# **Committee on Energy and Commerce**

U.S. House of Representatives Witness Disclosure Requirement - "Truth in Testimony" Required by House Rule XI, Clause 2(g)(5)

1.	Your Name: Eric C. Strain			
2.	Your Title: Professor, Johns Hopkins University School of Medicine			
3.	The Entity(ies) You are Representing: Myself			
4.	Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No X	
5.	Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2015. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.			
	None			
6.	Please attach your curriculum vitae to your completed disclosure fo	rm.		



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Signature:\_

3/16/18

Date:

Eric C. Strain, M.D.

February 3, 2018

## DEMOGRAPHIC INFORMATION

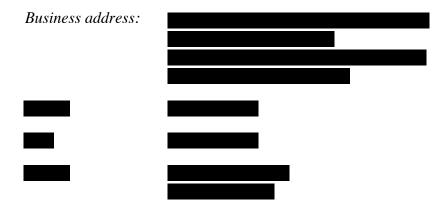
Current Appointment:

Professor, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine (2000 – present); Professor, Department of Mental Health, Johns Hopkins University Bloomberg School of Public Health (2014 – present)

Director, Johns Hopkins Center for Substance Abuse Treatment and Research (2009 – present)

JHBMC Department of Psychiatry Executive Vice Chair (2015 – 2016, 2017 – present)

Personal Data:



## Education and Training:

Undergraduate:	University of Sydney, Sydney, New South Wales, Australia; Non- Degree Student (1979)
	Amherst College, Amherst, Massachusetts; Degree: B.A. (1976 – 1980)
Doctoral:	Ohio State University College of Medicine, Columbus, Ohio; Degree: M.D. (1980 – 1984)
Postdoctoral:	Francis Scott Key Medical Center, Baltimore, Maryland; Internship: Medicine/Psychiatry (1984 – 1985)
	Johns Hopkins Hospital, Baltimore, Maryland; Residency: Psychiatry (1985 – 1988)

Johns Hopkins Hospital, Baltimore, Maryland; Chief Resident, Psychiatry (1987 – 1988)

Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine, Baltimore, Maryland; Post Doctoral Fellowship (1988 – 1990)

Professional Experience:

Assistant Professor, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine (1990 – 1994)

Associate Professor, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine (1995 – 2000)

Medical Director for Substance Abuse, Johns Hopkins Medical Services Corporation (1999 – 2000)

Director, Substance Abuse Service Line, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine (1997 – 2002)

Medical Director, Behavioral Pharmacology Research Unit, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine (2005 – present)

Section Head, Johns Hopkins Bayview Department of Psychiatry Substance Abuse Programs (2006 – present)

Behavioral Pharmacology Research Unit, Interim Scientific Director (2014 – present)

JHBMC Department of Psychiatry Interim Chair (July, 2016 – June, 2017)

#### **RESEARCH ACTIVITIES**

Publications:

Peer-reviewed Scientific Articles:

Glaser R., Strain E.C., Tarr K.L., Holliday J.E., Donnerberg R.L., Kiecolt-Glaser J.K. Changes in Epstein-Barr Virus antibody titers associated with aging. Proc Soc Exp Biol Med 179:352-355, 1985.

Kiecolt-Glaser J.K., Glaser R., Strain E.C., Stout J., Tarr K., Holliday J.E., Speicher C. Modulation of cellular immunity in medical students. J Behav Med 9:5-21, 1986.

Brooner R.K., Bigelow G.E., Strain E.C., Schmidt C.W. Intravenous drug abusers with antisocial personality disorder: increased HIV risk behavior. Drug Alcohol Depend 26:39-44, 1990.

Strain E.C., Brooner R.K., Bigelow G.E. Clustering of multiple substance use and psychiatric diagnoses in opiate addicts. Drug Alcohol Depend 27:127-134, 1991.

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Strain E.C., Preston K.L., Liebson I.A., Bigelow G.E. The effects of buprenorphine in methadone-dependent volunteers. J Pharmacol Exp Ther 261:985-993, 1992.

Preston K.L., Sullivan J.T., Strain E.C., Bigelow G.E. Effects of cocaine alone and in combination with bromocriptine in human cocaine abusers. J Pharmacol Exp Ther 262:279-291, 1992.

Silverman K., Evans S.M., Strain E.C., Griffiths R.R. Withdrawal syndrome after double-blind cessation of caffeine consumption. New England J Med 327:1109-1114, 1992.

Strain E.C., Stitzer M.L., Liebson I.A., Bigelow G.E. Dose-response effects of methadone in the treatment of opioid dependence. Ann Internal Med 119:23-27, 1993.

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Strain E.C., Preston K.L., Liebson I.A., Bigelow G.E. Precipitated withdrawal by pentazocine in methadone-maintained volunteers. J Pharmacol Exp Ther 267:624-634, 1993.

Strain E.C., Preston K.L., Stitzer M.L., Liebson I.A., Bigelow G.E. The effects of cocaine in buprenorphine-maintained outpatient volunteers: results from clinical experience and laboratory challenges. Amer J Addict 3:129-143, 1994.

Strain E.C., Stitzer M.L., Liebson I.A., Bigelow G.E. Comparison of buprenorphine and methadone in the treatment of opioid dependence. Am J Psychiatry 151:1025-1030, 1994.

Strain E.C., Stitzer M.L., Liebson I.A., Bigelow G.E. Outcome after methadone treatment: influence of prior treatment factors and current treatment status. Drug Alcohol Depend 35:223-230, 1994.

Strain E.C., Mumford G.K., Silverman K., Griffiths R.R. Caffeine dependence syndrome: evidence from case histories and experimental evaluations. JAMA 272:1043-1048, 1994.

Strain E.C., Stitzer M.L., Liebson I.A., Bigelow G.E. Buprenorphine versus methadone in the treatment of opioid-dependent cocaine users. Psychopharmacol 116:401-406, 1994.

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Johnson R.E., Eissenberg T., Stitzer M.L., Strain E.C., Liebson I.A., Bigelow G.E. A placebo controlled clinical trial of buprenorphine as a treatment for opioid dependence. Drug Alcohol Depend 40:17-25, 1995.

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Schlaepfer T.E., Strain E.C., Greenberg B.D., Preston K.L., Lancaster E., Bigelow G.E., Barta P.E., Pearlson G.D. Site of opioid action in the human brain: mu and kappa agonists produce different subjective and cerebral blood flow effects. Am J Psychiatry 155:470-473, 1998.

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Stoller K., Walsh S.L., Bigelow G.E., Strain E.C. Effects of buprenorphine/naloxone in opioid-dependent humans. Psychopharmacol 154:230-242, 2001.

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Tompkins D.A., Bigelow G.E., Harrison J.A., Johnson R.E., Fudala P.J., Strain E.C. Concurrent validation of the Clinical Opiate Withdrawal Scale (COWS) and singleitem indices against the Clinical Institute Narcotic Assessment (CINA) opioid withdrawal instrument. Drug Alcohol Depend 105:154-9, 2009.

Chisolm M.S., Tuten M., Brigham E.P., Strain E.C., Jones H.E. The relationship between antidepressant use and smoking cessation in pregnant women in treatment for substance abuse. Am J Drug Alcohol Abuse 36:46-51, 2010.

Tompkins D.A., Lanier R.K., Harrison J.A., Fudala P.J., Strain E.C. Bigelow G.E. Human abuse liability assessment of oxycodone combined with ultra-low-dose naltrexone. Psychopharmacology 210:471-80, 2010.

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Lanier R.K., Lofwall M.R., Mintzer M.Z., Bigelow G.E., Strain E.C. Physical dependence potential of daily tramadol dosing in humans. Psychopharmacology 211:457-66, 2010.

Chisolm M.S, Brigham E.P., Lookatch S.J., Tuten M., Strain E.C., Jone H.E. Cigarette smoking knowledge, attitudes, and practices of patients and staff at a perinatal substance abuse treatment center. J Subst Abuse Treatment 39:298-305, 2010.

Mintzer M.Z., Lanier R.K., Lofwall M.R., Bigelow G.E., Strain E.C. Effects of repeated tramadol and morphine administration on psychomotor and cognitive performance in opioid-dependent volunteers. Drug Alcohol Depend 111:265-8, 2010.

Johnson M.W., Strain E.C., Griffiths R.R. Effects of oral caffeine pretreatment on response to intravenous nicotine and cocaine. Exp Clinical Psychopharmacology 18:305-15, 2010.

Vandrey R., Umbricht A., Strain E.C. Increased blood pressure following abrupt cessation of daily cannabis use. J Addic Med 5:16-20, 2011.

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Chen L.Y., Crum R.M., Strain E.C., Alexander G.C., Kaufmann C., Mojtabai R. Prescriptions, nonmedical use, and emergency department visits involving prescription stimulants. J Clin Psychiatry 77:297-304, 2016.

Sweeney M.M., Rass O., Johnson P.S., Strain E.C., Berry M.S., Vo H.T., Fishman M.J., Munro C.A., Rebok G.W., Mintzer M.Z., Johnson M.W. Initial feasibility and validity of a prospective memory training program in a substance use treatment population. Exp Clin Psychopharmacol. 24:390-399, 2016.

Mauro P.M.,, Furr-Holden C.D., Strain E.C., Crum R.M., Mojtabai R. Classifying substance use disorder treatment facilities with co-located mental health services: A latent class analysis approach. Drug Alcohol Depend 163:108-15, 2016.

Tompkins D.A., Johnson P.S., Smith M.T., Strain E.C., Edwards R.R., Johnson M.W. Temporal preference in individuals reporting chronic pain: discounting of delayed pain-related and monetary outcomes. Pain 157:1724-32, 2016.

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Dunn K.E., Tompkins D.A., Bigelow G.E., Strain E.C. Efficacy of tramadol extended-release for opioid withdrawal: a randomized clinical trial. JAMA Psychiatry. 74: 885-893, 2017.

Tompkins D.A., Huhn A.S., Johnson P.S., Smith M.T., Strain E.C., Edwards R.R., Johnson M.W. To take or not to take: The association between perceived addiction risk, expected analgesic response, and likelihood of trying novel pain relievers in self-identified chronic pain patients. Addiction. 113: 67-79, 2018.

Dunn K.E., Finan P.H., Tompkins D.A., Strain E.C. Frequency and correlates of sleep disturbance in methadone and buprenorphine-maintained patients. Addict Behav. 76: 8-14, 2018.

## Non-peer Reviewed Articles [Published Abstracts]:

Strain E.C., Bigelow G.E., Preston K.L., Liebson I.A. The effects of buprenorphine in methadone-dependent volunteers. In Problems of Drug Dependence, 1990: NIDA Research Monograph 105. Edited by Harris L.S. Rockville, MD, National Institute on Drug Abuse, 1990.

Brooner R.K., Bigelow G.E., Greenfield L., Strain E.C., Schmidt C.W. Intravenous drug abusers with Antisocial Personality Disorder: high rate of HIV infection. In Problems of Drug Dependence, 1990: NIDA Research Monograph 105. Edited by Harris L.S. Rockville, MD, National Institute on Drug Abuse, 1990.

Preston K.L., Sullivan J.T., Strain E.C., Bigelow G.E. Effects of cocaine alone and in combination with bromocriptine in human cocaine abusers. In Problems of Drug Dependence, 1990: NIDA Research Monograph 105. Edited by Harris L.S. Rockville, MD, National Institute on Drug Abuse, 1990.

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Strain E.C., Bigelow G.E., Liebson I.A., Stitzer M.L. Moderate versus high dose methadone in the treatment of opioid dependence. In Problems of Drug Dependence 1996: NIDA Research Monograph 174. Edited by Harris L.S. Rockville, MD, National Institute on Drug Abuse, 1997.

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Strain E.C. Buprenorphine: an update. Heroin Addiction Related Clinical Problems 2(1S):40, 2000.

Strain E.C. Methadone: an update. Heroin Addiction Related Clinical Problems 2(1S):55, 2000.

Strain E.C. Methadone maintenance: the recommended dose. J European College Neuropsychopharm 10:S136-S137, 2000.

Strain E.C., Walsh S.L., Bigelow G.E. Blockade effects of buprenorphine/naloxone combination tablet in opioid-dependent volunteers. Drug Alcohol Depend 60 (S1): S216, 2000.

Becker A.B., Johnson R.E., Jones H.E., Strain E.C., Bigelow G.E. Rapid opiate detoxification with LAAM and clonidine: a pilot study. Drug Alcohol Depend 60 (S1): S14, 2000.

Johnson R.E., Becker A.B., Jones H.E., Strain E.C., Bigelow G.E. How fast can patients be transitioned from buprenorphine to naltrexone and can opioid blockade be maintained? A pilot study. Drug Alcohol Depend 60 (S1): S101, 2000.

Jones H.E., Strain E.C., Johnson R.E., Bigelow G.E. Comparing heroin- and cocainedependent individuals: pre-treatment characteristics. Drug Alcohol Depend 60 (S1): S102, 2000.

Walsh S.L., Geter-Douglas B., Strain E.C., Bigelow G.E. Evaluation of enadoline and butorphanol effects on cocaine self-administration and cocaine pharmacodynamics in humans. Drug Alcohol Depend 60 (S1): S231, 2000.

Johnson R.E., Jones H.E., Strain E.C., Bigelow G.E. A within-subject comparison from randomized controlled trials with methadone, LAAM and buprenorphine. Drug Alcohol Depend 63 (S1): S74, 2001.

Jones H.E., Johnson R.E., Strain E.C., Bigelow G.E. Gender relationship to treatment outcome in a methadone (meth), buprenorphine (bup) and LAAM comparison. Drug Alcohol Depend 63 (S1): S74, 2001.

O'Toole T., Strain E.C., Wand G., McCaul M.E., Barnhart M. Health care utilization after combined medical/substance abuse treatment in a novel day hospital program: a controlled comparison. Drug Alcohol Depend 63 (S1): S117, 2001.

Strain E.C. Making buprenorphine available for the treatment of opioid dependence: status of final steps in the medication development process. Drug Alcohol Depend 63 (S1): S153, 2001.

Walsh S.L., Strain E.C., Johnson R.E., Bigelow G.E. Evaluation of lofexidine and clonidine to suppress naloxone-precipitated withdrawal in opioid-dependent humans. Drug Alcohol Depend 63 (S1): S165, 2001.

Lofwall M.R., Strain E.C., Brooner R.K., Kindbom K.A., Bigelow G.E. Characteristics of older methadone maintenance (MM) patients. Drug Alcohol Depend 66 (S1): S105, 2002.

Strain E.C., Moody D.E., Stoller K., Walsh S.L., Bigelow G.E. Bioavailability of buprenorphine solution versus tablets during chronic dosing in opioid-dependent subjects. Drug Alcohol Depend 66 (S1): S176, 2002.

### Letters to Editors:

Book S.W, Myrick H., Malcolm R., Strain E.C. Buprenorphine for post-operative pain following general surgery in a buprenorphine-maintained patient. Am J Psychiatry 164:979, 2007.

Strain E.C., Harrison J.A., Bigelow G.E. Response to "commercial factors override science in combination addiction drug trial". Clin Pharmacol Ther 90:650, 2011.

Dunn K.E., Tompkins D.A., Strain E.C. Tramadol extended-release and opioid withdrawal management-legal implications-reply. JAMA Psychiatry. 2017 Dec 27.

Editorials, Reviews (including Invited Reviews), Commentaries:

Strain E.C. Antisocial personality disorder, misbehavior and drug abuse. J Nerv Ment Dis 183:162-165, 1995.

Strain E.C., Griffiths R.R. Caffeine dependence: fact or fiction? J Royal Soc Med 88:437-440, 1995

Strain E.C. Rethinking lessons learned. (commentary on "Psychosocial treatments for cocaine dependence: results of the National Institute on Drug Abuse Collaborative Cocaine Treatment study" by Crits-Christoph et al.) Arch Gen Psychiatry 56:503-504, 1999.

Strain E.C. Commentary on: "Review: there is insufficient evidence for naltrexone maintenance treatment in opioid dependence." Evidence-Based Mental Health 6:57, 2003.

Strain E.C. Single versus multiple drug focus in substance abuse clinical trials research: the devil is in the details. Drug Alcohol Depend 70:131-4, 2003.

Strain E.C. Patient-treatment matching and opioid addicted patients: past methods and future opportunities. Heroin Add and Rel Clin Probl 6:5-16, 2004.

Strain E.C. Changes at Drug and Alcohol Dependence. Drug Alcohol Depend 111:3, 2010

Strain E.C. Drug use and sport – a commentary on: Injury, pain and prescription opioid use among former National Football League football players by Cottler et al. Drug Alcohol Depend, 2011.

#### Book Chapters:

Pearlson G., Strain E.C. Chronic pain and depression. In: Robinson R.G., and Rabins P.V. (Eds.) <u>Depression in Medical Illness</u>. New York: Igaku-Shoin, 1989.

Carroll M.E., Stitzer M.L., Strain E.C., and Meisch D.A. The behavioral pharmacology of alcohol and other drugs. In: Gallanter M. (Ed) <u>Recent</u> <u>Developments in Alcoholism (vol 8)</u>. New York: Plenum, 1989.

Strain E.C., Griffiths R.R. Caffeine use disorders. In: Tasman A., Kay J., Lieberman J.A. (Eds.) <u>Psychiatry</u>. Philadelphia: W.B. Saunders, 1997.

Strain E.C., Griffiths R.R. Caffeine use disorders. In: Taylor D.H., Tasman A. (Eds.) <u>Psychiatry: Self-Assessment and Review</u>. Philadelphia: W.B. Saunders, 1997.

Strain E.C., Griffiths R.R. Caffeine-related disorders. In: Kaplan H.I., Sadock B.J. (Eds.) <u>Comprehensive Textbook of Psychiatry/VII</u>. Baltimore: Williams and Wilkins, 1999.

Strain E.C. High dose buprenorphine for treatment of opioid dependence. In: Kintz P., Marquet P. (Eds.) <u>Buprenorphine Therapy of Opiate Addiction</u>. Totowa, New Jersey: Humana Press, 2002.

Strain E.C., Griffiths R.R. Substance abuse: caffeine use disorders. In: Tasman A., Kay J., Lieberman J.A. (Eds.) <u>Psychiatry, Second Edition</u>. West Sussex, England: John Wiley and Sons, 2003.

Jaffe J.H., Strain E.C. Opioid-related disorders. In: Sadock B.J., Sadock V.A. (Eds.) <u>Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Eighth Edition</u>. Philadelphia: Lippincott Williams and Wilkins, 2005.

Strain E.C., Griffiths R.R. Caffeine-related disorders. In: Sadock B.J., Sadock V.A. (Eds.) <u>Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Eighth Edition</u>. Philadelphia: Lippincott Williams and Wilkins, 2005.

Strain E.C., Lofwall M.R. Buprenorphine maintenance. In: Galanter M., Kleber H.D. (Eds) <u>The American Psychiatric Publishing Textbook of Substance Abuse</u> <u>Treatment, Fourth Edition.</u> Arlington, Virginia: American Psychiatric Press, Inc., 2008.

Strain E.C., Lofwall M.R., Jaffe J.H. Opioid-related disorders. In: Sadock B.J., Sadock V.A., Ruiz P. (Eds.) <u>Kaplan and Sadock's Comprehensive Textbook of</u> <u>Psychiatry, Nineth Edition</u>. Philadelphia: Lippincott Williams and Wilkins, 2009.

Strain E.C. Efficacy and safety of buprenorphine. In: Renner J.A., Levounis P. (Eds) <u>Handbook of Office-Based Buprenorphine Treatment of Opioid Dependence.</u> Arlington, Virginia: American Psychiatric Press, Inc., 2011.

Strain E.C., Tompkins D.A. Substance abuse and addictions. In: Kahan S., Fagan P., Gielen A., Green L.W. (Eds) <u>Health Behavior Change in Populations</u>. Baltimore: Johns Hopkins University Press, 2014.

Strain E.C., Fernando G.I.I. Efficacy and safety of buprenorphine. In: Renner J.A., Levounis P., LaRose A.T. (Eds) <u>Office-Based Buprenorphine Treatment of Opioid</u> <u>Use Disorder.</u> Arlington, Virginia: American Psychiatric Associated Publishing, 2018.

## Section Editor for Book:

Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Ninth Edition. Philadelphia: Lippincott Williams and Wilkins, 2009. Editor of section on substance use disorders. Kaplan and Sadock's Comprehensive Textbook of Psychiatry, Tenth Edition. Philadelphia: Lippincott Williams and Wilkins, in press. Editor of section on substance use disorders.

#### Books:

<u>Methadone Treatment for Opioid Dependence</u>. Strain E.C., Stitzer M.L. (Eds.) Baltimore: Johns Hopkins University Press, 1999.

<u>The Treatment of Opioid Dependence.</u> Strain E.C., Stitzer M.L. (Eds.) Baltimore: Johns Hopkins University Press, 2006.

<u>Substance Abuse: A Clinical Handbook.</u> Ruiz P., Strain E.C., Langrod J.G. (Eds) Baltimore: Lippincott Williams and Wilkins, 2007.

<u>Maintenance Medication Treatment for Alcohol Dependence.</u> [Center for Substance Abuse Treatment, Treatment Improvement Protocol] Strain E.C. (Chair), 2009.

Lowinson and Ruiz's Substance Abuse: A Comprehensive Textbook, Fifth Edition. Ruiz P., Strain E.C. (Eds.) Philadelphia: Lippincott Williams & Wilkins, 2011.

<u>The Substance Abuse Handbook, 2e.</u> Ruiz P., Strain E.C. (Eds) Baltimore: Wolters Kluwer, Lippincott Williams and Wilkins, 2014.

## Other Media:

Strain E.C. Opiates, narcotic addiction. Disease Update, Medcast Networks [online medical news and information service], March, 1999.

Strain E.C. (Ed) Use of Buprenorphine in the Management of Opioid Dependence: A Curriculum for Physicians. Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 2000, revised 2004.

Doot M., Glusman S., Schnoll S., Strain E.C. Proper Prescribing of Controlled Substances [video]. Illinois State Medical Society, November 26, 2001.

## Extramural Sponsorship:

#### Current Grants:

Medications Development for Drug Abuse Disorders (09/27/04 - 06/30/15; NCE). National Institute on Drug Abuse, R01 DA018125. Principal Investigator: Eric C. Strain, M.D.

Mentoring of Clinical Investigators in Patient Oriented Research (06/01/12 – 05/31/17; NCE). National Institute on Drug Abuse, K24 DA023186. Principal Investigator: Eric C. Strain, M.D.

Other grants as co-investigator available on request.

## Current Contract:

Current contracts as investigator or co-investigator are available on request.

#### Pending Grants:

A list of recent submissions as PI available on request.

Other pending grants as co-investigator available on request.

#### Previous Grants:

Buprenorphine: Evaluation for IV Drug Abuse Treatment (9/30/89 – 2/28/95). National Institute on Drug Abuse, R18 DA06165. Total direct costs: \$2,621,052. Principal Investigator: Maxine L. Stitzer, Ph.D.

AIDS Demo-Pharmacological Treatment of IV Drug Abuse (1/1/92 – 12/31/95). National Institute on Drug Abuse, R01 DA05792. Total direct costs: \$1,025,678. Principal Investigator: Maxine L. Stitzer, Ph.D.

Clinical Research in Drug Abuse Treatment (4/1/92 - 3/31/97). National Institute on Drug Abuse, K20 DA00166. Total direct costs: \$505,272. Principal Investigator: Eric C. Strain, M.D.

Evaluation of Opioid Antagonist Activity in Humans (12/15/93 – 11/30/95). National Institute on Drug Abuse, R01 DA08045. Total direct costs: \$326,679. Principal Investigator: Eric C. Strain, M.D.

Evaluation of Opioid Antagonist Activity in Humans (6/30/96 – 4/30/00). National Institute on Drug Abuse, R01 DA08045. Total direct costs: \$677,016. Principal Investigator: Eric C. Strain, M.D.

Tryptophan and Behavior Therapy for Cocaine Abuse (9/30/96 – 7/31/01). National Institute on Drug Abuse, R01 DA10754. Total direct costs: \$1,286,811. Principal Investigator: Eric C. Strain, M.D.

Clinical Trials Network Mid-Atlantic Collaborative Group (09/28/99-09/27/04). National Institute on Drug Abuse, U10 DA 13034. Total direct costs: \$11,000,000. Principal Investigator: Robert K. Brooner, Ph.D.

Evaluation of Opioid Antagonist Activity in Humans (5/01/01 - 2/28/06). National Institute on Drug Abuse, R01 DA08045. Total direct costs: \$1,144,429. Principal Investigator: Eric C. Strain, M.D.

Clinical Research on Drug Abuse (4/15/97 – 3/31/02). National Institute on Drug Abuse, K02 DA00332. Total direct costs: \$503,289. Principal Investigator: Eric C. Strain, M.D.

Serotonin Treatment of Cocaine Dependence (05/01/01 - 03/31/06). National Institute on Drug Abuse, R01 DA10754. Total direct costs: \$1,918,045. Principal Investigator: Eric C. Strain, M.D.

Clinical Research on Drug Abuse (4/1/02 - 3/31/07). National Institute on Drug Abuse, K02 DA00332. Total direct costs: \$580,500. Principal Investigator: Eric C. Strain, M.D.

Benzodiazepine Use/Abuse: Effects on Memory Mechanisms (5/1/99 – 3/31/09). National Institute on Drug Abuse, R01 DA011936. Total direct costs (on year): \$107,888. Principal Investigator: Miriam Mintzer, Ph.D.

Maternal Opioid Treatment: Human Experimental Research (7/1/04 - 6/30/09). National Institute on Drug Abuse, R01 DA015764. Total direct costs (year one): \$1,158,059. Principal Investigator: Hendrée Jones, Ph.D.

Effects of Opioid Pharmacotherapy on Functioning (9/1/05 - 6/30/09). National Institute on Drug Abuse, R01 DA017688. Total direct costs (on year): \$266,094. Principal Investigator: Miriam Mintzer, Ph.D.

Evaluation of Opioid Antagonist Activity in Humans (12/15/93 – 06/30/12). National Institute on Drug Abuse, R01 DA08045. Principal Investigator: Eric C. Strain, M.D.

Mentoring of Clinical Investigators in Patient Oriented Research (05/01/07 – 05/31/12). National Institute on Drug Abuse, K24 DA023186. Principal Investigator: Eric C. Strain, M.D.

Other previous grants available on request.

#### Previous Contracts:

The Energy Value of Alcohol in the Diet of Alcoholics (9/1/98 – 5/30/00). United States Department of Agriculture and National Institute on Alcohol Abuse and Alcoholism, Federal Agreement Number 58-1235-8-046. Total direct costs: \$198,700. Principal Investigator: Eric C. Strain, M.D.

Induction of Opioid-Dependent Individuals onto Buprenorphine and Buprenorphine/Naloxone (3/08 – 12/08). Total direct costs: \$545,909. Principal Investigator: Eric C. Strain, M.D.

A Phase 2, Double Blind, Placebo Controlled Trial to Assess the Efficacy of Levetiracetam Extended Release in Heavy Drinkers (8/1/09 – 7/31/10). Fast Track Drugs and Biologics, Inc. Total direct costs: \$337,933. Principal Investigator: Eric C. Strain, M.D.

A Phase 2, Double Blind, Placebo Controlled Trial to Assess the Efficacy of Varenicline Tartrate for Alcohol Dependence in Very Heavy Drinkers (02/01/11 – 04/30/12). Fast Track Drugs and Biologics, Inc. Principal Investigator: Eric C. Strain, M.D.

A Phase 2, Double Blind, Placebo Controlled Trial to Assess the Efficacy of ABT-436 for Alcohol Dependence (12/12 - 01/14). Fast Track Drugs and Biologics, Inc. Principal Investigator: Eric C. Strain, M.D.

Randomized, Double Blind, Placebo-Controlled Trial of the Safety and Efficacy of HORIZANT® (Gabapentin Enacarbil) Extended-Release Tablets for the Treatment of Alcohol Use Disorder (4/15 – 9/16). Fast Track Drugs and Biologics, Inc. Principal Investigator: Eric C. Strain, M.D.

Teaching:

Classroom instruction:

Johns Hopkins University Department of Psychiatry PGY IV Seminar Series (1988 – 1991, 1993); Teacher.

Johns Hopkins University Department of Psychiatry Introduction to Psychiatry and Behavioral Sciences Course: Tutorial Group (1988, 1991, 1992, 1995 – 1997); Group Leader.

Johns Hopkins Bayview Medical Center Department of Psychiatry Weekly Internship Seminar: "Introduction to Psychopathology" (1990 – 1999); Teacher.

Johns Hopkins University undergraduate lecture: "The Treatment of Psychiatric Disorders" (April 15, 1994); Lecturer.

Johns Hopkins University School of Hygiene and Public Health: "The Organization and Nature of Substance Abuse Treatment" (September 1, 1994); Lecturer.

Johns Hopkins Hospital Community Psychiatry Program: "Opioid Abuse and Dependence in the Treatment of Community Psychiatry Patients" (October 25, 1994); Lecturer.

Johns Hopkins University School of Medicine lecture: "Introduction to Substance Abuse" (1995 – 1999); Lecturer.

Johns Hopkins University School of Medicine lecture: "Alcohol Abuse" (1996 – 1997); Lecturer.

JHBMC Addictions Treatment Lecture Series (1997, 1998, 2002); Lecturer.

Johns Hopkins University School of Medicine year two lecture: "Overview of Clinical Addiction Syndromes" (1999); Lecturer.

Johns Hopkins University School of Medicine year two lecture: "Nicotine, Hallucinogens, and Other Drugs of Abuse" (1999); Lecturer.

Johns Hopkins University School of Medicine year two lecture: "Psychiatric Comorbidity in Patients with Substance Abuse Disorders" (1999); Lecturer.

Johns Hopkins University Department of Psychiatry Clerkship Student Lecture: "Drug Abuse" (1988 – 2010); Lecturer.

Johns Hopkins University School of Medicine year one lecture: "Treatment of Substance Abuse" (2002); Lecturer.

Johns Hopkins University Department of Psychiatry PGY II seminar: "Drug Abuse Treatment" (1997, 1999-2006, 2008 – present); Lecturer.

Johns Hopkins Bloomberg School of Public Health, Department of Mental Hygiene (course: The Nature of Mental Disorders: Detection, Measurement and Classification), lecture: "Drug and Alcohol Abuse" (2002, 2003, 2005, 2006); Lecturer.

Johns Hopkins University School of Medicine year one lecture: "Addictive Disorders" (2003); Lecturer.

Johns Hopkins Bloomberg School of Public Health, Department of Mental Hygiene (course: Drug Dependence and Infectious Disease Epidemiology), lecture: "Drug and Alcohol Abuse" (2006); Lecturer.

Johns Hopkins University Department of Psychiatry Resident Seminar: "Substance Abuse Research" (May 18, 2007); Lecturer.

Johns Hopkins Blaustein Pain Conference: "The Treatment of Opioid Addiction: Pharmacotherapies" (December 14, 2007); Lecturer.

Johns Hopkins University School of Medicine, Department of Neurosciences: "Neurobiology of Substance Use Disorders" (January – February, 2012); Course Co-Director (with Drs. Antonello Bonci and Jean Lud Cadet).

Johns Hopkins Bloomberg School of Public Health, Department of Mental Hygiene (course: The Public Health Approach to Psychopathology), lecture: "Drug and Alcohol Abuse" (2012); Lecturer.

Johns Hopkins University School of Medicine year one lecture: "Drug Abuse" (April 10, 2013; May 6, 2015); Lecturer.

Johns Hopkins Bloomberg School of Public Health, Department of Mental Hygiene (course: Introduction to Mental Health Services), lecture: "Overview to Substance Abuse and Its Treatment" (April 24, 2013; May 6, 2015; October 19, 2015); Lecturer.

### Clinical instruction:

Johns Hopkins University Department of Psychiatry Grand Rounds: "The Emergency Room and Psychiatry" (April 14, 1988); Co-presenter.

Johns Hopkins University Department of Psychiatry Introduction to Psychiatry and Behavioral Sciences Course: Patient Interview Small Group (1985-1988); Group Leader.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Caffeine" (December 14, 1992); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "The Treatment of Opioid Dependence" (January 31, 1994); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Nicotine Dependence" (January 9, 1995); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "What's New in the Pharmacological Treatment of Opioid Dependence" (December 2, 1996); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Cocaine" (March 29, 1999); Presenter.

St. Joseph Medical Center Department of Psychiatry Grand Rounds: "Buprenorphine for the Treatment of Opioid Dependence" (February 18, 2000); Presenter.

Johns Hopkins University Department of Psychiatry Annual Departmental Faculty Meeting: "Buprenorphine for Use in the Treatment of Opioid Dependence" (April 13, 2000); Presenter.

Johns Hopkins University Department of Medicine Housestaff lecture: "Initial Management of Patients with Substance Abuse Disorders" (July 4, 2000); Presenter.

St. Joseph Medical Center Department of Psychiatry Grand Rounds: "Nicotine Dependence" (October 20, 2000); Presenter.

Johns Hopkins University Department of Psychiatry Departmental Conference (Scientific Linkages to Psychiatric Knowledge and Practice): "Alcoholism: Epidemiology" (March 5, 2001); Co-presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "An Update on Opioid Abuse and Its Treatment" (January 14, 2002); Presenter.

Johns Hopkins Health Care, First Annual Symposium on Best Practices: "Pharmacological Treatments of Chronic Opiate Addiction: State of the Science of Evidence-Based Care" (September 27, 2002); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "The Treatment of Opioid Dependence and Special Populations" (December 9, 2002); Presenter.

St. Joseph Medical Center 17th Annual Interface: Medicine and Psychiatry Symposium: "Substance Abuse Update" and "Alcoholism Treatment: Psychopharmacological Options" (November 1, 2003); Presenter.

Baltimore Dental Study Group on Pain: "Opioids and Addiction" (November 3, 2003); Presenter.

Maryland Chapter of NAADAC – Credentialed Addiction Counselors of Maryland (CACOM): "Buprenorphine: What It Is and Why Addictions Counselors Should Know About It" (November 7, 2003); Presenter.

Johns Hopkins Bayview Medical Center Community Psychiatry Program: "Buprenorphine: What It Is and Why You Should Know About It" (June 1, 2004); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Buprenorphine: An Update" (October 18, 2004); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Medications Development for Drug Use Disorders" (September 18, 2006); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "A Primer on Methadone Treatment" (September 17, 2007); Presenter.

Johns Hopkins Bayview Medical Center Outpatient Community Psychiatry Rotation for Medical Students (2007 – present); Attending Physician.

Division of Substance Abuse and Mental Health, Delaware Health and Social Services, New Castle, DE: "Buprenorphine for the Treatment of Opioid Dependence" (June 24, 2008); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Organization of Substance Abuse Services at Johns Hopkins" (September 22, 2008); Presenter.

Montefiore Medical Center, New York, NY, Department of Psychiatry Grand Rounds: "Studies of Buprenorphine from the Human Laboratory" (Febuary 19, 2009); Presenter.

NIDA Intramural Research Program, Baltimore, MD: "Studies of Buprenorphine from the Human Laboratory" (March 26, 2009); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Organization of Substance Abuse Services at Johns Hopkins" (September 22, 2008); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Outpatient Clinical Trials of Medications to Treat Drug Use Disorders" (September 21, 2009); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Medications for the Treatment of Alcohol Dependence" (November 14, 2011); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "Where's the Mission? (And, what is going on there?)" (April 29, 2013); Presenter.

Kolmac Conference: "New Developments in Addictions Treatment" (September 19, 2013); Presenter

St. Joseph Medical Center Department of Psychiatry Grand Rounds: "Pharmacological Management of Alcoholism" (September 20, 2013); Presenter.

Prince George's Hospital Center Grand Rounds: "Opioid Dependence" (October 30, 2013); Presenter

Johns Hopkins University Department of Psychiatry Grand Rounds: "Is There Harm in Harm Reduction?" (December 16, 2013); Presenter.

Behavioral Health Systems Baltimore, Legislative Briefing: "Substance Abuse and Its Treatment" (December 10, 2014); Presenter.

University of Maryland St. Joseph Medical Center Grand Rounds: "Opioid Addiction and Its Management" (September 16, 2015); Presenter.

Akron General Medical Center Grand Rounds: "The Treatment of Opioid Dependence" (October 22, 2015); Presenter.

Sheppard Pratt Health System Grand Rounds: "The Treatment of Opioid Dependence" (December 16, 2015); Presenter.

Suburban Hospital Grand Rounds: "Opioid Use Disorders and Their Management" (March 4, 2016); Presenter.

University of Maryland Midtown Campus presentation: "Opioid Use Disorders and Their Management" (June 2, 2016); Presenter.

Prince George's Hospital Center Grand Rounds: "Drug Abuse" (January 25, 2017); Presenter.

Johns Hopkins University Department of Psychiatry Grand Rounds: "The Behavioral Perspective: First Among Equals" (January 9, 2017); Presenter.

CME instruction:

Clinical Aspects of Caffeine Use. Johns Hopkins University School of Medicine Conjoint Clinic, Baltimore, Maryland (April 3, 1993)

Psychiatric Aspects of Cocaine Use. Johns Hopkins University School of Medicine Biennial Meeting, Baltimore, Maryland (June 11, 1993)

Maryland Educational Forum on Narcotic Treatment: Grand Rounds for Medical and Nursing Staff. Sponsored by the U.S. Center for Substance Abuse Treatment and the Maryland Alcohol and Drug Abuse Administration, Baltimore, Maryland (November 9, 1993)

New Pharmacotherapies for Opioid Dependence: LAAM and Buprenorphine. Johns Hopkins University School of Medicine Biennial Meeting, Baltimore, Maryland (June 6, 1997)

Psychiatry. Johns Hopkins Internal Medicine Board Review, Baltimore, Maryland (August 4, 1999)

Rethinking Lessons Learned: Psychosocial Treatment of Addictions. The Eleventh Annual Summa Health System/St. Thomas Hospital Multidisciplinary Conference on Addictions, Akron, Ohio (November 3, 1999)

Alcoholism. Maryland Psychiatric Society, Baltimore, Maryland (October 17, 2000)

Use of Buprenorphine in the Pharmacological Management of Opioid Dependence: A Curriculum for Physicians; Course Director. Phoenix, Arizona. (December 8-9, 2000)

Buprenorphine in Office-Based Treatment of Opiate Dependence: Faculty Development Workshop; Course Co-director. California Society of Addiction Medicine and American Society of Addiction Medicine, San Francisco, California (March 8-10, 2001)

Buprenorphine in Office-Based Treatment of Opiate Dependence; Faculty Member. California Society of Addiction Medicine and American Society of Addiction Medicine, San Francisco, California (March 9-10, 2001)

Best Practices: Treatment of Opiate Dependence; Faculty Member. Drug and Alcohol Treatment Association of Rhode Island, Newport, Rhode Island (March 14, 2001) Addictive Behaviors in Men. Johns Hopkins Men's Health 2001 Symposium, Baltimore, Maryland (March 23, 2001)

Buprenorphine Training Course; Faculty Member. American Society of Addiction Medicine, Los Angeles, California (April 22, 2001)

Office-based Treatment of Opioid Dependent Patients; Faculty Member. American Psychiatric Association Annual Meeting, New Orleans, Louisiana (May 6, 2001)

Office-based Opioid Treatment; Faculty Member. Indian Health Service Provider's Course, Phoenix, Arizona. (June 7, 2001)

Buprenorphine in Office-Based Treatment of Opiate Dependence; Faculty Member. American Methadone Treatment Association Annual Meeting, St. Louis, Missouri (October 6, 2001)

Office-based Treatment of Opioid Dependence with Buprenorphine; Plenary Session Speaker. Association for Medical Education and Research in Substance Abuse Annual National Conference, Alexandria, Virginia (November 8, 2001)

Training for Buprenorphine Treatment of Opioid Dependence; Faculty Member. Association for Medical Education and Research in Substance Abuse Annual National Conference, Alexandria, Virginia (November 11, 2001)

Buprenorphine in the Treatment of Opioid Dependence; Course Director. American Association of Addiction Psychiatry National Conference, Amelia Island, Florida (December 13, 2001)

The Treatment of Opioid Addiction; Plenary Session Speaker. Methadone, Opiates and Beyond, Nashville, Tennessee (March 14, 2002)

Buprenorphine for Opioid Dependence; Symposium Speaker. New Developments in Medications for the Treatment of Substance Abuse; American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania (May 21, 2002)

Office-based Treatment of Opiate Dependent Patients; Course Co-director. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania (May 22, 2002)

Buprenorphine: An Office-based Treatment for Opioid Dependence; Course Codirector. Sponsored by Tennessee Department of Health, Nashville, Tennessee (November 15, 2002)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by The Caribbean Basin and Hispanic Addiction Technology Transfer Center, San Juan, Puerto Rico (April 5, 2003)

Buprenorphine in Office-based Treatment of Opioid Dependence; Faculty Member. Sponsored by the Indian Health Service, Phoenix, Arizona (May 16, 2003)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Course Codirector. Sponsored by the American Psychiatry Association, San Francisco, California (May 21, 2003)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the Maryland Med Chi Foundation, Baltimore, Maryland (September 6, 2003)

Office-Based Treatment of Opiate Addiction: Buprenorphine; Faculty Member. Sponsored by the Massachusetts Psychiatric Society, Boston, Massachusetts (October 4, 2003)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the Maryland Med Chi Foundation, Baltimore, Maryland (February 7, 2004)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Course Codirector. Sponsored by the American Psychiatric Association New York, New York (May 21, 2004)

Buprenorphine and Office-Based Treatment of Opioid Dependence; Faculty Member. Sponsored by the American Society of Addiction Medicine, Boston, Massachusetts (November 20, 2004)

Buprenorphine Training Course for Clinical Teachers; Faculty Member. Sponsored by the American Osteopathic Academy of Addiction Medicine, Phoenix, Arizona (March 18, 2005)

Buprenorphine and Office-based Treatment of Opioid Dependence; Faculty Member. Sponsored by the Indian Health Service, Phoenix, Arizona (March 19, 2005)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Course Codirector. Sponsored by the American Psychiatric Association, Atlanta, Georgia (May 23, 2005)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the American Psychiatric Association/Maryland Med Chi Foundation, Towson, Maryland (June 4, 2005)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the American Psychiatric Association, Cleveland, Ohio (September 17, 2005)

Union Square: The Despair of Drug Dependence. Sponsored by the Maryland Psychiatric Society, Baltimore, Maryland (October 1, 2005)

Buprenorphine for the Treatment of Opioid Dependence; Faculty Member. Sponsored by the American Society of Addiction Medicine, Washington, D.C. (October 30, 2005)

Pharmacological and Nonpharmacological Treatment of Alcohol Dependence; Faculty Member. Sponsored by the American Society of Addiction Medicine, the Maryland Society of Addiction Medicine, and Central East Addiction Technology Transfer Center, Columbia, Maryland. (January 14, 2006)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Faculty Member. Sponsored by the American Psychiatric Association, Toronto, Canada (May 22, 2006)

Component Workshop; Buprenorphine: Clinical Issues and Managing More Complicated Patients; Faculty Member. Sponsored by the American Psychiatric Association, Toronto, Canada (May 23, 2006) Buprenorphine Training Course; Faculty Member. Sponsored by the American Society of Addiction Medicine and the Maryland Society of Addiction Medicine, Columbia, Maryland. (June 3, 2006)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the American Psychiatric Association, Cincinnati, Ohio (October 7, 2006)

Medications for Substance Use Disorders – Current Developments. Sponsored by the Maryland Psychiatric Society, Hunt Valley, Maryland (March 31, 2007)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Faculty Member. Sponsored by the American Psychiatric Association, San Diego, California (May 21, 2007)

What do we know about treating opioid withdrawal with buprenorphine? Faculty Member. Workshop at the American Psychiatric Association, San Diego, California (May 23, 2007)

Buprenorphine for the Treatment of Opioid Dependence; Course Director. Sponsored by the American Society of Addiction Medicine and the Maryland Med Chi Foundation, Baltimore, Maryland (January 4, 2008)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Faculty Member. Sponsored by the American Psychiatric Association, Washington, D.C. (May 7, 2008)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Faculty Member. Sponsored by the American Psychiatric Association, San Francisco, CA (May 20, 2009)

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Faculty Member. Sponsored by the American Psychiatric Association, New York, NY (October 10, 2009)

Emergence of Buprenorphine: Its Promise and Its Limits; Faculty Member. 56th Annual Topics in Clinical Medicine, Johns Hopkins University School of Medicine, Baltimore, MD (May 2, 2011)

Buprenorphine Update: Its Use for Opioid Addiction; Faculty Member. 58th Annual Topics in Clinical Medicine, Johns Hopkins University School of Medicine, Baltimore, MD (May 6, 2013)

Research Integrity, the Scientist as a Responsible Member of Society: Plagiarism and Research Integrity. Johns Hopkins University School of Medicine Dean's Integrity Lecture series (invited), Baltimore, MD (September 24, 2013).

Office-Based Buprenorphine Treatment for Opioid Dependent Patients; Course Director/Co-Director. Sponsored by the American Academy of Addiction Psychiatry and Baltimore Substance Abuse Systems/Behavioral Health Systems Baltimore, Baltimore, MD (November 13, 2009; November 12, 2010; November 4, 2011; November 16, 2012; November 15, 2013; November 7, 2014; November 6, 2015)

Pharmacologic Interventions for Addictions. Sponsored by the Maryland Psychiatric Society, Baltimore, MD (November 7, 2015)

#### Mentoring:

Advisees:

Hendree E. Jones, Ph.D. (2/1/97 - 4/30/98). Present position: RTI and University of North Carolina; Adjunct Professor, Department of Psychiatry, Johns Hopkins University School of Medicine.

Kenneth Stoller, M.D. (7/1/96 – 3/8/98). Present position: Medical Director, Addiction Treatment Services, Johns Hopkins Bayview Medical Center, and Instructor, Johns Hopkins University School of Medicine.

Christopher J. Correia, Ph.D. (9/1/00 - 8/15/02). Present position: Alumni Associate Professor, Department of Psychology, Auburn University.

James Rosado, Ph.D. (6/27/01 - 9/5/03). Present position: Assistant Professor of Psychology, Department of Social Sciences, Miami Dade College, Miami, Florida.

C. Patrick Carroll, M.D. (6/30/03 – 5/1/05). Present position: Assistant Professor, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Michelle R. Lofwall, M.D. (6/30/03 – 5/24/05). Present position: Associate Professor, University of Kentucky School of Medicine, Lexington, Kentucky.

Ryan Lanier, Ph.D. (06/13/05 – 04/20/08). Present position: Clinical Research Scientist, Rock Creek Pharmaceuticals, Gloucester, Massachusetts.

Angela N. Duke, Ph.D. (08/01/08 – 03/01/11). Present position: Post-doctoral Fellow, Wake Forest University School of Medicine, Wake Forest, North Carolina.

D. Andrew Tompkins, M.D. (07/01/08 – 08/17). Present position: Associate Professor, UCSF, San Francisco, California.

Denis G. Antoine, M.D. (07/01/10 – present). Present position: Assistant Professor, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Alexis Hammond, M.D. (07/01/16 – present). Present position: Post-doctoral Fellow, Johns Hopkins University School of Medicine, Baltimore, Maryland.

#### Thesis Committees:

Timothy Mudric: Outpatient Detoxification Comparison of Buprenorphine versus Methadone. Master of Arts degree, Towson State University, June 1997. Thesis Committee Member.

Deanie M. Leonard: Patterns and Outcomes of Care Among Severely Mentally Ill Adults with Co-occurring Substance Abuse in a Medicaid Population. Doctoral Dissertation, Johns Hopkins University School of Hygiene and Public Health, September, 1997. Preliminary Oral Examination Committee Member.

Johan Kakko: Improving Maintenance Treatment of Heroin Addiction. Karolinska Institute, Stockholm, Sweden, March 20, 2009. Thesis Opponent.

Lian Yu Chen: Trends, Correlates, and Consequences of Prescription Stimulants Use In the United States. Doctoral Dissertation, Johns Hopkins University School of Hygiene and Public Health, December, 2012. Oral Examination Committee Chair.

Hoon Byun: Discharges Against Medical Advice: Towards a Better Understanding of One Health System's Experience. Doctoral Dissertation, Johns Hopkins University School of Hygiene and Public Health, January, 2013. Preliminary Oral Examination Committee Member.

Pia Mauro: Behavioral Health Service Integration in Adult Substance Abuse Treatment: Trends and Predictors 2002-2011. Doctoral Dissertation, Johns Hopkins University School of Hygiene and Public Health, October, 2013. Oral Examination Committee Chair.

#### Training Grant Participation:

Member of training faculty (1990 – present): Human Behavioral Pharmacology of Substance Abuse. National Institute on Drug Abuse, T32 DA07209. Principal Investigator: George E. Bigelow, Ph.D.

### **Editorial Activities:**

#### Editor:

Drug and Alcohol Dependence, Associate Editor for Treatment and Services (2005 – 2010); Editor in Chief (2010 – present)

#### Editorial Board Appointments:

Addictive Disorders and Their Treatment (2002 – present)

American Journal on Addictions (2004 – present)

Drug and Alcohol Dependence (1996 – 2005)

Experimental and Clinical Psychopharmacology (1999 – 2005)

Journal of Maintenance in the Addictions (1997 – 2004)

Journal of Addiction Medicine (2007 – present)

Psychology of Addictive Behaviors (2013)

Journal Peer-review Activities:

Ad hoc reviewer:

Addiction

Addiction Review

American Journal of Drug and Alcohol Abuse

American Journal of Psychiatry

Annals of Emergency Medicine

Annals of Internal Medicine Archives of General Psychiatry **Behavioral Pharmacology Biological Psychiatry Clinical Pharmacokinetics CNS** Drugs Drug and Alcohol Dependence Drug and Alcohol Review Experimental and Clinical Psychopharmacology JAMA Journal of Maintenance in the Addictions Journal of Nervous and Mental Disease Journal of Clinical Psychopharmacology Journal of General Internal Medicine Journal of Psychoactive Drugs Journal of Studies on Alcohol Journal of Substance Abuse Journal of Substance Abuse Treatment Mayo Clinic Proceedings The Medical Journal of Australia New England Journal of Medicine **Pediatrics Psychiatric Services** Psychopharmacology CLINICAL ACTIVITIES Certification:

Medical Licensure:

Medical License D33223, State of Maryland (1986 - present)

Boards, Other Specialty Certification:

Board Certified in Psychiatry (32077), American Board of Neurology and Psychiatry (1989)

Board Certified in Addiction Psychiatry (901677), American Board of Neurology and Psychiatry (1993; 2003; 2013)

Other Certifications:

Buprenorphine waiver

Johns Hopkins Leadership Development Program (2009)

Service Responsibilities:

Attending and Supervisor, psychiatry outpatient clinic, Bayview Medical Center Community Psychiatry Program, 4 hours per week (1988 – present)

Attending, psychiatry inpatient service at Bayview Medical Center, 1-2 months per year (1990 – present)

Attending, psychiatry consult-liaison service at Bayview Medical Center (2003 – 2008)

## ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments:

Professional Advisory Committee, Hubert H. Humphrey Fellowship Program in Drug Abuse (1992 – 1996); Member.

JHHS Medicaid Managed Care Communications Group (aka JHM Medicare/Medicaid Executive Oversight Group) (1996 – 1998); Member.

Behavioral Healthcare Management Committee (1999 – 2002); Member.

Johns Hopkins Bayview Medical Center Search Committee, Administrative Director, Community Psychiatry Program (2009); Member.

Johns Hopkins University School of Medicine Search Committee, Director, Division of Child Psychiatry (2009 – 2011); Member.

Johns Hopkins University Bloomberg School of Public Health Search Committee, Department of Mental Health (2011); Member.

Johns Hopkins University Department of Psychiatry and Behavioral Sciences, Vice Chair Committee (2010 – 2016); Member.

Johns Hopkins University School of Medicine, Development of Mission Imperatives, Subject Matter Expert Workgroup on Research (2012); Member.

Johns Hopkins University School of Medicine, Johns Hopkins Community Health Partnership (J-Chip), Program Administration Committee, Behavioral Workgroup (2012-2013); Member.

Johns Hopkins Center for AIDS Research (CFAR), Substance Abuse Working Group (2012 – 2013): Member.

Johns Hopkins University School of Medicine, Professorial Promotion Committee (2013 – present); Member.

Johns Hopkins University Department of Psychiatry and Behavioral Sciences, Leadership Team (2016 – present); Member.

**Professional Societies:** 

American Medical Association (1981 – 2010); Member.

American Psychiatric Association (1990 – present); Member.

Maryland Psychiatric Association (1990 – present); Member.

American Academy of Addiction Psychiatry (1991 – present); Member.

The College on Problems of Drug Dependence (1995 – present); Member.

American Society of Addiction Medicine (2003 – present); Member

American Association for the Treatment of Opioid Dependence (2003 – 2008); Member

Professional Society Committees, Boards:

Continuing Medical Education committee (American Academy of Addiction Psychiatry; 2000 – 2006, Member).

Committee on Medications Development, Subcommittee on Buprenorphine Training (American Society of Addiction Medicine; 2001 – 2005, Member).

Workgroup for Revising Practice Guideline for the Treatment of Substance Use Disorders (American Psychiatric Association; 2002 – 2006, Member).

Research committee and section (American Academy of Addiction Psychiatry; 2002 – 2005, Chair).

Board of Directors (American Academy of Addiction Psychiatry; 2002 – 2005, Member).

Council on Addiction Psychiatry (American Psychiatric Association; 2002-2003, Corresponding Member; 2003 – 2005, Member; 2005 – 2009, Chair).

Buprenorphine Advisory Committee (The Maryland State Medical Society Foundation (Med Chi); 2003 – 2009, Member)

Credentials Committee (College on Problems of Drug Dependence; 2003 – 2008, Chair).

Board of Directors (College on Problems of Drug Dependence; 2008 – 2012).

Abuse Liability Evaluation for Research, Treatment, and Training (ALERTT) workgroup (Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks; 2012 – 2013).

President-Elect (2013-2014), President (2014-2015), Past-President (2015-2016), (College on Problems of Drug Dependence).

**Community Boards:** 

Baltimore Substance Abuse Services, Inc. (Board member, 2009 – 2012).

Conference Organizer, Session Chair:

The Use of Behavior Therapy in Medication Efficacy Trials, National Institute on Drug Abuse (September 19-20, 1996); Moderator.

Data Monitoring Board, National Institute on Drug Abuse/Department of Veterans Affairs Cooperative Studies Program (1997); Chair.

Drug Abuse Advisory Committee of the Food and Drug Administration (1997 – 2000); Chair.

Strategies for Post-Marketing Surveillance. 128<sup>th</sup> Annual Meeting, American Public Health Association, Boston, Massachusetts (November 13, 2000); Co-chair.

Innovations in Clinical Services and Management. Clinical, Educational and Managed Care Strategies for Academic Psychiatry, The Second Annual Conference of The Academic Behavioral Health Consortium (ABHC), Baltimore, Maryland (June 14, 2001); Moderator.

French Experience with Buprenorphine. Annual Meeting of The College on Problems of Drug Dependence, Quebec, Canada (June 13, 2002); Symposium Chair.

The Data on DATA: Evaluating the Impact of Buprenorphine's Introduction in the Medical Community. Annual Meeting of The College on Problems of Drug Dependence, Orlando, Florida (June 20, 2005); Symposium Co-chair.

Population Selection. Pharmacology Clinical Trials: Psychiatric/Substance Use Comorbidity Issues. Sponsored by the National Institute of Health, Bethesda, Maryland (February 28, 2006); Discussant.

Who prescribes What to Whom and Why? Understanding and Assessing the Complex Issue of Addiction to Prescription Medications. Sponsored by the American Psychiatric Association, Toronto, Canada (May 23, 2006); Forum Co-Chair.

Special Lecture by Dr. Marcus Heilig; Sponsored by the American Psychiatric Association, Toronto, Canada (May 24, 2006); Chair.

The interaction between alcohol and other drugs of abuse: from neurobiology to clinical implications. Annual Meeting of The College on Problems of Drug Dependence, San Diego, California (June 17, 2013); Symposium Co-chair.

Measures of Outcome for Stimulant Trials (MOST). Sponsored by ACTTION (a public-private collaboration with the FDA, NIH, and other key stakeholders; March 25-26, 2015), Rockville Maryland. Organizer and Chair.

Advisory Committees, Review Groups:

Special Review Committee, National Institute on Drug Abuse (August 21, 1991); Consultant.

Special Review Committee, National Institute on Drug Abuse (December 20, 1991); Consultant.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (July 28, 1992); Consultant.

Special Review Committee, National Institute on Drug Abuse (November 12, 1992); Consultant and Chair.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (February 22, 1993); Consultant.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (April 5, 1993); Consultant.

Special Review Committee, National Institute on Drug Abuse (June 8, 1993); Consultant.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (September 27, 1994); Consultant.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (August 3, 1995); Consultant.

Special Review Committee, National Institute on Alcohol Abuse and Alcoholism (October 19, 1995); Consultant.

Drug Abuse Advisory Committee of the Food and Drug Administration (1996 – 2000); Consultant.

Center review (Yale University School of Medicine, New Haven, CT), National Institute on Drug Abuse (June 18-19, 1996); Site Visit Committee Member.

Special Review Committee, National Institute on Drug Abuse (July 10, 1996); Consultant.

Special Review Committee, National Institute on Drug Abuse (July 17, 1996); Consultant.

Special Review Committee, National Institute on Drug Abuse (March 10-11, 1999); Consultant.

Special Review Committee, National Institute on Drug Abuse (March 16-17, 1999); Consultant.

American Board of Psychiatry and Neurology's Committee for Added Qualifications in Addictions (1999 – 2004); Member.

Consensus Panel, Buprenorphine Practice Guidelines Project, Center for Substance Abuse Treatment (2000); Member.

Curriculum Panel, Buprenorphine Physician Training Project, Center for Substance Abuse Treatment (2000); Member.

Special Review Committee, National Institute on Drug Abuse (June 27, 2001); Consultant.

Medication Development Research Subcommittee (NIDA-L), National Institute on Drug Abuse (July 9, 2001); Consultant.

Scientific Advisory Committee to the Maryland Drug and Alcohol Council (2002); Member

Special Review Committee, National Institute on Drug Abuse (March 6, 2003); Consultant.

Data Safety and Monitoring Board: Methadone Maintenance for Prisoners (R01 DA016237, Timothy W. Kinlock, Ph.D., PI; Friends Research Institute; 2003-present); Chair

National Institute on Drug Abuse – Substance Abuse and Mental Health Services Administration Blending Team for Buprenorphine for Non-physician Addiction Practitioners (2003-present); Member.

Training and Career Development Subcommittee (NIDA-K), National Institute on Drug Abuse (November 4-5, 2003); Consultant.

Medication Development Research Subcommittee (NIDA-L), National Institute on Drug Abuse (June 7, 2004); Consultant.

Data Safety and Monitoring Board: Drug Abuse Treatment and HIV Risk Reduction in Malaysia (R01, Richard Schottenfeld, M.D., PI; Yale University; 2004); Member.

Training and Career Development Subcommittee (NIDA-K), National Institute on Drug Abuse (November 16-18, 2004); Consultant.

Buprenorphine Summit, National Institute on Drug Abuse and Substance Abuse and Mental Health Services Administration (April 11-12, 2005); Moderator

Data Safety and Monitoring Board: Prescription Opioid Addiction Treatment Study (POATS) (CTN 0030, Walter Ling, M.D. and Roger Weiss, M.D., PIs; 2005 – present); Member

Special Review Committee, National Institute on Drug Abuse (April 27-28, 2006); Chair.

Special Review Committee, National Institute on Drug Abuse (June 30, 2006); Chair.

Medication Development Research Subcommittee (NIDA-L), National Institute on Drug Abuse; Member (2006); Chair (2007 – 2009).

Special Review Committee for P50 applications, National Institute on Drug Abuse (June 10, 2009); Consultant.

NIDA Grand Opportunity in Medications Development Review Group (September 30, 2011); Chair

SAMHSA Science and Service Award Program (November 2011; February 2012; March 2013); Panel Member/Reviewer.

Federation of State Medical Board and SAMHSA update of Model Policy Guidelines for Opioid Addiction Treatment in the Medical Office (March 9, 2012); Panel Member.

NIDA Intramural Research Program, Clinical Program Portfolio Review Group (January – May, 2012); Chair.

NIDA Translational Avant Garde Award Review (DP1) Committee (March 27, 2012); Chair.

NIH Director's Transformative Research Awards (R01) Review Committee (May 31, 2012); Member.

NIDA Intramural Research Program (IRP) Board of Scientific Counselors (2013 – present); Member

Review Committee for P30/P50 center applications, National Institute on Drug Abuse (February 23-24, 2010; February 22-24, 2011; February 22, 2012; February 20-21, 2013; February 18, 2014; March 10-11, 2015 [Chair]; March 16-17, 2016 [Chair]; March 22-23, 2017 [Chair]).

NIH Special Emphasis Panel/Scientific Review Group RPIA-K/N (2010 – 2015); Chair.

NIH Addiction Risks and Management Study Section (2015-2016); Chair.

### RECOGNITION

Awards, Honors:

History and Philosophy of Science Award, University of Sydney (1979)

Frank Dow Prize in Chemistry, Amherst College (1980)

John Simpson Fellowship for The Study of Medicine, Amherst College (1980 – 1981)

Rock Sleyster Scholar, AMA-ERF (1983 – 1984)

Landacre Society, Ohio State University Research Society (1984)

The William Means Memorial Award, Ohio State University (1984)

Distinguished Fellow, American Psychiatric Association (2004)

Visiting Faculty Member, National Health Research Institutes, Taiwan (2009)

Fellow, College on Problems of Drug Dependence (2012)

Great Teachers Series, NIH Clinical Center (2015)

Chester Schmidt, M.D., Teaching Award, JHBMC (2015)

Invited Talks, Panels:

#### National:

The Effects of Buprenorphine in Methadone-Dependent Volunteers. The Committee on Problems of Drug Dependence, Richmond, Virginia (June 14, 1990)

Buprenorphine: Historical Overview and Studies Planned/In Progress. NIDA Technical Review, Bethesda, Maryland (July 16, 1990)

Limited Abuse-Liability of Buprenorphine in Methadone-Dependent Volunteers. American Society for Clinical Pharmacology and Therapeutics, San Antonio, Texas, (March 14, 1991)

Methadone Dosing Level: Effects on Treatment Outcome. The Committee on Problems of Drug Dependence, Palm Beach, Florida (June 20, 1991)

The Characteristics of Triply Diagnosed Patients. The American Psychiatric Association, Washington, D.C. (May 5, 1992)

An Outpatient Trial of Methadone versus Buprenorphine in the Treatment of Opioid Dependence. The College on Problems of Drug Dependence, Keystone, Colorado (June 21, 1992)

Pharmacotherapies for Opioid Dependence: Methadone and Buprenorphine. Drug and Alcohol Nursing Association, Baltimore, Maryland (October 10, 1992)

Methadone Dosing Level: Effects on Treatment Outcome. Baltimore Substance Abuse Systems, Inc., Baltimore, Maryland (November 5, 1992)

An Outpatient Trial of Methadone versus Buprenorphine in the Treatment of Opioid Dependence. Johns Hopkins University School of Medicine Department of Psychiatry Research Potpourri (May 19, 1993)

An Outpatient Trial of Methadone versus Buprenorphine in the Treatment of Combined Opioid and Cocaine Dependence. The College on Problems of Drug Dependence, Toronto, Canada (June 17, 1993)

Buprenorphine Treatment for Opioid Dependence. National Methadone Conference, Washington, D.C. (April 22, 1994)

Urinalysis and Self-Reports of Drug Use. Johns Hopkins University School of Medicine Department of Psychiatry Research Potpourri (May 16, 1994)

Useful Predictors of Outcome in Methadone Patients. The American Psychiatric Association, Philadelphia, Pennsylvania (May 26, 1994)

Buprenorphine versus Methadone in the Treatment of Opioid Dependence: Urinalysis and Self-Report Results. New Clinical Drug Evaluation Unit Program Annual Meeting, Marco Island, Florida (June 2, 1994)

Abuse Liability Evaluation of Buprenorphine in Buprenorphine-Treated Patients. The College on Problems of Drug Dependence, Palm Beach, Florida (June 21, 1994)

The Development of Buprenorphine as a New Treatment Agent for Opioid Dependence. Wayne State University School of Medicine, Department of Psychiatry Grand Rounds, Detroit, Michigan (February 22, 1995) The Effects of Dezocine in Methadone-Dependent Volunteers. The College on Problems of Drug Dependence, Scottsdale, Arizona (June 14, 1995)

Clinical Evidence for the Caffeine Dependence Syndrome. The College on Problems of Drug Dependence, Scottsdale, Arizona (June 15, 1995)

Methadone Dose and Treatment Outcome. National Methadone Conference, Phoenix, Arizona (November 2, 1995)

Caffeine. Jefferson Medical College Department of Psychiatry Grand Rounds, Philadelphia, Pennsylvania (January 17, 1996)

Treatment with Moderate versus High-Dose Methadone. The American Psychiatric Association, New York, New York (May 7, 1996)

Substance Abuse: Disease versus Behavior. Johns Hopkins University School of Medicine, Faculty Development for Preventing Alcohol and Other Drug Abuse program, Baltimore, Maryland (May 17, 1996)

Buprenorphine in the Treatment of Opioid Dependence: Results from a Placebo-Controlled Clinical Trial. Johns Hopkins University School of Medicine Department of Psychiatry Research Potpourri (May 20, 1996)

Moderate versus High Dose Methadone in the Treatment of Opioid Dependence. The College on Problems of Drug Dependence, San Juan, Puerto Rico (June 27, 1996)

Buprenorphine: An Update on Its Development. National Methadone Conference, Chicago, Illinois (April 14, 1997)

Characteristics of Patients with Chronic Use of OTC Analgesics Containing Caffeine. The College on Problems of Drug Dependence, Nashville, Tennessee (June 18, 1997)

The Pharmacology of Buprenorphine. American Society of Addiction Medicine, Washington, D.C. (October 23, 1997)

Medications Development for Substance Dependence: LAAM and Buprenorphine Treatment. The American Psychiatric Association, Toronto, Canada (June 3, 1998)

The Effects of Buprenorphine/Naloxone in Non-Dependent Opioid Abusers. The College on Problems of Drug Dependence, Scottsdale, Arizona (June 17, 1998)

LAAM for Opioid Dependence: Clinical Aspects of Treatment with LAAM. American Methadone Treatment Association Conference, New York, New York (September 28, 1998)

The Recognition of Substance-Related Problems and Their Impact on the Family. St. Mary's Seminary and University, Baltimore, Maryland (October 16, 1998)

The Role of Medications in the Treatment of Substance Abuse. National Drug Court Institute, Comprehensive Training Conference, Arlington, Virginia (October 20, 1998)

Substance Abuse in Schizophrenia. Sixth Annual Maryland Schizophrenia Conference, Hunt Valley, Maryland (November 23, 1998) Buprenorphine for the Treatment of Opioid Dependence: Laboratory Studies. American Academy of Addiction Psychiatry, Amelia Island, Florida (December 5, 1998)

Buprenorphine for the Treatment of Opioid Dependence. Virginia Commonwealth University – Medical College of Virginia, Richmond, Virginia (January 14, 1999)

Pharmacology of Buprenorphine. American Society of Addiction Medicine, New York, New York (April 30, 1999)

Acute Effects of Tramadol in Methadone-Maintained Volunteers. The College on Problems of Drug Dependence, Acapulco, Mexico (June 15, 1999)

Medication Compliance, Substance Abuse Disorders, and the Hopkins' Perspectives. Value Options, Falls Church, Virginia (October 16, 1999)

Office-based Practice of Substance Abuse Treatment. University of Maryland Department of Psychiatry Grand Rounds, Baltimore, Maryland (October 18, 1999)

Blockade Effects of Buprenorphine/naloxone Combination Tablet in Opioiddependent Volunteers. The College on Problems of Drug Dependence, San Juan, Puerto Rico (June 21, 2000)

Overview to the Buprenorphine Curriculum. Physician Summit, Center for Substance Abuse Treatment, Bethesda, Maryland (November 30, 2000)

Comparison of Patients with Opioid versus Cocaine Dependence. American Academy of Addiction Psychiatry, Phoenix, Arizona (December 8, 2000)

Substance Use and Its Treatment. Baltimore City Health Department, Baltimore, Maryland (January 18, 2001)

The Neuroscience and Practical Applications of Treating Chemical Addiction. American Pharmaceutical Association Annual Meeting, San Francisco, California (March 17, 2001)

Making Buprenorphine Available for the Treatment of Opioid Dependence: Status of Final Steps in the Medication Development Process. The College on Problems of Drug Dependence, Phoenix, Arizona (June 18, 2001)

Office-based Treatment of Opioid Dependence: Use of Suboxone when Available. Third Annual Psychopharmacology Review Course sponsored by Holy Name Hospital, Teaneck, New Jersey (October 5, 2001)

Office-based Narcotic Treatment – Buprenorphine. National Association of State Controlled Substance Authorities Annual Meeting, Scottsdale, Arizona (October 26, 2001)

Office Based Treatment of Opiate Addiction. Eighth Annual Seminar on Chemical Dependency, North Carolina Pharmacist Recovery Network, Greensboro, NC (November 4, 2001)

Assessing Abuse Potential of Medications Using the Human Laboratory. Second Annual Drug Development and Clinical Trials for Novel Pain Therapeutics, Institute for International Research, Washington, D.C. (November 30, 2001) Update on the Treatment of Opioid Dependence. Joint Medicine/Psychiatry Grand Rounds, Maine Medical Center, Portland, Maine (January 9, 2002)

Buprenorphine in the Treatment of Opioid Dependence. Grand Rounds, Department of Psychiatry and Behavioral Sciences, Northwestern University Medical School, Chicago, Illinois (April 24, 2002)

Bioavailability of Buprenorphine Solution versus Tablets During Chronic Dosing in Opioid Dependent Subjects. The College on Problems of Drug Dependence, Quebec, Canada (June 10, 2002)

Buprenorphine for the Treatment of Opioid Dependence. University of Vermont College of Medicine, Burlington, Vermont (November 20, 2002)

Pharmacology, Safety and Efficacy of Buprenorphine for the Treatment of Opioid Dependence. State Systems Development Program (SSDP VI) Conference (November 22, 2002)

Abuse Potential of Parenteral Buprenorphine/Naloxone in Non-Dependent Opioid Abusers. The College on Problems of Drug Dependence, Bal Harbour, Florida (June 16, 2003)

Buprenorphine for the Treatment of Opioid Dependence. Springfield State Hospital Grand Rounds, Catonsville, Maryland (September 12, 2003)

Evidence-Based Practice-Part II: Buprenorphine: A New Drug Treatment and a New Opportunity for Physician/Psychologist Collaboration in the Treatment of Opioid Addiction. Maryland Psychological Association Annual Meeting, Linthicum, Maryland (October 10, 2003)

Buprenorphine and Office Based Treatment of Opioid Addiction; Clinical Aspects of Caffeine Use; Dual Diagnosis in Illicit Drug Users. Eleventh Annual Alcohol and Drug Issues Conference for Clinicians, Columbia, South Carolina (January 24-25, 2004)

Assessing Buprenorphine/Naloxone's Withdrawal Precipitation Potential in Methadone-Maintained Volunteers. The College on Problems of Drug Dependence, San Juan, Puerto Rico (June 14, 2004)

A Review of Recent Research Relevant to the Clinical Use of Buprenorphine. State Systems Development Program (SSDP VII) Conference, Washington, D.C. (August 12, 2004)

Adding Naloxone to Opioids to Decrease Abuse Potential: Rationale, History, and Evidence of Efficacy. CPDD Conference on Impact of Drug Formulation on Abuse Liability, Safety and Regulatory Decisions, Washington, D.C. (April 19-20, 2005)

Opioid Dependence Treatment: Recent Findings, Future Directions. Sinai Hospital Grand Rounds, Baltimore, Maryland (January 3, 2006)

Controlled Clinical Trial of Fluoxetine and Vouchers. The College on Problems of Drug Dependence, Scottsdale, Arizona (June 21, 2006)

Modest Opioid Withdrawal Suppression Efficacy of Oral Tramadol in Humans. Johns Hopkins University School of Medicine Department of Psychiatry Research Potpourri (May 14, 2007)

Studies of Buprenorphine from the Human Laboratory. Johns Hopkins Bayview Medical Center Department of Psychiatry Seminar Series (January 16, 2008)

Enhancing Educational Supports for Physicians Prescribing Buprenorphine. Buprenorphine in the Treatment of Opioid Addiction (Buprenorphine Summit), sponsored by Substance Abuse and Mental Health Services Administration and National Institute on Drug Abuse, Washington, D.C. (February 22, 2008).

Current Status of Buprenorphine Treatment for Opioid Dependence. Sinai Hospital Grand Rounds, Baltimore, Maryland (March 4, 2008)

Buprenorphine Therapy: Refining the Training Curriculum. Symposium sponsored by the Substance Abuse and Mental Health Services Administration at the annual meeting of the American Society of Addiction Medicine, Toronto, Canada (April 11, 2008)

Regulatory Pitfalls Observed in Pharmacotherapy Grant Applications and How to Avoid Them. Workshop sponsored by the National Institute on Drug Abuse at the annual meeting of the College on Problems of Drug Dependence, San Juan, PR (June 17, 2008)

Outpatient Clinical Trials of Medications to Treat Drug Use Disorders. Johns Hopkins Bayview Medical Center Department of Psychiatry Seminar Series (September 4, 2008)

Induction of Opioid-dependent Individuals onto Buprenorphine and Buprenorphine/naloxone Soluble Film. The College on Problems of Drug Dependence, Reno, Nevada (June 24, 2009)

Pharmacotherapy of Alcohol Dependence. Institute on Psychiatric Services, New York, NewYork (October 8, 2009)

Pharmacotherapies for Alcohol Dependence – What are the Risks? American Society of Addiction Medicine State of the Art in Addiction Medicine conference, Washington, D.C. (October 23, 2009)

A Wake Up Call: The Facts about Caffeine. Johns Hopkins Medicine: A Woman's Journey, Palm Beach, Florida (January 21, 2010)

New Formulations of Buprenorphine: What's on the Horizon. Buprenorphine Summit, Washington, D.C. (May 11, 2010)

A Wake Up Call: The Facts about Caffeine. Johns Hopkins Medicine: A Woman's Journey, Baltimore, Maryland (November 20, 2010)

Outpatient Clinical Trials of Medications to Treat Drug Use Disorders. University of Arkansas Department of Psychiatry Grand Rounds, Little Rock, Arkansas (April 7, 2011)

New Formulations for the Treatment of Opioid Dependence. University of Alabama, Birmingham Department of Psychiatry Grand Rounds, Birmingham, Alabama (May 10, 2011)

Maintenance Therapies for Opioid Addiction. Hazelden Graduate School, Center City, Minnesota (June 8, 2011)

The Discriminative Stimulus Effects of Tramadol in Drug Experienced Humans. The College on Problems of Drug Dependence, Hollywood, Florida (June 20, 2011)

Opioid Dependence. Southern Maryland Hospital Center Grand Rounds, Clinton, Maryland (February 8, 2012)

Opioid Dependence. Good Samaritan Hospital Grand Rounds, Baltimore, Maryland (December 12, 2012)

How to Get Your Addiction Research Manuscripts Published: Guidelines for Emerging Investigators. Workshop at the annual meeting of the College on Problems of Drug Dependence, San Diego, California (June 18, 2013)

Buprenorphine: The Science of Its Development to Clinical Use. Invited plenary session talk, Society of Biological Psychiatry, New York, NY (May 8, 2014)

The Assessment of Tramadol's Pharmacological Profile as an Example of Abuse Liability Testing in Humans. Workshop at the annual meeting of the College on Problems of Drug Dependence, San Juan, Puerto Rico (June 16, 2014)

Buprenorphine: The Science of Its Development to Clinical Use. JHU Department of Psychiatry and Behavioral Sciences Research Conference (December 23, 2014)

The Treatment of Opioid Dependence. University of Maryland School of Social Work (February 12, 2015)

Medications Development for Opioid Use Disorder: Buprenorphine and the Human Laboratory. Temple University Center for Substance Abuse Research Symposium and Retreat (September 28, 2016)

Duration of Treatment and Tapering Strategies for Opioid Use Disorder. American Society of Addiction Medicine State of the Art in Addiction Medicine conference, Washington, D.C. (October 6, 2016)

Medications Development for Opioid Use Disorder: Buprenorphine and the Human Laboratory. Caron Research Conference (September 29, 2017)

Opioid Dependence and Its Treatment. Good Samaritan Hospital Grand Rounds, Baltimore, Maryland (October 14, 2016)

Hallucinogen Research – Then and Now. Caron Professional Advisory Council (October 10, 2017)

The Opioid Epidemic. Brown Advisory, Baltimore (October 24, 2017)

#### International:

The Pharmacological Treatment of Opioid Dependence; The Pharmacological Treatment of Alcohol Dependence; Contemporary Issues in the Treatment of Substance Abuse. III Encontro de Profissionais e Instituições de Tratamento em Dependência Química no Rio de Janeiro, [and] V Fórum de Dependência Química nas Empresas do Rio de Janeiro (Third Meeting of Professionals and Treatment Centers on Chemical Dependence, and Fifth Forum of Chemical Dependence on Rio de Janeiro Business), sponsored by ABEAD – Associação Brasileira de Estudo ao Álcool e outras Drogas, Rio de Janeiro (July 2-3, 1998)

The Development of Medications for Treating Substance Abuse Disorders: The United States Experience. 1ère Réunion européenne de pharmacodépendance (First European Meeting on Drug Abuse and Dependence), Biarritz, France (October 25, 1999)

Cocaine Abuse: The United States Experience. Université Victor Segalen, Bordeaux, France (October 27, 1999)

Opiate Abuse: A Pharmacological Perspective. Buprenorphine: Progress in Partnership conference, London, England (March 23, 2000)

Buprenorphine: An Update; Methadone: An Update. European Opiate Addiction Treatment Association Conference: Heroin Addiction and Related Clinical Problems, 4th European Substitutive Therapies Conference, Subbiano, Arezzo, Italy (May 3-5, 2000)

Methadone Maintenance: The Recommended Dose. Thirteenth Congress of the European College of Neuropsychopharmacology, Munich, Germany (September 9-13, 2000)

Psychiatric Co-morbidity and Opioid Dependence Treatment. Subutex International Conference, Amsterdam, Netherlands (April 8-9, 2002)

Low versus High Doses of Methadone. Fifteenth Congress of the European College of Neuropsychopharmacology, Barcelona, Spain (October 7, 2002)

Update of Drug Abuse Psychopharmacological Treatment; Epidemiology of Drug Abuse in the United States; Opioids: From History to Dependence. XXI Congresso Brasilero de Psiquiatria (XXI Brazilian Congress of Psychiatry), Goiânia, Brazil (October 15-18, 2003)

Patient-Treatment Matching for Opioid Addicted Patients; The Problem of Compliance: Pharmacological Aspects. Italian Society on Addiction (Società Italiana Tossicodipendenze), "Update in the Treatment of Drug Addiction," Cagliari, Sardinia, Italy (January 29-31, 2004)

Assessing the Pharmacological Aspects of Buprenorphine Through Use of Human Laboratory Studies. Sixth European Opiate Addiction Treatment Association Conference (Europad), Paris, France (November 2, 2004) An Update on Buprenorphine: Research Findings. Second Nordic Opioid Addiction Treatment Conference (Chair of conference), Oslo, Norway (September 1-4, 2005)

Opiate Pharmacotherapies: An Update on Buprenorphine (keynote address); An Update on Pharmacotherapy Research for the Treatment of Addiction Pharmacotherapies. Australasian Professional Society on Alcohol and Drugs, Melbourne, Australia (November 8, 2005)

Suboxone: Pharmacology and Clinical Use. Keynote speaker, buprenorphine/naloxone launch, Brisbane, Melbourne, Sydney, Adelaide, Perth, Australia (April 3-7, 2006)

Pharmacokinetics, Safety and Efficacy of Buprenorphine/naloxone; Pharmacokinetics, Safety and Efficacy of Methadone and Naltrexone. Ninth Annual meeting of the International Society of Addiction Medicine, Cairo, Egypt (October 22, 2007)

Basic Pharmacology of Buprenorphine/naloxone and Clinical Data. Eighth International Congress Addiction, Hepatitis, AIDS, Biarritz, France (October 25, 2007).

The Role of Physical Dependence in Abuse and Addiction: A Clinical Perspective. Fifth Annual GRT-Columbia Abuse Liability Workshop, Aachen, Germany (November 30, 2007).

Outpatient Clinical Trials of Medications to Treat Drug Use Disorders. Special presentation at the National Institute on Drug Dependence, Beijing, China (October 20, 2008).

Pharmacology of Buprenorphine and Buprenorphine/Naloxone. Plenary session, The 10th National Conference on Drug Dependence, Xi'an City, China (October 22, 2008)

Pharmacology of Buprenorphine and Buprenorphine/Naloxone. Taichung, Kaohsiung, and Tapei, Taiwan (October 24-26, 2008)

Clinical Research: Pharmacologic Achievements. Plenary session, Societa' Italiana Tossicodipendenze, VI National Conference, Rome, Italy (November 20, 2008)

Prescription Opioid Abuse: A Historical U.S. Perspective; Side Effects and Significant Adverse Events with Opioid Maintenance Treatment Medications. The Australasian Professional Society on Alcohol and other Drugs (APSAD), Sydney, Australia (November 23-24, 2008)

The Treatment of Opioid Dependence. Karolinska Institute, Stockholm, Sweden (March 20, 2009)

Studies from the Human Laboratory: Buprenorphine as an Example in Medications Development; Substance Abuse Research: Pharmacologic Achievements; An Overview to the Use of Buprenorphine in the Treatment of Opioid Dependence. Various locations in Taiwan (November 1-12, 2009) Maintenance Treatment Using Buprenorphine/Naloxone for the Treatment of Opioid Dependence. Second World Congress in Asian Psychiatry, Taipei, Taiwan (November 7, 2009)

The Buprenorphine/Naloxone Soluble Film. Clinical Advances Conference, Sydney, Australia (March 11, 2011)

Outpatient Clinical Trials of Medications to Treat Drug Use Disorders. National Drug and Alcohol Research Centre, Sydney, Australia (March 15, 2011)

Ethical issues in the planning, conduct, and publication of addictions research. National Taiwan Normal University, Taipei City, Taiwan (October 13, 2016)

Opioid Dependence and Its Treatment. Reforming Drug Treatment: An Inspiration of Taiwan's Methadone Treatment to New Challenges of New Psychoactive Substance Policy, Taipei City, Taiwan (October 14, 2016)

Three invited talks for the 4th Annual Conference on Substance Use and HIV: (1) Cooccurring Disorders in Substance Abuse Patients. (2) Building An Integrated Substance Abuse Treatment System. (3) Treatments for Opioid Dependence: Buprenorphine and Methadone, Ho Chi Minh City, Viet Nam (August 3-5, 2017)

Co-occurring Disorders in Methadone Maintenance Patients. Technical Assistance meeting, Hanoi, Viet Nam (August 7-8, 2017)

## OTHER PROFESSIONAL ACCOMPLISHMENTS

New Program Development:

Day Hospital Program for Substance Abuse Treatment, Meyer 5, Johns Hopkins Hospital (started in 1997)

Medicaid Capitated Contract for Substance Abuse Treatment, Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Sciences (started in 1999)

Cornerstone@HUM clinic, Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Sciences (business plan written in 2011; clinical services launched in March, 2012)