

CURRICULUM VITAE

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Associate Professor in Residence,
Department of Psychiatry and Human Behavior
Clinical Director, UCI Brain Imaging Center

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EDUCATION

Fellowship: Silver Light PET brain scan fellowship, University of California, Irvine, 1988
Residency: University of California, Irvine (Psychiatry), 1986
Graduate: M.D., University of California, Irvine, 1982
Undergraduate: B.S., Stanford University (Biology), 1978.

MEDICAL LICENSURE: G51572, State of California

BOARD CERTIFICATION: Diplomate in Psychiatry, No. 31296

ACADEMIC APPOINTMENTS:

Associate in residence professor University of California, Irvine 1987-present.
Clinical Director, UCI Brain Imaging Center

PROFESSIONAL ACTIVITY

Awards and honors:

Values, Technology, and Society Program (1978)
Sandoz Psychiatry Award (1982)
Alumni Service Award (1982)
Dean's Research Resident Fellowship (1984-85)
Association for Academic Psychiatry Honorary Fellow (1985)
Senior Resident Research Award (1986)
NARSAD Young Investigator Award (1990-1992)
Taiwan Biological Psychiatry Society Distinguished Invited Lecturer (1991)
Peking Union Medical College "Dr. Morgan Lu Distinguished Invited Lecturer" (1994)
California Alliance for Minority Participation Academic Excellence Mentorship (1998)
American Psychiatry Association Fellow (2001)

Grants and Research Awards

Co-investigator on National Institute of Drug Abuse grant on Human Imaging Studies of Nicotine Dependence and Withdrawal for \$2,580,899 for 1999-2004.

Principal investigator on National Institute of Health RO1 grant on Positron emission tomography study of sleep deprivation in affective illness (RO1 MH 42955, \$1,396,428 direct and indirect costs for six year period beginning July 1, 1988, 50 % effort).

Principal investigator on grant from National Alliance for Research in Schizophrenia and Affective Disease (NARSAD) for Functional Imaging Study of Sleep Deprivation in Depression for \$60,000 over four years from July 1, 1990 to June 30, 1994.

Co-principal investigator on Center for Neuroscience for Schizophrenia with William E. Bunney, Jr., M.D., principal investigator for \$270,000 from July 1, 1989 to February 28, 1994 from NIH.

Principal investigator for Fidia Pharmaceutical "PET Alzheimer Study" contract for \$443,900 from 5/1/90 through June 30, 1993.

PET co-principal investigator with Stephen Potkin's "Treatment Resistant Schizophrenia: PET and EEG Studies" from April 1, 1990 through 3/31/94 for \$ 686,044 from NIH.

PET co-principal investigator with Stephen Potkin's "MAR 327 treatment study of schizophrenia" from November 1, 1993 through April 30, 1995 for \$282,033 from Sandoz Pharmaceuticals.

PET co-principal investigator with "ENA treatment study of Alzheimer's Disease" from Sandoz Pharmaceuticals from July 1, 1995 to June 30, 1996 for \$180,000.

PET co-principal investigator with "MAZ treatment study of schizophrenia" from Sandoz Pharmaceuticals from July 1, 1995 to June 30, 1996 for \$70,000.

PET co-principal investigator with Michael Cohen for "PET study of spinal cord injury" with \$30,000 from March 1, 1995 to December 1, 1997 from VALS (Veterans Assistance League) group.

PET co-principal investigator with Francis Leslie for "Transdisciplinary Tobacco Use Research Center" from National Institute of Health from 9/1/98 to 8/31/00 for \$325,922. Continued 9/1/03 to 8/31/04 for #353,056.

PET co-principal investigator with Daniel Cooper for General Clinical Research Center (GCRC)

PET co-principal investigator with Dr. Stephen Potkin on "A PET Scan, Neurocognitive, and Health Consequences Study of Subjects Treated with Quetiapine (Seroquel®) Versus Those Treated with Olanzapine (Zyprexa®)" from Astra Zeneca for 8/25/03-12/25/03 for \$453,290.

PET co-principal investigator with Dr. Stephen Potkin on "A Randomized, Double-Blind, Parallel-Group Study to Evaluate the Brain Metabolic and Cognitive Effects of Exelon(Rivastigmine) in Patients with Schizophrenia and Related Disorders" from Novartis for 8/27/02-12/31/04 for \$134,144.

PET co-principal investigator with Dr. Stephen Potkin on "A Randomized, Parallel-Group Pilot Study to Evaluate the Brain Effects and Efficacy of Exelon® Compared to Aricept® in Patients with Alzheimer's Disease" from Novartis from 10/16/02-10/15/04 for \$199,968.

PET co-principal investigator with Dr. Stephen Potkin on "A 52-week, prospective, randomized, double-blind, multi-center study of relapse following transition from oral antipsychotic medication to two different doses (25 or 50 mg given every two weeks) of risperidone long-acting microspheres (Risperdal Consta™) in adults with schizophrenia or schizoaffective disorder (Clinical Protocol RIS-SCH-401)" from Janssen from 2/17/03-8/17/04 for \$141,997.

Principal investigator on "Chronobiological acceleration package (sleep deprivation/phase advance plus bright light therapy) for psychopharmacological antidepressant treatment for bipolar depression" from Stanley Foundation from 1/24/03 to 1/25/05 for \$499,900.

Invited presentations:

1. PET studies of PCP abusers as a drug model for schizophrenia. Fourteenth International Symposium of the Taniguchi Foundation. Biological Basis of Schizophrenic Disorders. Katata, Japan. Sep 5-Sep 8, 1990.

2. PET scanning in depression and psychosis. Psychiatric research presentation. Institute of Psychiatric Research, Psychiatry Dept. Indiana University. Apr 11, 1991.
3. Basic principle and clinical application of PET in psychiatry. Kaohsiung University Psychiatry Dept. Grand Rounds, Kaohsiung, Taiwan. Apr 15, 1991.
4. Sleep deprivation in depression. Tainan University Psychiatric Grand Rounds, Tainan, Taiwan. Apr. 16, 1991.
5. Acoustic startle response in schizophrenia. Taichung Medical College Psychiatry Dept. Grand Rounds. Taichung, Taiwan. Apr 17, 1991.
6. Magnetic resonance imaging studies in depression. National Cheng Kung University Medical Center Psychiatry Dept. Grand Rounds. Taipei, Taiwan. April 18, 1991.
7. Brain imaging studies of sleep deprivation in depressed patients. National Alliance for Research on Schizophrenia and Depression (NARSAD) Scientific Symposium, Madison Hotel, Washington, D.C. Sep 27-28, 1991.
8. Positron emission tomographic studies in depression. Invited lecture, Grand Rounds, Yale University. July 28, 1992.
9. Evaluating brain damage for the courtroom with positron emission tomography. Orange County Trial Lawyers Association Symposium. April 26, 1993, Santa Ana, CA.
10. FDOPA and dopamine abnormalities in mental illness. Invited lecture, Doctor's Symposium. Sixth Annual Lockhart Symposium. June 7, 1993, Irvine, California.
11. Mental disorders as viewed through Positron Emission Tomography. American Psychological Society Fifth Annual Convention Presidential Symposium. June 26, 1993, Chicago, Illinois.
12. Positron emission tomographic studies in psychiatry and neurology. "Dr. Morgan Lu Distinguished Invited lecturer". Peking Union Medical College. March 23-24, 1994.
13. FDG findings in stutterers. Seventh annual Lockhart symposium on mental illness and brain imaging. June 12, 1994.
14. FDOPA PET scan abnormalities in schizophrenia. Eighth annual Lockhart symposium on mental illness and brain imaging. June 10, 1995.
15. Regional brain metabolic correlates of sleep deprivation. Third International

Conference on Refractory Depression. Oct 18-21, 1995, Napa Valley, CA.

16. Decreased fdopa uptake in right putamen in PET study of cocaine addicts during acute withdrawal. Society for Neuroscience 25th Annual Meeting,, November 11-16, 1995, San Diego, California.

17. PET scan study of stuttering during choral reading. American Speech and Hearing Association (ASHA) convention. December 8, 1995, Orlando, Florida.

18. Regional brain metabolism in stuttering. 3rd Nijmegen Conference on Speech Motor Behaviour and Stuttering. June 5-8, 1996. Nijmegen, The Netherlands.

19. Update on and new knowledge in brain imaging studies in psychiatric diagnoses and treatment, California Psychiatric Association, 9th annual California Premier conference, October 11-13, 1996, Rancho Mirage, California.

20. Regional cerebral glucose metabolic studies of REM and NREM sleep in normal controls and depressed subjects as assessed by positron emission tomography. III Pan-Pacific Conference on Brain Topography, April 1-4, 1997, Tokyo, Japan.

21. Brain imaging and cocaine addiction. 1997 UCI College of Medicine Homecoming Reunion Weekend CME course presentation. October 17, 1997, Irvine, California.

22. A clinician's guide to the functional brain mapping. American Psychiatric Association annual meeting. May 19, 1999, Washington, D.C.

23. Positron emission tomography (PET) scan study of stuttering, cocaine abuse and schizophrenia. St. Joseph Hospital Behavioral Sciences Departmental Lecture. April 9, 1999, Orange, California.

24. Depressed moods and what brain areas are associated as studied by PET scans. UCI University Club lecture. February 17, 2000, Irvine, California.

25. Does sleep play a role in emotional recovery? Insights from the bedside to the neuroimaging laboratory. Association of Professional Sleep Societies. June 22, 2000, Las Vegas, Nevada.

26. National Alliance of Mentally Ill, PET scan studies of depression and schizophrenia, August 12, 2000, Santa Ana, CA

27. Texas Brain Injury Society, PET scan studies of brain injury, 3/15/2002, Houston, Texas

28. Closed head trauma lecture, 6/25/02, Santa Clara

29. Florida Public Defenders Annual Meeting, PET scan studies of brain injury and psychiatric illness, 9/13/02 Fort Lauderdale, Florida

30. Opening the Mind: The use of brain SPECT imaging in clinical practice, lecture to 200 psychologists, organized by the Amen Clinic, 5/3/03, Newport Beach, CA
31. Invited lecture on PET scan of traumatic brain injury to annual meeting of North American Brain Injury Society meeting, September 2003
32. PET scan and brain injury. Traumatic Brain Injury LG group. April 20, 2007, Treasure Island Hotel, Las Vegas, NV
33. Neuroscience and the Law: Brain Imaging to 2007 Appellate Judicial Attorneys Institute, November 8, 2007, Pacific Palms Conference Resort Hotel, City of Industry, CA.
34. Traumatic brain injury cases- Neurodiagnostic imaging. American Association of Justice. January 26-30, 2008, El Conquistador Resort and Golden Door, San Juan, Puerto Rico.

Presentations at professional meetings:

1. "Simultaneous PET scan and EEG topography" in Society for Neuroscience 13th Annual Meeting, 1983.
2. "PET in schizophrenia and affective illness" in Society for Neuroscience 13th Annual Meeting Abstracts, 1983.
3. "PET study of occipital and somatosensory lobe glucose metabolism in normal subjects receiving photic stimuli versus somatosensory stimuli" in Society for Neuroscience 14th Annual Meeting, 1984.
4. "Cortical and subcortical metabolic correlates of affective illness using positron emission tomography" in Society for Neuroscience 15th Annual Meeting, 1985.
5. "Acute effects of antidepressants on cerebral glucose metabolism in depression assessed by PET" in Neuroscience 16th Annual Meeting, 1986.
6. "Comparison of regional cerebral metabolic rates for bulimics vs. normal controls" in Society for Neurosciences 17th Annual Meeting, 1987.
7. "Cerebral glucose metabolic study of generalized anxiety disorder as assessed by PET" in Society for Neurosciences 18th Annual Meeting, 1988.
8. "Regional cerebral metabolism of REM and nonREM human sleep as assessed by PET" in Society for Neurosciences 18th Annual Meeting, 1988.
9. "PET study of bulimic normal differences" in American Psychiatric Association 141st Annual Meeting New Research Presentations, 1988.
10. "Greater left cerebral hemispheric metabolism in bulimic patients as

assessed by positron emission tomography." XVIth C.I.N.P. Congress, Munich. Aug 15-19, 1988.

11. "PET scan study of patients on phencyclidine" in Society for Neuroscience 19th Annual Meeting, 1989.

12. "Dream phenomenological correlations with regional cerebral glucose metabolism" in Association of Professional Sleep Societies Third Annual Meeting, 1989.

13. "Positron emission tomography correlates of response to sleep deprivation." in American Psychiatric Association Presentation 143rd meeting , May 4, 1990, New York.

14 "Positron emission studies of sleep deprivation in depression" in Collegium Internationale Neuro-Psychopharmacologicum (CINP) Congress 17th meeting, Kyoto, Japan. Sep 10-14, 1990.

15. "Positron emission tomographic evidence for brain metabolic similarities between PCP users and schizophrenics" in American College of Neuropsychopharmacology (ACNP) 29th Annual Meeting. Caribe Hilton, San Juan, Puerto Rico. Dec 10 -Dec 14, 1990.

16. "Positron emission tomography studies of phencyclidine abuse" in Winter Conference on Brain Research (WCBR) 24th Annual Meeting. Vail, Colorado. Jan 26-Feb 2, 1991.

17. "Positron emission tomography study of phencyclidine users" in International Congress on Schizophrenia Research. The Westin, La Paloma. Tucson, Arizona. Apr 21-25, 1991.

18. "PET studies of PCP abusers" American Psychiatric Association (APA) 144th Annual Meeting, New Orleans, Louisiana. May 11-16, 1991.

19. "Brain imaging and sleep deprivation" in World Federation of Societies of Biological Psychiatry, Fifth World Congress, June 9-14, 1991. Florence, Italy.

20. "PET study of sleep deprivation in unipolar depression. World Federation of Sleep Research Societies, Sep 21-25, 1991, Cannes, France.

21. "Brain imaging studies of sleep deprivation in depressed patients" in National Alliance for Research on Schizophrenia and Depression Scientific Symposium, Sep 27-28, 1991, Washington, D.C.

22. "Elevated cingulate cortex metabolism in subtype of depression that responds to sleep deprivation" in Association of Professional Sleep Societies 6th Annual Meeting. Phoenix, Arizona. May 29-June 3, 1992.

23. "Functional aspects of multiple subtypes of GABAA Receptors as assessed by positron emission tomography" in 26th Winter Conference on Brain Research. January 30, 1993, Whistler BC, Canada.
24. "Changes in cerebral glucose uptake during stuttering" in American Speech and Hearing Association meeting, November 11, 1994, New Orleans, Louisiana.
25. "FDOPA PET Study of Dopamine Function in schizophrenia." in 148th American Psychiatric Association 148th annual meeting. May 20-25, 1995, Miami, Florida.
26. "Decreased FDOPA uptake in right putamen in PET study of cocaine addicts during Acute withdrawal" in Society for Neuroscience 25th annual meeting, November 11-16, 1995, San Diego, California.
27. "Recovery of striatal FDOPA uptake in cocaine addicts during late recovery". Society of Biological Psychiatry Annual Meeting, May 1997, San Diego, California.
28. "FDG PET scan study of traumatic brain injury and correlation with performance on Frontal lobe task (wisconsin card sort)", Society of Neuroscience, November 1998, Los Angeles, California.
29. "FDG PET: a sensitive quantitative measure of Alzheimer's disease progression and brain metabolic effects of ENA", Society of Neuroscience, November 1998, Los Angeles, California.
30. "PET scan studies of Parkinson's disease in the on and off state". Society of Neuroscience, October 1999, Miami Beach, Florida.
31. "PET scan study of treatment of stuttering with risperidal". Collegium Internationale Neuropsychopharmacologicum. July 2000, Brussels, Belgium.
32. Winter conference on brain research, February 1, 2002, Aspen, Colorado, "PET scan studies of nicotine addiction"
33. Winter conference on brain research, February 1, 2002, Aspen, Colorado, "PET scan studies of nicotine addiction"
34. West Coast College of Biological Psychiatry, April 19, 2002, "PET scan studies of depression"
35. American Academy of Psychiatry and Law, October 26, 2002 (Newport Beach, CA), "PET scan studies in the assessment of neuropsychiatric conditions in forensic settings".
36. Second International Workshop on Sleep Deprivation and Chronobiology of Depression, Milan, Italy, January 30-31, 2003

37. Utah Brain Injury Association Meeting, March 17, 2003, "PET scan studies of brain injury"
38. 2005 International Whiplash Trauma Congress, Breckenridge, Colorado, "PET scan studies of brain injury".
39. Seventy-second symposium: Clocks and Rhythms. "Chronotherapeutic augmentation of antidepressant treatment can enhance rapidity and magnitude of response", May 30, 2007, Cold Spring Harbor Laboratory, New York.

Reviewer

1. Biological Psychiatry
2. American Journal of Psychiatry
3. Psychiatry Research
4. Nature
5. National Institute of Health (NIH) Mental Health Centers for Intervention and Applied Research (CIDAR) reviewer (October 2006 and October 2007), Bethesda, Maryland

Memberships in societies

American Medical Association
American Psychiatric Association
American Association for the Advancement of Science
Society of Neuroscience
Charter member of West Coast College of Biological Psychiatry
Association of Professional Sleep Societies
Society of Nuclear Medicine
Society of Biological Psychiatry

UNIVERSITY AND PUBLIC SERVICE

Campus

Member of academic senate

School- College of Medicine:

College of Medicine Representative Assembly Member through 1997
Committee on Educational Policy (CEP) 1999-present
Institutional Review Board committee member, 1999-present

Department of Psychiatry and Human Behavior

Lecturer, neuroscience course clinical correlates, for first year medical students, 2000.

Coordinator and primary lecturer for year long weekly seminar on neuroscience for the psychiatrist and research methodology. This course is required for the first year residents in psychiatry. 1983-1991.

Lecturer for weekly seminar on neuroanatomy, neurochemistry and research methodology for PGY I and PGY II core curriculum, 1992- 2007.

Research advisor for 199 undergraduate student research elective. I have been active as an advisor to twelve students for the last two years. Over half have been awarded excellence in research. Three of these students have gone on to medical school.

Resident supervisor to help with advising residents about research options and to give feedback and support to residents.

Member, Brain Imaging Center Departmental Business Committee, 1995-1996

Community:

Volunteer attending physician at Share Our Selves Free Medical Clinic in Costa Mesa

Board member of Brain Imaging Center Community Fundraising Committee

Presentation to Regents Point on "Brain Imaging and Mental Illness", April 25, 1996

PUBLICATIONS

Book chapters, peer reviewed

1. Wu, J.C., Riley, G., Maguire, G., Nafai, A., Tang, C. PET scan evidence of parallel cerebral systems related to treatment effects: FDG and FDOPA PET scan findings. In *Speech Production: Motor Control, Brain Research and Fluency Disorders*. Editors: Hulstijn, W., Peters, H.F.M., van Lieshout, P.H.H.M. Elsevier, 1997, New York.
2. Maguire, G.A., Riley, G.D., Wu, J.C., Franklin, D.L., Potkin, S. PET scan evidence of parallel cerebral systems related to treatment effects: effects of risperidone in the treatment of stuttering. In *Speech Production: Motor Control, Brain Research and Fluency Disorders*. Editors: Hulstijn, W., Peters, H.F.M., van Lieshout, P.H.H.M. Elsevier, 1997, New York.
3. Riley, G.D., Wu, J.C., Maguire, G. PET scan evidence of parallel cerebral systems related to treatment effects. in *Speech Production: Motor Control, Brain Research and Fluency Disorders*. Editors: Hulstijn, W., Peters, H.F.M., van Lieshout, P.H.H.M. Elsevier, 1997, New York.
4. Wu, J.C., Amen, D.G., Bracha, H.S. Neuroimaging in Clinical Practice. In *Kaplan & Sadock's Comprehensive Textbook of Psychiatry (Seventh edition)*. Editors: Sadock, B.I., Sadock, V.A. Lippincott, Williams & Wilkins, 2000, New York.
5. Gillin, J.C., Buchsbaum, M.S., Wu, J.C., Hong, C., Gottschalk, L., Clark, C., Bunney, W.E. Drummond, S., Brown, G.G. Functional brain imaging during sleep and sleep deprivation in health and disease. In *Pathogenesis, Diagnosis, and Treatment of Sleep Apnea*. Editor: Allan I. Pack, M.D., Ph.D., Publisher: Marcel Decker, in press, New York) 2002.
5. Wu J.C., Buchsbaum M., Bunney W., Gillin J.C. Antidepressant effects (of sleep deprivation). In *Sleep Deprivation: basic science, physiology and behavior*. Editor: Clete Anthony Kushida. (Informa Health Care, 2005, ISBN: 0824759494).
6. Wu JC, Bunney BG, Potkin SG. Sleep deprivation as an antidepressant. In *Sleep and Psychosomatic Medicine*. 2007. Editors: S.R. Pandi-Perumal, Rocco R. Ruoti & Milton Kramer. ISBN: 978-041539499- , Publisher : Informa Helath Care

Journal articles peer reviewed

1. Buchsbaum, M.S., Hazlett, E., Sicotte, N., Stein, M., Wu, J., Zetin, M. Topographic EEG changes with benzodiazepine administration in generalized anxiety disorder. *Biol Psychiatry*, 20: 832-842, 1985.
2. Buchsbaum, M.S., Wu, J., DeLisi, L.E., Holcomb, H., Kessler, R., Johnson, J., King, A.C., Hazlett, E., Langston, K., Post, R.M. Frontal cortex and basal ganglia metabolic rates assessed by positron emission tomography with ^{18}F -2-deoxyglucose in affective illness. *Jour of Affective Disorders*, 10:137-152, 1986.

3. Buchsbaum, M.S., Tang, S.W., Wu, J.C., Hazlett, E., Donoghue, D.E., Higa, J., Haier, R. Effects of amoxapine and imipramine on cerebral glucose metabolism assessed by positron emission tomography. *Jour of Clinical Psychiatry*, 4:14-17, 1986.
4. Buchsbaum M.S., Wu, J. Haier, R., Hazlett, E., Ball, R., Katz, M, Sokolski, K., Lagunas-Solar, M., Langer, D. Positron emission tomography assessment of effects of benzodiazepines on regional cerebral glucose metabolic rate in patients with anxiety disorder. *Life Sciences*, 40:2393-2400, 1987.
5. Buchsbaum, M.S., Wu, J.C., DeLisi, L.E., Holcomb, H., Hazlett, E., Cooper-Langston, K., Kessler, R. Positron emission tomography studies of basal ganglia and somatosensory cortex neuroleptic drug effects: Differences between normal controls and schizophrenic patients. *Biol. Psychiatry*, 22:479-494, 1987.
6. Haier, R.J., Siegel, B.V., Neuchterlein, K.H., Hazlett, E., Wu, J.C., Paek, J., Browning, H., Buchsbaum, M.S. Cortical metabolic rate correlates of abstract reasoning and attention studied with positron emission tomography. *Intelligence*, 12:199-217, 1988.
7. Heh, C.W., Smith, R., Wu, J.C., Hazlett, E., Russell, A., Asarnow, R., Tanguay, P., Buchsbaum, M. Positron emission tomography of the cerebellum in autism. *Am J Psychiatry*, 146:242-245, 1989.
8. Buchsbaum, M.S., Nuechterlein, Haier, R., Wu, J., Sicotte, N., Hazlett, E., Asarnow, R., Potkin, S., Guich, S. Glucose metabolic rate in normals and schizophrenics during the continuous performance test assessed by positron emission tomography. *Brit J.Psychiatry*, 156:216-227, 1990.
9. Wu, J.C., Siegel, B.V., Haier, R., Buchsbaum, M.S. Testing the Swerdlow/Koob model of schizophrenia pathophysiology using positron emission tomography. *Behavioral and Brain Sciences*, 13:169-170, 1990.
10. Wu, J.C., Hagman, J., Buchsbaum, M.S., Blinder, B., Derrfler, M., Tai, W.Y., Hazlett, E., Sicotte, N. Greater left cerebral hemisphere in bulimia assessed by positron emission tomography. *Am J. Psychiatry*, 147:309-312, 1990.
11. Buchsbaum, M.S., Gillin, J.C., Wu, J.C., Hazlett, E., Sicotte, N., Dupont, R.M., Bunney, W.E. Regional cerebral glucose metabolic rate in human sleep assessed by positron emission tomography. *Life Science*, 45:1345-1356, 1989.
12. Wu, J.C., Bunney, W.E. Sleep deprivation and relapse (Biological Basis: Review and Hypothesis). *Am J. Psychiatry*, 147:14-21, 1990.
13. Guich, S.M., Buchsbaum, M.S., Burgwald, L., Wu, J., Haier, R., Asarnow, R., Nuechterlein, K., Potkin, S. Effect of attention on frontal distribution of delta activity and cerebral metabolic rate in schizophrenia. *Schizophrenia Research*, 2:439-448, 1989.

14. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Hershey, T., Hazlett, E., Sicotte, N., Bunney, W.E. The effect of sleep deprivation on cerebral glucose metabolic rate in normal humans assessed with positron emission tomography. *Sleep*, 14:155-162, 1991.
15. Wu, J.C., Buchsbaum, M.S., Hershey, T., Hazlett, E., Sicotte, N. Positron emission tomography study of generalized anxiety disorder. *Biol Psychiatry*, 29:1181-1199, 1991.
16. DeMet E.M., Reist, C., Bell, K. Gerner R.H., Chicz-DeMet, A., Warren, S., Wu, J.C. Decreased seasonal mesor of platelet ³H-imipramine binding in depression. *Biol Psychiatry*, 29:427-440, 1991.
17. Gottschalk, L.A., Buchsbaum, M.S., Gillin, J.C., Wu, J., Reynolds, C.A., Herrera, D.B. Positron emission tomographic studies of the relationship of cerebral glucose metabolism and the magnitude of anxiety and hostility experienced during dreaming and waking. *Journal of Neuropsychiatry*, 3:131-142, 1991.
18. Hagman, J.O., Buchsbaum, M.S., Wu, J.C., Rao, S.J., Reynolds, C.A. Blinder, B.J. Comparison of regional brain metabolism in bulimia nervosa and affective disorder assessed with positron emission tomography. *Jour Affective Disorder*, 19:153-162, 1990.
19. Gottschalk, L.A., Buchsbaum, M.S., Gillin, J.C., Wu J., Reynolds, C.A., Herrera, D.B. Anxiety levels in dreams: Relation to localized cerebral glucose metabolic rate. *Brain Research*, 538:107-110, 1991.
20. Buchsbaum, M.S., Kesslak, J.P., Lynch, G., Chui, H., Wu, J., Sicotte N., Hazlett, E., Cotman, C.W. Temporal and hippocampal metabolic rate during an olfactory memory task assessed by positron emission tomography in patients with dementia of the alzheimer type and controls. *Arch Gen Psychiatry*, 48:840-847, 1991.
21. Wu, J.C., Gillin, J.C., Buchsbaum, M., Hershey, T., Reynolds, C., Bunney, W.E. Effect of sleep deprivation on brain metabolism of depressed patients. *Am J Psychiatry*, 149:538-543, 1992.
22. Gottschalk, L.A., Buchsbaum, M.S., Gillin, J.C., Wu, J.C., Reynolds, C.A., Herrera, D.B. The effect of anxiety and hostility in silent mentation on localized cerebral glucose metabolism. *Comp Psych* 33:52-59, 1992.
23. Buchsbaum, M.S., Siegel, B.V., Wu, J.C., Hazlett, E., Sicotte, N., Haier, R., Tanguay, P., Asarnow, R., Cadorette, T., Donoghue, D., Lagunas-Solar, M., Lott, I., Paek, J., Sabalesky. Brief report: Attention performance in autism and regional brain metabolic rate assessed by positron emission tomography. *Jour Autism and Dev Disorders* 22:115-125, 1992.

24. Buchsbaum, M.S., Haier, R.J., Potkin, S.G., Nuechterlein, K., Bracha, S., Katz, M., Lohr, J., Wu, J.C., Lottenberg, S., Jerabek, P.A., Trenary, M., Tafalla, R., Reynolds, C., Bunney, W.E. Frontal striatal disorder of cerebral metabolism in never-medicated schizophrenics. *Archives of General Psychiatry*, 49:935-42, 1992.
25. Sandman, C.A., Vigor-Zierk, C.S., Isenhardt, R., Wu, J.C., Zetin, M. Cardiovascular phase relationships to the cortical event-related potential of schizophrenic, depressed, and normal subjects. *Biological Psychiatry*, 32(9):778-89, 1992.
26. Wu, J.C., Buchsbaum, M.S., Johnson, J.C., Hershey, T.G., Wagner, E.A., Teng, C., Lottenberg, S. Magnetic resonance and positron emission tomography imaging of corpus callosum size, shape, and metabolic rate in unipolar depression. *Jour of Affective Disorder*, 28: 15-25, 1993.
27. Wu, J.C., Moy, K., Denlea, N., Kesslak, P., Russell, M., Buchsbaum, M., Cotman, C. Olfactory memory in unmedicated schizophrenics. *Schizophrenia Research*, 9:41-47, 1993.
28. Schroeder J; Buchsbaum MS; Siegel BV; Geider FJ; Haier RJ; Lohr J; Wu J; Potkin SG. Patterns of cortical activity in schizophrenia. *Psychological Medicine*, 24(4):947-55, 1994.
29. Alkire, M.T., Haier, R.J., Barker, S.J., Shan, N.K., Wu, J.C., Kao, J.Y. Cerebral metabolism during propofol anesthesia in humans studied with positron emission tomography. *Anesthesiology*, 82: 393-403, 1995.
30. Wu, J.C., Maguire, G., Riley, G., Fallon, J., LaCasse, L., Chin, S., Klein, E., Tang, C., Cadwell, S., Lottenberg, S. A positron emission tomography [18F]deoxyglucose study of developmental stuttering. *Neuroreport* 6:501-505, 1995.
31. Shapiro, D.H., Wu, J., Hong, C., Buchsbaum, M., Gottschalk, L., Thompson, V.E., Hillyard, D., Hetu, M., Friedman, G. Exploring the relationship between having control and losing control to functional neuroanatomy within the sleeping state. *Psychologia*, 38:133-145, 1995.
32. Hong C.C., Gillin J.C., Dow B., Wu J., Buchsbaum M.S. Localized and lateralized cerebral glucose metabolism associated with eye meovements during REM sleep and wakefulness: a positron emission tomography (PET) study. *Sleep*, 18:570-580, 1995..
33. Katz, M., Buchsbaum, M.S., Siegel, B.V., Wu, J., Haier, R., Bunney, W.E. Correlational patterns of cerebral glucose metabolism in never-medicated schizophrenic. *Neuropsychobiology*, 33: 1-11, 1996.
34. Siegel, B.V., Nuechterlein, K.H., Abel, L., Wu, J.C., Buchsbaum, M.S. Glucose metabolic correlates of continuous performance test performance in adults with a

history of infantile autism, schizophrenics, and controls. *Schizophrenia Research*, 17:85-94, 1995.

35. Ho, A.P., Gillin, J.C., Buchsbaum, M.S., Wu, J.C., Abel, L., Bunney, W.E. Brain glucose metabolism during non-rapid eye movement sleep in major depression: a positron emission tomography study. *Archives of General Psychiatry*, 53: 645-652, 1996.
36. Gillin, J.C., Buchsbaum, M.S., Vallardes-Neto, D., Hong, C., Hazlett, E., Langer, S.Z., Wu, J. Effects of zolpidem on local cerebral glucose metabolism during non-REM sleep in normal volunteers: a positron emission tomography study. *Neuropsychopharmacology* 15: 302 -313, 1996.
37. Noble, E.P., Gottschalk, L.A., Fallon, J.H., Ritchie, T.L., Wu, J.C., D₂ dopamine receptor polymorphism and brain regional glucose metabolism. *American Journal of Medical Genetics*. 74: 162-6, 1997.
38. Cahill, L., Haier, R., Fallon, J., Alkire, M.T., Tang, C., Keator, D., Wu, J., McGaugh, J.L. Amygdala activity at encoding correlated with long term, free recall of emotional information. *Proceedings of the National Academy of Sciences (PNAS)*. 93:8016-8021, 1996.
39. Haznedar, M.M., Buchsbaum, M.S., Luu, C., Hazlett, E.A., Siegel, B.V., Lohr, J., Wu, J., Haier, R.J., Bunney, W.E. Decreased anterior cingulate gyrus metabolic rate in schizophrenia. *American Journal of Psychiatry*, 154:682-684, 1997.
40. Schroder J., Buchsbaum, M.S., Siegel, B.V., Geider, F.J., Lohr, J., Tang, C., Wu, J., Potkin, S.G., Cerebral metabolic activity correlates of subsyndromes in chronic schizophrenia. *Schizophrenia Research*, 19:41-58, 1996.
41. Buchsbaum, M.S., Wu, J., Siegel, B.V., Hackett, E., Trenary, M., Abel L., Reynolds, C., Effect of sertraline on regional metabolic rate in patients with affective disorder. *Biological Psychiatry*, 41:15-22, 1997.
42. Buchsbaum M.S., Someya, T., Teng C.Y., Abel, L., Chin, S., Najafi, A., Haier, R.J., Wu, J., Bunney, W.E., PET and MRI of the thalamus in never-medicated patients with schizophrenia. *American Journal of Psychiatry*, 153:191-9, 1996.
43. Wu, J.C., Maguire, G., Riley, G., Lee, A., Keator, D., Tang, C., Fallon, J., Najafi, A., Increased dopamine activity associated with stuttering. *NeuroReport* 8: 767-770, 1997.
44. Wu, J.C., Bell, K., Najafi, A., Widmark, C., Keator, D., Tang, C., Klein, E., Bunney, B.G., Fallon, J., Bunney, W.E. Decreasing striatal 6-FDOPA uptake with increasing duration of cocaine withdrawal. *Neuropsychopharmacology*, 17:402-409, 1997.
45. Davis, C.M., Ambros-Ingerson, J., Granger, R., Wu, J., Zabaneh, R., Abdelnaby, M., Lynch, G. Triazolam impairs delayed recall but not acquisition of

various everyday memory tasks in humans. *Experimental Neurology* 148:12434, 1997

46. Varney, N.R., Morrow, L.A., Pinkston, J.B., Wu, J.C. PET scan findings in a patient with a remote history of exposure to organic solvents. *Applied Neuropsychology*, 5:100-106, 1998.

47. Wu, J.C., Buchsbaum, M.S., Gillin, J.C., Tang, C., Cadwell, S., Keator, D., Fallon, J.H., Wiegand, M., Najafi, A., Klein, E., Hazen, K., Bunney, W.E. Prediction of antidepressant effects of sleep deprivation by metabolic rates in the ventral anterior cingulate and medial prefrontal cortex. *American Journal of Psychiatry*, 156:1149-1158, 1999.

48. Pinkston, J.B., Wu, J.C., Gouvier, W.D., Varney, N.R. Quantitative PET scan findings in carbon monoxide poisoning: deficits seen in a matched pair. *Archives of Clinical Neuropsychology*, 15:545-553, 2000.

49. Wu, J.C., Iacono, R., Ayman, M., Salmon, E., Lin, S.D., Carlson, J., Keator, D., Lee, A., Najafi, A., Fallon, J. Correlation of intellectual impairment in Parkinson's disease with FDG PET scan *Neuroreport*, 11:2139-2144, 2000.

50. Varney, N.R., Pinkston, J.B., Wu, J.C. Quantitative PET findings in patients with post-traumatic anosmia. *Journal of Head Trauma Rehabilitation*, 16:253-259, 2001.

51. Heuser, G., Wu, J. Deep subcortical (including limbic) hypermetabolism in patients with chemical intolerance: human PET studies. *Annals New York Academy of Sciences*, 2001.

52. Potkin, S.G., Anand, R., Fleming, K., Alva, G., Keator, D., Carreon, D., Messina, J., Wu, J.C., Hartman, R., Fallon, J.H. Brain metabolic and clinical effects of rivastigmine in Alzheimer's disease. *International Journal of Neuropsychopharmacology* 4:223-230, 2001.

53. Gillin J.C., Buchsbaum M., Wu J, Clark C, Bunney WE. Sleep deprivation as a model experimental antidepressant treatment: findings from functional brain imaging. *Depress Anxiety* 14:37-49, 2001.

54. Wu J.C., Buchsbaum M, Bunney W.E. Clinical neurochemical implications of sleep deprivation's effects on the anterior cingulate of depressed responders. *Neuropsychopharmacology* 25:s74-8, 2001.

55. Buchsbaum M.S, Hazlett E.A., Wu J.C., Bunney W.E. Positron emission tomography with deoxyglucose F18 imaging of sleep. *Neuropsychopharmacology* 25:S50-6, 2001.

56. Potkin S.G, Alva G., Fleming K., Anand R., Keator D., Carreon D., Doo M., Jin Y., Wu J.C., Fallon J.H. A PET study of the pathophysiology of negative symptoms in schizophrenia. *Am J Psychiatry* 159:227-37, 2002.

57. Potkin S.G., Basile V.S., Jin Y., Masellis M., Badri F., Keator D., Wu J.C., Alva G., Carreon D.T., Bunney W.E., Fallon J.H., Kennedy J.L. D1 receptor alleles predict PET metabolic correlates of clinical response to clozapine. *Mol Psychiatry* 8:109-113, 2003.
58. Reist C, Albers L, Marder S.R., Williams-Jones B, Wu J.C., Mee S., Shimoda KI, Someya T., Ozdemire V. A candidate pathway strategy for integration of pharmacogenomic components of variability in antipsychotic treatment outcomes: a focus on aripiprazole. *Current Pharmacogenomics* 3:305-317, 2005.
59. Wu JC, Gillin JC, Buchsbaum MS, Chen P, Keator DB, Wu NK, Darnall LA, Fallon JH, Bunney WE. Frontal lobe metabolic decreases with sleep deprivation not totally reversed by recovery sleep. *Neuropsychopharmacology*, 31:2783-2792, 2006.
60. Wu JC, Gillin JC, Buchsbaum MS, Schachat C, Darnall L, Keator DB, Fallon JH, Bunney WE. Sleep deprivation PET correlations of Hamilton symptom improvement ratings with changes in relative glucose metabolism in patients with depression. *Journal of Affective Disorders*, 2007, in press.

Journal articles, other

1. Buchsbaum, M.S., Cappelletti, J., Ball, R., Hazlett, E., King, A.C., Johnson, J., Wu, J., DeLisi, L.E., Holcomb, H.H., Dowling-Zimmerman, S., Kessler, R. PET image measurement in schizophrenia and affective disorders. *Annals of Neurology*, 15 (suppl):KS157-S165, 1984.
2. Wu, J.C., Buchsbaum, M.S., Bunney, W.E. Positron emission tomography of phencyclidine users as a possible drug model of schizophrenia. *Am. J. Psychopharmacol*, 11:47-48, 1991.
4. Wu, J.C., Iacono, R., Ayman, M., Salmon, E., Chou, K., Lee, A., Keator, D., Khosla, N. Najafi, A., Fallon, J. Cerebral metabolic correlates of dysphagia in Parkinson's disease.
5. Wu, J.C., Bell, K., Widmark, C., Najafi, A., Fallon, J., Keator, D., Chen, P., Khosla N, Bunney, W. Regional cerebral metabolic correlates of cocaine abstinence (submitted)

CONFERENCE PROCEEDINGS PAPERS, OTHER

1. Bunney, W.E., Bunney, B.G., Wu, J. Schizophrenia: Diagnosis, Course, Neuronal Bases, and Hypotheses in Decade of the Brain: India/USA Research in Mental Health and Neurosciences (National Institute of Mental Health, Rockville, Maryland, editors: Koslow, S.H., Murthy, R.S., Coelho, G.V., 1995).

ABSTRACTS

1. Wu., J.C., Buchsbaum, M.S., Holcomb, H.H., DeLisi, L.E., Hazlett, E., Ball, R. Simultaneous PET scan and EEG topography in Society for Neuroscience 13th Annual Meeting Abstracts, 1983.
2. Buchsbaum, M.S., Wu, J.C., Holcomb, H.H., DeLisi, L.E., Hazlett, E., Ball, R. PET in schizophrenia and affective illness in Society for Neuroscience 13th Annual Meeting Abstracts, 1983.
3. Wu, J.C., Buchsbaum, M.S., Holcomb, H.H., DeLisi, L.E., Hazlett, E. PET study of occipital and somatosensory lobe glucose metabolism in normal subjects receiving photic stimuli versus somatosensory stimuli in Society for Neuroscience 14th Annual Meeting Abstracts, 1984.
4. Wu, J.C., Buchsbaum, M.S., DeLisi, L., Holcomb, H., Hazlett, E. Cortical and subcortical metabolic correlates of affective illness using positron emission tomography in Society for Neuroscience 15th Annual Meeting Abstracts, 1985.
5. Wu, J.C., Buchsbaum, M.S., Tang, S.W., Hazlett, E., Ball, R. Acute effects of antidepressants on cerebral glucose metabolism in depression assessed by PET in Neuroscience 16th Annual Meeting Abstracts, 1986.
6. Wu, J.C., Blinder, B., Derrfler, M., Asavisanu, T., Hazlett, E., Sicotte, N., Buchsbaum, M. Comparison of regional cerebral metabolic rates for bulimics vs. normal controls in Society for Neurosciences 17th Annual Meeting Abstracts, 1987.
7. Vasquez, M., Wu, J.C., Buchsbaum, M. Cerebral glucose metabolic study of generalized anxiety disorder as assessed by PET in Society for Neurosciences 18th Annual Meeting Abstracts, 1988.
8. Wu, J.C., Buchsbaum, M.S., Gillin, J.C. Regional cerebral metabolism of REM and nonREM human sleep as assessed by PET in Society for Neurosciences 18th Annual Meeting Abstracts, 1988.
9. Wu, J.C., Buchsbaum, M.S., Blinder, B.J., Derfler, M., Hagman, J. PET study of bulimic normal differences in American Psychiatric Association 141st Annual Meeting New Research Abstracts, 1988.
10. Wu, J.C., Blinder, B., Buchsbaum, M.S., Derrfler, M., Hagman, J., Tai, W.Y., Hazlett, E., Sicotte, N. Greater left cerebral hemispheric metabolism in bulimic patients as assessed by positron emission tomography. Abstract 34.03.10 *Psychopharmacology* 96:s382. Proceedings of the XVIth C.I.N.P. Congress, Munich. Aug 15-19, 1988.
11. Wu, J.C., Buchsbaum, M.S., Bunney, W.E. PET scan study of patients on phencyclidine in Society for Neuroscience 19th Annual Meeting Abstracts, 1989.

12. Wu, J.C., Buchsbaum, M.S., Gillin, J.C., Hong, C., Lam, M., Herrera, D. Dream phenomenological correlations with regional cerebral glucose metabolism in Association of Professional Sleep Societies Third Annual Meeting, 1989.
13. Potkin, S.G., Buchsbaum, M.S., Marshall, J.F., Heh, C., Singer, J., Costa, J., Wu, J., Bunney, W.E. Differential effects of clozapine and thiothixene on regional glucose metabolism assessed by PET in schizophrenics. *Clinical Neuropharmacology*, 13(2):81, 1990.
14. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Bunney, W.E. Positron emission tomography correlates of response to sleep deprivation. American Psychiatric Association Presentation 143rd meeting (Symposium 8F, p 139, May 4, 1990), New York.
15. Wu, J.C. Brain imaging and sleep deprivation. *Biological Psychiatry* (World Federation of Societies of Biological Psychiatry, Fifth World Congress, June 9-14, 1991, Florence, Italy) 11S:726S, 1991.
16. Wu, J.C., Buchsbaum, M.S., Gillin, J.C., Bunney, W.E. PET study of sleep deprivation in unipolar depression. World Federation of Sleep Research Societies. Cannes, France. Sep 21-25, 1991.
17. Wu, J.C., Potkin, S.G., Ploszaj, D., Lau, V., Telford, J., Richmond, G. Clozapine improves sensory gating more than haldol. New Research 443. American Psychiatric Association 145th Annual Meeting. Washington D.C. May 2-7, 1992.
18. Siegel B.V., Buchsbaum M.S, Wu J.C., Potkin S.G., Bunney W.E. Cortico-striato-thalamic circuits and brain glucose metabolic activity in 70 unmedicated schizophrenic patients. Society for Neuroscience 22nd Annual Meeting, October 25-30, 1992, Anaheim, California.
19. Hong, C.C.H., Gillin J.C., Dow B.M., Wu J., Buchsbaum M.S. Positron emission tomography and eye movements during REM sleep. Society for Neuroscience 23rd Annual Meeting, November 7-12, 1993. Washington D.C.
20. Klein, E.A., Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Bunney, W.E., Brain glucose metabolism in unipolar depression compared with normal controls before and after sleep deprivation as measured by PET FDG. American Psychiatric Association 148th Annual Meeting, May 20-25, 1995. Miami, Florida.
21. Wu, J.C., Khosla, N., Potkin, S.G., Najafi, A., LaCasse, L., Klein, E. FDOPA PET study of dopamine function in schizophrenia. American Psychiatric Association 148th Annual Meeting, May 20-25, 1995. Miami, Florida.
22. Riley, G.D., Maguire, G., Wu, J.C., Klein, E.A., A PET study of developmental stuttering. American Psychiatric Association 148th Annual Meeting, May 20-25, 1995. Miami, Florida.

23. Widmark, C.B., Wu, J.C., Klein, E.A., Bell, K.M. FDOPA uptake differences in cocaine addicts in withdrawal and normal controls. American Psychiatric Association 148th Annual Meeting, May 20-25, 1995. Miami, Florida.
24. Bell, K.M., Widmark, C.B., Wu, J.C., Klein, E.A., LaCasse, L. Brain metabolism of cocaine abusers in middle abstinence. American Psychiatric Association 148th Annual Meeting, May 20-25, 1995. Miami, Florida.
25. Wu, J.C., Bell, K., Klein, E., Widmark, C., Najafi, A., Tang, C., LaCasse, L., Bunney, B., Bunney, W.E. Decreased fdopa uptake in right putamen in PET study of cocaine addicts during acute withdrawal. Society for Neuroscience 25th Annual Meeting, November 11-16, 1995, San Diego, California.
26. Potkin, S., Zborowski, J., Wu, J., Giles, K., Bera, R., Henry, M., Sebree, T., Aurang, C., Wallin, B., Bunney, W. Brain imaging to determine the effects of sertindole in a double-blind, placebo controlled trial in schizophrenic patients. ACNP, December 1995, San Juan, Puerto Rico.
27. Wu, J.C., Maguire, G., Riley, G. PET scan study of stuttering during choral reading. American Speech and Hearing Association (ASHA) convention. December 8, 1995, Orlando, Florida.
28. Wu, J.C. Update on and new knowledge in brain imaging studies in psychiatric diagnoses and treatment, California Psychiatric Association, 9th annual California Premier conference, October 11-13, 1996, Rancho Mirage, California.
28. Wu, J.C., Bell, K., Widmark, C., Najafi, A., Klein, E., Bunney, W.E., Recovery of striatal FDOPA uptake in cocaine addicts during late recovery. Society of Biological Psychiatry Annual Meeting, May 1997, San Diego, California.
29. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Hong, C., Ho, A., Bunney, W.E., Regional cerebral glucose metabolic studies of REM and NREM sleep in normal controls and depressed subjects as assessed by positron emission tomography. III Pan- Pacific Conference on Brain Topography, April 1-4, 1997, Tokyo, Japan.
30. Wu, J.C., Iacono, R.P., Mohammed, A.S. Unified Parkinson's disease rating scale clinical correlations with ¹⁸F-deoxyglucose positron emission tomography in patients with idiopathic Parkinson's disease. XIIth International symposium on Parkinson's disease, London, March 23-26, 1997.
31. Cohen, M.J., Haier, R.J., Young, R.R., Wu, J.C., Fallon, J., Alkire, M., Schandler, S.L. Functional imaging of the human spinal-cord injured brain. Third International Conference on Functional Imaging of the Human Brain, Copenhagen, May 1997.
32. Potkin, S.G., Anand, R., Messina, J., Hartman, R., Keator, D., Wu, J.C., Maguire, G., Fleming, K., Dockstader, T., Bunney, W.E. FDG PET: a sensitive quantitative measure Alzheimer's disease progression and brain metabolic effects of

ENA. Society of Neuroscience 28th meeting. Los Angeles, California, November 1998.

33. Wu, J.C., Purisch, A., Scaglione, C. FDG PET scan study of traumatic brain injury and correlation with performance on frontal lobe task (Wisconsin card sort). Society of Neuroscience 28th meeting. Los Angeles, California, November 1998.

34. J. Le, E. Salmon, R. Iacono, A. Mohamed, D. Keator, A. Lee, J. Wu. Pet scan studies of Parkinson's disease in the on and off state. Society of Neuroscience 29th meeting. Miami Beach, California, October, 1999.

35. Vawter M, Wu JC, Bunney WE, Kelsoe J Sleep deprivation and biomarkers in PBMC. American College of Neuropsychopharmacology Meeting, Boca Raton Resort and Club, Dec 9-13, 2007.

Work in progress, in preparation:

1. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Cadwell, S., Lottenberg, S., Bunney, W.E. Positron emission tomography studies of sleep deprivation in unipolar depression. In preparation.

2. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Cadwell, S., Lottenberg, S., Bunney, W.E. Positron emission tomography studies of relapse vs antidepressant response to recovery sleep after sleep deprivation in unipolar depression. In preparation.

3. Wu J.C., Cadwell S., Chen S., Tang C., Gillin J.C., Buchsbaum M.S., Bunney W.E. Magnetic resonance imaging abnormalities in thalamus and striatum in unipolar depression. In preparation.

4. Bell, K., Wu, J.C., Widmark, C., Keator, LaCasse, L., Klein, E., Fallon, J., Bunney, W.E. Regional glucose metabolic change with abstinence from chronic cocaine use. In preparation.

5. Cohen, M., Wu, J.C., Vulpe, M., Schendler, S. Regional glucose metabolic change in quadraplegia and paraplegia. In preparation.

6. Potkin, S., Wu, J.C., Bunney, W.E., Presynaptic dopamine change in schizophrenia. In preparation.

7. Wu, J.C., Gillin, J.C., Buchsbaum, M.S., Bunney, W.E. Presynaptic dopamine change in normal controls after sleep deprivation.

DOCTORAL DISSERTATION COMMITTEES

1. C. Mike Davis, "Ampakines enhance memory in rats and humans," February 26, 1996

2. Matt Adams "The production and investigation of an electron-positron plasma in the laboratory," May 3, 1996

3. Matthew Turner, *Cognitive Science*, June 13, 2007

MEDIA COVERAGE

1. Science magazine, 261:557-558, 30 July 1993.
2. "UCI Scientists Link Stuttering to Brain Area" in Los Angeles Times, p. A1, A23 on Sunday, March 5, 1995.
3. MS-NBC televised segment "Special edition" on September 17, 1999.
4. Orange County Register, Sunday newspaper, front page coverage on 8/1/99.
5. Scientific American, October 1999 issue in News and Analysis section.
6. San Jose Mercury News. June 3, 2000. Brain scan in slayings abnormalities set for Yosemite defendant.
7. www.courttv.com Florida vs. Couey 3/13/07
8. Science NewsFocus "Is internal timing key to mental health" 317:1488-1490, September 14, 2007.