystal JH. Pediatric psychopharmacology: mood, anxiety, disruptive behavior/pervasive developmental disorders (introduction). *Psychopharmacology* 2007;191(1):1-3
137. Krystal JH. Ketamine and the potential role for rapid-acting antidepressant medications. *Swiss Medical Weekly* 2007;137(15-16): 215-6
138. Pittenger C, Sanacora G, Krystal JH. The NMDA receptor as a therapeutic target for major depressive disorder. *CNS & Neurological Disorders – Drug Targets* 2007;6(2):101-15

139. Ford J, Krystal JH, Mathalon DH. Neural synchrony: bench to bedside. *Schizophrenia Bulletin* 2007;33(4):848-52
140. Krystal JH. Ketamine. *World Book Encyclopedia* 2007;in press
141. Krystal JH. Neuroplasticity as a target for the pharmacotherapy of psychiatric disorders: new opportunities for synergy with psychotherapy. *Biol Psychiatry* 2007; 62(8):833-4
142. Krystal JH. *Biological Psychiatry*: increasing impact. *Biol Psychiatry* 2007; 62(11):1203-4
143. Martinez D, Kim JH, Krystal J, Abi-Dargham A. Imaging the neurochemistry of alcohol and substance abuse. *Neuroimaging Clin N Am* 2007;17(4):539-55
144. Pittinger C, Coric V, Banasr M, Bloch M, Krystal JH, Sanacora G. Riluzole in the treatment of mood and anxiety disorders. *CNS Drugs* 2008;22(9):761-86
145. Krystal JH. Third generation treatments for schizophrenia targeting abnormalities in glutamatergic network function: Insights from research involving NMDA glutamate receptor antagonists. *Expert Commentaries in Psychiatry* 2008; in press
146. Johnson DC, Krystal JH, Southwick SM. Posttraumatic stress disorder and acute stress disorder. In: *Current Psychiatric Diagnosis and Treatment*. Second Edition. Eds Ebert MH, Nurcombe B, Loosen PT, Leckman JF, McGraw-Hill, Co.; Columbus, OH 2008;366-376
147. Heninger GR, Krystal JH, Duman RS, Bunney BS, Bowers MB Jr, Aghajanian GK. The neuroscience research program at the Connecticut Mental Health Center. In: Jacobs SC, Griffith EEH (eds.) *40 Years of Academic Psychiatry: CMHC*, Wiley, Hoboken, NJ, 2007;77-96
148. Soyka M, Kranzler HR, Berglund M, Gorelick D, Hesselbrock V, Johnson BA, Möller H-J, and the WFSBP Task Force on the Treatment of Substance Abuse Disorders (including J. Krystal). World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of substance use and related disorders. Part I: alcoholism. *World J Biol Psychiatry* 2008;9(1):6-23
149. Sanacora G, Zarate CA Jr, Krystal JH, Manji HK. Targeting the glutamatergic system to develop novel, improved therapeutics for mood disorders. *Nature Reviews: Drug Discovery* 2008;7(5):426-37
150. Krystal JH, Carter CS, Geschwind D, Manji HK, March JS, Nestler EJ, Zubieta JK, Charney DS, Goldman D, Gur RE, Lieberman JA, Roy-Byrne P, Rubinow DR, Anderson SA, Barondes S, Berman KF, Blair J, Braff DL, Brown ES, Calabrese JR, Carlezon WA Jr, Cook EH Jr, Davidson RJ, Davis M, Desimone R, Drevets WC, Duman

RS, Essock SM, Faraone SV, Freedman R, Friston KJ, Gelernter J, Geller B, Gill M, Gould E, Grace AA, Grillon C, Gueorguieva R, Hariri AR, Innis RB, Jones EG, Kleinman JE, Koob GF, Krystal AD, Leibenluft E, Levinson DF, Levitt PR, Lewis DA, Liberzon I, Lipska BK, Marder SR, Markou A, Mason GF, McDougale CJ, McEwen BS, McMahon FJ, Meaney MJ, Meltzer HY, Merikangas KR, Meyer-Lindenberg A, Mirnics K, Monteggia LM, Neumeister A, O'Brien CP, Owen MJ, Pine DS, Rapoport JL, Rauch SL, Robbins TW, Rosenbaum JF, Rosenberg DR, Ross CA, Rush AJ, Sackeim HA, Sanacora G, Schatzberg AF, Shaham Y, Siever LJ, Sunderland T, Tecott LH, Thase ME, Todd RD, Weissman MM, Yehuda R, Yoshikawa T, Young EA, McCandless R. It is time to take a stand for medical research and against terrorism targeting medical scientists. *Biol Psychiatry* 2008;63(8):725-7

151. Krystal JH. Capitalizing on extrasynaptic glutamate neurotransmission to treat antipsychotic-resistant symptoms in schizophrenia. *Biol Psychiatry* 2008;64:358-360

152. Carter CS, Barch DM, Buchanan RW, Bullmore E, Krystal JH, Cohen J, Geyer M, Green M, Nuechterlein KH, Robbins T, Silverstein S, Smith EE, Strauss M, Wykes T, Heinssen R. Identifying cognitive mechanisms targeted for treatment development in schizophrenia: an overview of the first meeting of the Cognitive Neuroscience Treatment Research to Improve Cognition in Schizophrenia Initiative. *Biol Psychiatry* 2008;64(1):4-10

153. Pittinger C, Vaccarino F, Krystal JH. Prefrontal GABA deficits in schizophrenia: interneuron pathology and network dysfunction. *Cell Science Reviews* 2008;5(1):144-179

154. Krystal JH, Moghaddam B. Contributions of glutamate and GABA systems to the neurobiology and treatment of schizophrenia. In: *Schizophrenia*, 3rd edition, D.r. Weinberger and P.J. Harrison, editors, Blackwell Science, Oxford, UK, 2011;433-461

155. Krishnan-Sarin S, O'Malley SS, Krystal JH. Treatment neuroscience: using neuroscience to guide the development of new pharmacotherapies for alcoholism. *Alcohol, Health & World* 2009;31(4):400-407

156. Mason G, Sanacora G, Krystal JH. Nuclear magnetic resonance imaging and spectroscopy: basic principals and recent findings in neuropsychiatric disorders. In: *Kaplan & Sadock's Comprehensive Textbook of Psychiatry* Lippincott Williams & Wilkins, Philadelphia, PA, 2009;248-73

157. Staley J, Krystal JH. Radiotracer imaging with positron emission tomography and single photon emission computerized tomography: fundamental principals and role in diagnosis and treatment neuropsychiatric disorders. In: *Kaplan & Sadock's Comprehensive Textbook of Psychiatry* Lippincott Williams & Wilkins, Philadelphia, PA, 2009;273-99

158. Krystal J. *Biological Psychiatry*: real progress. *Biol Psychiatry* 2009;65(1):3-4

159. Barch DM, Carter CS, Arnsten A, Buchanan RW, Cohen JD, Geyer M, Green MF, Krystal JH, Nuechterlein K, Robbins T, Silverstein S, Smith EE, Strauss M, Wykes T, Heinszen R. Selecting Paradigms From Cognitive Neuroscience for Translation into Use in Clinical Trials: Proceedings of the Third CNTRICS Meeting. *Schizophr Bull* 2009;35(1):109-114
160. Krystal JH, Mathew SJ, D'Souza DC, Garakani A, Gunduz-Bruce H, Charney DS. Potential psychiatric applications of metabotropic glutamate receptor glutamate receptor agonists and antagonists. *CNS Drugs* 2010;24(8):669-93. PMID: 20658799
161. Krystal JH, Tolin DF, Sanacora G, Castner S, Williams G, Aikins D, Hoffman R, D'Souza DC. Neuroplasticity as a target for the pharmacotherapy of anxiety disorders, mood disorders, and schizophrenia. *Drug Discovery Today* 2009;14(13-14):690-7.
162. Corlett PR, Krystal JH, Taylor JR, Fletcher PC. Why do delusions persist? *Front Hum Neurosci* 2009;3:12. PMID: 19636384 [PubMed]
163. Krystal JH, Neumeister A. Noradrenergic and serotonergic mechanisms in the neurobiology of posttraumatic stress disorder and resilience. *Brain Res* 2009;1293:13-23
164. Nakic M, Krystal JH, Bhagwagar Z. Neurotransmitter systems in bipolar disorder. In: Latham YN, Maj M (eds) *Bipolar Disorder: Clinical and Neurobiological Foundations*. John Wiley & Sons, Chichester, West Sussex 2010,210-227
165. Walderhaug E, Krystal JH, Neumeister A. The Biology of PTSD. In: Benedek D, Wynne GH (eds) *Clinical Manual for the Management of PTSD*. American Psychiatric Publishing, Inc. Arlington, VA, 2011;45-68
166. Krystal J. The evolution of the psychiatry research journal. *J Clin Psychiatry* 2009;70(11):1601-2
167. Corlett PR, Simons JS, Pigott JS, Gardner JM, Murray GK, Krystal JH, Fletcher PC. Illusions and delusions: relating experimentally-induced false memories to anomalous experiences and ideas. *Frontiers of Neuroscience* 2009;3:12 PMID: 19956402 [PubMed]
168. Krystal JH. NMDA glutamate receptor antagonists and the promise of rapid-acting antidepressants. *Arch Gen Psychiatry* 2010; 67(11):1110-1 PMID: 21041611
169. Kienast T, Krystal JH, Schum G, Heinz A. Neurobiological correlates of the disposition and maintenance of alcoholism. In: *Research on the neurobiology of alcohol use disorders*. Nova Science, 2008;47-64
170. Corlett PR, Taylor JR, Wang XJ, Fletcher PC, Krystal JH. Toward a Neurobiology of Delusions. *Prog Neurobiol.* 2010;92(3):345-69. PubMed PMID:20558235.

171. Corlett PR, Honey GD, Krystal JH, Fletcher PC. Glutamatergic model psychoses: Prediction error, learning, and inference. *Neuropsychopharmacology Reviews* 2010;epub PMID: 20861831
172. Carter CS, Barch DM, Bullmore E, Breiling J, Buchanan RW, Butler P, Cohen JD, Geyer M, Gollub R, Green MF, Jaeger J, Krystal JH, Moore H, Nuechterlein K, Robbins T, Silverstein S, Smith EE, Strauss M, Wykes T. Cognitive Neuroscience Treatment Research to Improve Cognition in Schizophrenia II: Developing Imaging Biomarkers to Enhance Treatment Development for Schizophrenia and Related Disorders. *Biol Psychiatry*. 2011;epub PubMed PMID: 21529781.
173. Soyka M, Kranzler HR, van den Brink W, Krystal J, Möller HJ, Kasper S. The World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for the Biological Treatment of Substance Use and Related Disorders. Part 2: Opioid dependence. *World J Biol Psychiatry*. 2011;12(3):160-87. PubMed PMID: 21486104.
174. Steine IM, Harvey AG, Krystal JH, Milde AM, Grønli J, Bjorvatn B, Nordhus IH, Eid J, Pallesen S. Sleep disturbances in sexual abuse victims: A systematic review. *Sleep Med Rev*. 2011 May 18. [Epub ahead of print] PubMed PMID: 21600813.
175. Krystal JH. Biological psychiatry: a time of opportunity, a time of challenge. *Biol Psychiatry*. 2011 Jul 1;70(1):3-4. PubMed PMID: 21672647.
176. Marder SR, Roth B, Sullivan PF, Scolnick EM, Nestler EJ, Geyer MA, Welnerberger DR, Karayiorgou M, Guidotti A, Gingrich J, Akbarian S, Buchanan RW, Lieberman JA, Conn PJ, Haggarty SJ, Law AJ, Campbell B, Krystal JH, Moghaddam B, Saw A, Caron MG, George SR, Allen JA, Solis M. Advancing drug discovery for schizophrenia. *Ann N Y Acad Sci*. 2011 Oct;1236(1):30-43. doi: 10.1111/j.1749-6632.2011.06216.x. PubMed PMID: 22032400.
177. Kaffman A, Krystal JH. New frontiers in animal research of psychiatric illness. *Methods Mol Biol*. 2012;829:3-30. PubMed PMID: 22231804.
178. Anticevic A, Krystal JH, Barch DM. Translational cognitive neuroscience of schizophrenia: Bridging neurocognitive and computational approaches towards understanding cognitive deficits. Cognitive functioning in schizophrenia: Characteristics, Correlates, and Treatment Strategies. Ed. Phil Harvey, PhD. Oxford: Oxford University Press, 2012;193-230
179. Krystal JH. Enhancing prolonged exposure therapy for posttraumatic stress disorder with D-cycloserine: further support for treatments that promote experience-dependent neuroplasticity. *Biol Psychiatry*. 2012;71(11):932-4. PubMed PMID: 22579302.

180. Nestler EJ, Krystal JH. Planning the New National Institute on Substance Use and Addiction Disorders. *Biol Psychiatry*. 2012;72(3):166-7
PubMed PMID: 22683089.
181. Anticevic A, Repovs G, Krystal JH, Barch DM. A broken filter: Prefrontal functional connectivity abnormalities in schizophrenia during working memory interference. *Schizophr Res*. 2012;141(1):8-14, PubMed PMID: 22863548.
182. Moghaddam B, Krystal JH. Capturing the Angel in "Angel Dust": Twenty Years of Translational Neuroscience Studies of NMDA Receptor Antagonists in Animals and Humans. *Schizophr Bull* 2012; 38(5):942-9 PubMed PMID: 22899397.
183. Carter CS, Barch DM; CNTRICS Executive Committee (including J. Krystal). Imaging biomarkers for treatment development for impaired cognition: report of the sixth CNTRICS meeting: Biomarkers recommended for further development. *Schizophr Bull*. 2012 Jan;38(1):26-33. doi: 10.1093/schbul/sbr109. Epub 2011 Sep 12. PubMed PMID: 21914642; PubMed Central PMCID: PMC3245593.
184. Anticevic A, Cole MW, Murray JD, Corlett PR, Wang XJ, Krystal JH. The Role of Default Network Deactivation in Cognition and Disease. *Trends Cogn Sci*. 2012; 16(12):584-92. doi:pii: S1364-6613(12)00244-6. 10.1016/j.tics.2012.10.008. PubMed PMID: 23142417.
185. Krystal JH, Sanacora G, Duman RS. Rapid-acting glutamatergic antidepressants: the path to ketamine and beyond. *Biol Psychiatry*. 2013 Jun 15;73(12):1133-41. doi: 10.1016/j.biopsych.2013.03.026. PubMed PMID: 23726151; PubMed Central PMCID: PMC3671489.
186. Holmes A, Spanagel R, Krystal JH. Glutamatergic targets for new alcohol medications. *Psychopharmacology (Berl)*. 2013 Oct;229(3):539-54. doi: 10.1007/s00213-013-3226-2. Epub 2013 Sep 1. Review. PubMed PMID: 23995381; PubMed Central PMCID: PMC3811052.
187. Krystal JH. Biological psychiatry: raising the bar. *Biol Psychiatry*. 2013 Oct 1;74(7):476-7. doi: 10.1016/j.biopsych.2013.07.034. PubMed PMID: 24034363.
188. Boggs DL, Carlson J, Cortes-Briones J, Krystal J, Cyril D'Souza D. Going up in Smoke? A Review of nAChRs-Based Treatment Strategies for Improving Cognition in Schizophrenia. *Curr Pharm Des*. 2013 Dec 15. [Epub ahead of print] PubMed PMID: 24345265.
189. Anticevic A, Cole MW, Repovs G, Savic A, Driesen NR, Yang G, Cho YT, Murray JD, Glahn DC, Wang XJ, Krystal JH. Connectivity, Pharmacology, and Computation: Toward a Mechanistic Understanding of Neural System Dysfunction in

Schizophrenia. *Front Psychiatry*. 2013 Dec 24;4:169. Review. PubMed PMID: 24399974.

190. Krystal JH, State MW. Psychiatric Disorders: Diagnosis to Therapy. *Cell*. 2014;157(1):201-214. doi: 10.1016/j.cell.2014.02.042. Review. PubMed PMID: 24679536.

191. Nash M, Galatzer-Levy I, Krystal JH, Duman, Neumeister A. Neurocircuitry and neuroplasticity in PTSD. In: *Handbook of PTSD: Science and Practice*, Friedman MJ, Keane TM, Resick PA (eds.), The Guilford Press, New York, New York, 2014;251-74

192. Abdallah CG, Sanacora G, Duman RS, Krystal JH. Ketamine and rapid-acting antidepressants: a window into a new neurobiology for mood disorder therapeutics. *Annu Rev Med*. 2015;66:509-23. doi: 10.1146/annurev-med-053013-062946. Epub 2014 Oct 17. PubMed PMID: 25341010.

193. Wang XJ, Krystal JH. Computational Psychiatry. *Neuron*. 2014 Nov 5;84(3):638-654. doi: 10.1016/j.neuron.2014.10.018. Epub 2014 Nov 5. Review. PubMed PMID: 25442941.

194. Krystal JH. Biological psychiatry: looking good! *Biol Psychiatry*. 2015 Jan 1;77(1):2. doi: 10.1016/j.biopsych.2014.10.007. PubMed PMID: 25483341.

195. Krystal JH. Deconstructing N-methyl-d-aspartate glutamate receptor contributions to cortical circuit functions to construct better hypotheses about the pathophysiology of schizophrenia. *Biol Psychiatry*. 2015 Mar 15;77(6):508-10. doi: 10.1016/j.biopsych.2014.10.010. PubMed PMID: 25687430.

196. Abdallah CG, Averill LA, Krystal JH. Ketamine as a promising prototype for a new generation of rapid-acting antidepressants. *Ann N Y Acad Sci*. 2015 Feb 27. doi: 10.1111/nyas.12718. [Epub ahead of print] PubMed PMID: 25727103.

Case Reports:

1. Seibyl JP, Krystal JH, Goodman WK, Price LH: Obsessive-compulsive symptoms in a patient with a right frontal lobe lesion: Response to lithium augmentation of tranylcypromine. *Neuropsychiatry, Neuropsychol Behav Neurol* 1989;1(4):195-290.

2. Seibyl JP, Krystal JH, Price LH, Charney DS: Use of yohimbine to counteract nortriptyline-induced orthostatic hypotension. *J Clin Psychopharmacology* 1989;9:67-68.

3. Karper LP, Salloway SP, Seibyl JP, Krystal JH: Prolonged post-ictal encephalopathy in two patients with clozapine-induced seizures. *J Neuropsychiatry Clin Neurosci* 1992;4:454-457
4. Karper LP, Seibyl JP, Krystal JH: Valproate management of psychosis in a patient with carbamazepine-induced hyponatremia. *J Clin Psychopharmacology* 1992;12:137-139
5. Seibyl JP, Brenner L, Krystal JH, Johnson R, Charney DS: Effects of mazindol on cocaine craving and abuse in a cocaine-abusing schizophrenic patient. *Biological Psychiatry* 1992;31:1179-1180
6. Brenner LM, Karper LP, Krystal JH: Short-term use of disulfiram with clozapine. *J Clin Psychopharmacology* 1994;14(3):213-5
7. D'Souza DC, Bennett A, Abi-Dargham A, Krystal JH: Precipitation of a psychoneuromotor syndrome by fluoxetine in a haloperidol treated schizophrenic patient. *J Clin Psychopharmacology* 1994;14:361-362
8. Hillbrand M, Young JL, Krystal JH. Anticonvulsant discontinuation and the reemergence of violence in a neurologically-compromised patient. *J Neuropsychiatry Clin Neurosci* 1995;7(1):116-117
9. Sierra M, Phillips ML, Lambert M, Senior C, Krystal J, David AS. Lamotrigine in the treatment of depersonalisation disorder: Report of four cases. *J Clin Psychiatry* 2001 62(10):826-7
10. Coric V, Wasylink S, Milanovic S, Malison R, Krystal JH. Beneficial Effects of the antiglutamatergic Agent, riluzole in a patient diagnosed with obsessive-compulsive disorder and major depressive disorder. *Psychopharmacology* 2003;167(2):219-20
11. Sanacora G, Kendell SF, Fenton L, Coric V, Krystal JH. Riluzole augmentation for treatment-resistant depression. *Am J Psychiatry*. 2004;161(11):2132
12. Pittenger C, Naungayan C, Kendell S, Coric V, Malison R, Krystal JH, Sanacora GS. Visual hallucinations from the addition of riluzole to memantine and bupropion. *J Clin Psychopharmacology* 2006;26(2):218-20
13. Lafleur DL, Pittenger C, Kelmendi B, Gardner T, Wasylink S, Malison RT, Sanacora G, Krystal JH, Coric V. N-acetylcysteine augmentation in serotonin uptake inhibitor refractor obsessive-compulsive disorder. *Psychopharmacology* 2006;184(2):254-6

14. Pittenger C, Krystal JH, Coric V. Initial evidence of the beneficial effect of glutamatergic agents for self-injurious behavior in patients with borderline personality disorder. *J Clin Psychiatry* 2005;66(11):1492-1493

15. Sasso DA, Kalanithi PSA, Trueblood KV, Pittenger C, Kelmendi B, Wayslink S, Malison RT, Krystal JH, Coric V. Beneficial effects of the glutamate modulating agent riluzole on disordered eating and pathological skin picking behaviors. *J Clin Psychopharmacology* 2006;26(6):685-687

16. Corlett PR, D'Souza DC, Krystal JH. Capgras Syndrome Induced by Ketamine in a Healthy Subject. *Biol Psychiatry*. 2010;68(1):e1-2. PubMed PMID:20385373.

Miscellaneous (Book Reviews, Letters to Editors, etc.):

1. Krystal JH, Arnold RW: Book Review: Psychopharmacology of clonidine, *Yale J Biol Med* 1982;55:543-44.

2. Fassler D, Krystal J: The role of medical student societies in psychiatric recruitment, Letter. *Am J Psychiatry* 1983;140:654.

3. Krystal JH: Book Review: The natural history of alcoholism: Causes, patterns, and paths to recovery. *Yale J Biol Med* 1984;56:339-40.

4. Krystal JH: Book Review: Physiology of adrenocortical secretion. *Yale J Biol Med* 1984;57:247.

5. Krystal JH: Book Review: Ethopharmacology: Primate models of neuropsychiatric disorders. *Yale J Biol Med* 1984;57:248-50.

6. Krystal JH: Book Review: Anorexia nervosa: Recent developments in research. *Yale J Biol Med* 1984; 57:442-43.

7. Krystal JH: Book Review: Monoamine innervation of the cerebral cortex. *Yale J Biol Med* 1985;58:58-59.

8. Krystal JH: Book Review: Behavioral pharmacology: The current status. *Yale J Biol Med* 1985;58:197-98.

9. Krystal JH: Book Review: The psychopharmacology of lithium. *Yale J Biol Med* 1986;59:74-75.

10. Krystal JH Book Review: Position emission tomography and autoradiography: applications to the brain and heart. *Yale J Biol Med* 1987;60:202.

11. Krystal JH: Book Review: Quantitative autoradiography. *Yale J Biol Med*

1987;60:294-95.

12. Krystal JH: Diagnostic research: Advances in psychiatry's first frontier. *Contemporary Psychiatry* 1987; 6:244-45.
13. Krystal JH: Are we losing psychiatric researchers in the residency? *Psychiatric Research Report* 1987; 2(4):4.
14. Krystal JH: The preparation of basic researchers in psychiatry: An issue central to psychiatry's progress. *Psychiatric Research Report* 1988; 3(1):4.
15. Krystal JH: Minorities and research: Issues in career development. *Psychiatric Residents Newsletter* 1988; 7(1):6.
16. Krystal JH: Book Review: Neural plasticity: A life span approach. *Yale J Biol Med.* 1988; 61:478-479.
17. Krystal JH: Research training for the late bloomer. *Psychiatric Research Report* 1988; 3(2):10.
18. Krystal JH: Comments on "Trauma and its Ramifications in Vietnamese Victims of Piracy." Letter. *Jeff. J.Psychiatry* , 1988; 6:79-80.
19. Krystal JH, Walker M, Heninger GR: Intermittent naloxone decreases the development of physical dependence on methadone in Rhesus monkeys. *Yale Psychiatr Quarterly* 1988; 10:13.
20. Kosten TR, Krystal JH, Charney DS, Price LH, Morgan C, Kleber HD: Rapid detoxification from opioid dependence. Letter. *Am J Psychiatry* 1989; 146:1349.
21. Krystal JH: Book Review: Psychopharmacology: The third generation of progress. *Yale J Biol Med.* 1989; 62:554-555.
22. Seibyl JP, Krystal JH, Charney DS: Question the Experts: Impact of marijuana use on panic disorder. *J Clin Psychopharmacology* 1990;10:78.
23. Price LH, Krystal JH, Heninger GR, Ricaurte GA: Response to "Second Thoughts on 3,4-methylenedioxymethamphetamine (MDMA) neurotoxicity." Letter. *Arch Gen Psychiatry* 1990; 47:288-289.
24. Kosten TR, Krystal JH: Drs. Kosten and Krystal Reply (rapid detoxification letter) *Am J. Psychiatry* 1990; 147:953.
25. Krystal J, Leaf P, Bruce M, Charney DS: Age and alcoholism effects on the prevalence of panic disorder. *Psychiatry Digest* in press.

26. Krystal JH, McDougle CJ, Woods SW, Price LH, Heninger GR, Charney DS: Dose-response relationship for oral idazoxan effects in healthy subjects: comparison with oral yohimbine. *Pharmacy Digest* in press.
27. Krystal JH: Book Review: Trauma and the Vietnam war generation. *Yale J Biol Med* 1992; 65:543-544
28. Krystal JH: Book Review: Novel antipsychotic drugs. *Yale J Biol Med* 1992; 65:539-540
29. Krystal JH: Book Review: Stress, the aging brain, and mechanisms of neuron death. *Yale J Biol Med* in press.
30. D'Souza DC, Krystal JH: Book Review: Perturbing the Organism. The Biologicalology of stressful experience. *J Nerv Ment Dis* 1994; 182:126
31. Krystal JH, Southwick SM, Charney DS: Alcohol dependence maybe the missing link between posttraumatic stress disorder and panic. *Arch Gen Psychiatry* 1994; 51:430
32. Hillbrand M, Krystal JH, Sharpe KS, Foster HG. Clinical predictors of self-mutilation in hospitalized forensic patients. *Southwest Quart Rev* 1994; 2:10
33. Southwick SM, Krystal JH, Charney DS: Relationship of panic disorder to posttraumatic stress disorder. *Arch Gen Psychiatry* 1995; 52:77-78
34. Krystal JH, Petrakis IL. Dextromethorphan challenge in alcohol dependent patients and controls-reply. *Arch Gen Psychiatry* 2000;57:292
35. Krystal JH: Book Review: Psychopharmacology: The Fourth Generation of Progress. *Yale J Biol Med* in press
36. Krystal JH: Book Review: Excitatory Amino Acids: Clinical Results with Antagonists. *Yale J Biol Med* in press
37. Krystal JH, D'Souza DC, Madonick S, Petrakis IL. Commentary on the rational therapy of substance abuse among schizophrenic patients. Swedish Compendium of Psychosis and Schizophrenia. 1999; in press
38. Krystal JH, D'Souza DC, Belger A, Anand A, Charney DS, Aghajanian GK, Moghaddam B. Therapeutic implications of the hyperglutamatergic effects of NMDA antagonists. Presented in *Current Awareness in Biomedicine: Transmitters, Receptors, and Synapses*. Sheffield Press, Sheffield: UK
39. Anand A, Moghaddam B, Krystal JH. Effects of NMDAR antagonists: implications for schizophrenia-reply. *Arch Gen Psychiatry* 2002;59:663-664

40. Krystal JH, D'Souza DC. Comment on "ketamine has equal affinity for NMDA receptors and the high-affinity state of the dopamine D₂ receptor." *Biological Psychiatry* 2001; 50(7):555
41. Mathalon DH, Rapoport JL, Davis KL, Krystal JH. Neurotoxicity, neuroplasticity, and magnetic resonance imaging morphometry: a response to Weinberger and McClure. *Arch Gen Psychiatry* 2003;60:846-848
42. Goddard AW, Mason GF, Rothman DL, Behar KL, Petroff OAC, Krystal JH. Family psychopathology and magnitude of reductions in occipital cortex GABA levels in panic disorder. *Neuropsychopharmacology* 2004;29:639-640
43. Kaufman J, Massey J, Krystal J, Gelernter J. BDNF, serotonin transporter and depression: response to Kalueff and Colleagues: Reply. *Biol Psychiatry* 2006; epub
44. Working Group to Inform Research (including J. Krystal) *Mapping the Landscape of Deployment-Related Adjustmenet and Mental Disorders*. Convened by the Department of Veterans Affairs Office of Research and Development, National Institute of Mental Health, and U.S. Army Medical Research and Material Command, Rockville, MD, May 17-18, 2006
45. Task Force on Industry Publications (including J. Krystal), American College of Neuropsychopharmacology, 2008; epub
46. Southwick S, Friedman M, Krystal J. Does psychoeducation help prevent post traumatic psychological stress disorder? In Reply. *Psychiatry* 2008;71(4):303-307
47. Insel T, Krystal J, Ehlers M. New drug development for cognitive enhancement in mental health: challenges and opportunities. *Neuropharmacology*. 2013 Jan;64:2-7. PubMed PMID: 23145450.
48. Krystal JH, O'Malley SS. From Translational Neuroscience to Personalized Medicine. *Alcohol Clin Exp Res*. 2015 Feb 6. doi: 10.1111/acer.12667. [Epub ahead of print] PubMed PMID: 25656652.
49. Pietrzak RH, Averill LA, Abadallah CG, Neumeister A, Krystal JH, Levy I, Harpaz-Rotem I. Amygdala-hippocampal volume and phenotypic heterogeneity of posttraumatic stress disorder: a cross sectional study. (research letter) *JAMA Psychiatry* Published online February 18, 2015. doi:10.1001/jamapsychiatry.2014.2470.

John Krystal
July 2, 2015