

## **Adam M. Bisaga, M.D.**

### **Field of Specialization**

Addiction Psychiatry

### **Academic Training**

1982 - 1989 M.D., Jagiellonian University Medical College, Kraków, Poland

### **Traineeship**

1990 - 1993 Postdoctoral Research Fellow, Institute of Psychiatry and Neurology, Warsaw, Poland

1993 - 1996 Intern and Resident in Psychiatry: Department of Psychiatry, North Shore University Hospital - Cornell University Medical College, Manhasset, NY

1996 - 1997 Chief Resident: Department of Psychiatry, North Shore University Hospital, Manhasset, NY

1997 - 1999 Postdoctoral Clinical Fellow, Department of Psychiatry, Columbia University College of Physicians & Surgeons, New York, NY

### **Professional Certifications**

1996 Licensed to practice medicine in New York State (Cert. # 205300)

1998, 2008 Diplomate in Psychiatry, American Board of Psychiatry & Neurology (# 44995)

2000, 2011 Diplomate in Addiction Psychiatry, American Board of Psychiatry & Neurology (# 1780)

### **Academic Appointments**

1999-2006 Assistant Professor of Clinical Psychiatry, Columbia University College of Physicians & Surgeons

2006-2012 Associate Professor of Clinical Psychiatry, Columbia University College of Physicians & Surgeons

2012-present Professor of Psychiatry at CUMC, Columbia University College of Physicians & Surgeons

### **Professional Organizations and Societies**

American Psychiatric Association, American Academy of Addiction Psychiatry, College on Problems of Drug Dependence, Society for the Study of Addiction, International Society of Addiction Medicine, Polish Society for the Study of Addictions

### **Hospital Appointments**

1999-present New York Presbyterian Hospital, New York, NY

1999-present New York State Psychiatric Institute, New York, NY

### **Teaching Experience and Responsibilities**

1996-1997 Preceptor, 2<sup>nd</sup> year medical students, Cornell University Medical College, 15 hr/yr

2000-present Course Director for Fellows in Addiction Psychiatry, Columbia University P&S

2001-present Preceptor, 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Year Medical Students, Columbia University P&S, 40 hrs/yr

2002-present Supervisor, Psychiatry Residents and Fellows, Columbia University P&S, 3 hrs/wk

2008-present Co-Director, Addiction Psychiatry Fellowship, Columbia University P&S

### **Departmental and University Committees**

2007 - 2008 Member, Faculty Development Committee, New York State Psychiatric Institute

2009 - present Member, Medical Staff Executive Committee, New York State Psychiatric Institute

### **Other Professional Activities**

Expert Panel member United Nations Office on Drugs and Crime

Assistant Editor *Addiction*

Reviewer for Journals (*Addiction*, *Drug and Alcohol Dependence*, *American Journal of Psychiatry*, *Psychopharmacology*, *Clinical and Experimental Pharmacology*, among others)

Trainer, U.S. Department of State: Bureau of Intl Narcotics & Law Enforcement

Ad-hoc member Grant Review Committee: NIDA, VA Merit, Canada Institutes of Health Research

## Grant Support

### ACTIVE:

- 2013 – 2018 Principal Investigator “Training and Education Core” (Shared Pharmacotherapeutic Strategies for Cannabinoid and Opioid Use Disorders, U54DA037842: F. Levin PI), NIDA
- 2013 – 2016 Chair, Mentoring Program “Physicians’ Clinical Support Service for Medication-Assisted Treatment (1 U79 TI024697: K. Kates-Wessel PI), SAMHSA
- 2013 – 2018 Fellowship Co-Director “Research Fellowship in Substance Abuse Disorders” (T32DA007294: F. Levin PI)
- 2011 – 2016 Principal Investigator “Improved Strategies for Outpatient Opioid Detoxification” (DA030484)
- 2010 – 2015 Co-Investigator “Marijuana Relapse: Influence of Tobacco Cessation and Varenicline (R01 DA031005: M. Haney PI), NIDA.
- 2011 – 2014 Co-Investigator/Medical Director “Effects of MDMA (“ecstasy”) and THC on Social Processing” (R03DA029679: G. Bedi PI), NIDA.

### PAST:

- 2009 – 2013 Principal Investigator “Imaging the Neurobiology of Behavioral and Medication Treatment for Cocaine Dependence” (P50DA009236; Project 3), NIDA.
- 2009 – 2013 Co-Investigator “Pharmacologic Treatment for Marijuana Dependence” (P50DA009236; Project 5: M. Haney PI), NIDA.
- 2010 – 2013 Principal Investigator: Pioglitazone for the Treatment of Opioid and of Nicotine Dependence (R01 DA03102), NIDA.
- 2009 – 2012 Principal Investigator “Dronabinol naltrexone treatment for opioid dependence” (R01 DA 027124), NIDA.
- 2004 - 2009 Principal Investigator, “Memantine naltrexone treatment for opioid dependence” (R01 DA15822), NIDA.
- 2006 – 2009 Co-Principal Investigator “Combined Pharmacotherapies for Cocaine Dependence” (R01 DA 022217; F. Levin PI), NIDA.
- 2003 - 2008 Principal Investigator “Developing medication for tobacco addiction: NMDA agents” (R01 DA17572), NIDA.
- 1999 - 2004 Principal Investigator, “Evaluation of NMDA antagonists for opioid dependence” (K23 DA00429), NIDA.
- 1999 - 2004 Project Principal Investigator, “Excitatory and inhibitory pathways for cocaine treatment” (P50 DA12761, Levin, PI), NIDA.
- 1999 - 2004 Co-Principal Investigator, “Medications development for alcohol abuse: NMDA agents” (R01 AA12599; S Evans, PI), NIDA.

## Bibliography

### PEER REVIEWED PUBLICATIONS

- Popik P, Vetulani J, **Bisaga A**, van Ree JM: Recognition Cue in the Rat's Social Memory Paradigm. J Basic Clin Physiol Pharmacol, 2 (1991) 315-327.
- Bisaga A**, Krzascik P, Jankowska E, Palejko W, Kostowski W, Danysz W: Effect of glutamate antagonists on NMDA- and AMPA- induced convulsant effects in mice and rats. Eur J Pharmacol, 242 (1993) 213-220.
- Bisaga A**, Sikora J, Kostowski W: The effects of agents interacting with serotonergic 5HT3 and 5HT4 receptors on morphine place conditioning. Pol J Pharmacol, 45 (1993) 513-519.
- Bisaga A**, Kostowski W: Individual behavioral differences and ethanol consumption in Wistar rats. Physiol Behav, 54 (1993) 1125-1131.
- Bisaga A**, Kostowski W: Selective breeding of rats differing in voluntary ethanol consumption. Pol J Pharmacol, 45 (1993) 431-436.
- Kostowski W, **Bisaga A**, Jankowska E, Krzascik P: Studies on the effects of certain 5-HT3 receptor antagonists on ethanol preference and withdrawal seizures in the rat. Pol J Pharmacol, 46 (1994) 133-137.
- Włodarczyk-Bisaga K, **Bisaga A**: Selected issues of biological aspects of eating disorders. Psych. Pol., 27 (1994) 579-592.

- Kostowski W, Sikora J, **Bisaga A**, Rosnowska E: Effects of 5-HT<sub>3</sub> receptor antagonists on ethanol-induced hyperlocomotion in mice. *Pol J Pharmacol*, 47 (1995) 293-297.
- Bisaga A**, Gianelli P, Popik P: Opiate withdrawal using dextromethorphan. *Am J Psych*, 154, (1997) 584
- Bisaga A**, Katz JL, Antonini A, Wright CE, Margoueff C, Gorman JM, Eidelberg D: Cerebral glucose metabolism in women with panic disorder. *Am J Psych*, 155, (1998) 1178-1183.
- Bisaga A**, Popik P, Bespalov A, Danysz W: Therapeutic potential of NMDA receptor antagonists in the treatment of alcohol and substance use disorders. *Exp. Opin. Invest. Drugs* 9 (2000) 2233-2248.
- Bisaga A**, Popik P: In Search of a New Pharmacological Treatment for Drug and Alcohol Addiction: N-methyl-D-aspartate (NMDA) antagonists. *Drug Alcohol Depend* 59 (2000) 1-15.
- Levin FR, **Bisaga A**, Kleber HD. Pharmacologic Treatments for Substance Abuse: Current and Promising. *TEN* 2 (2000) 32-40.
- Radomska M, **Bisaga A**, Popik P: Contemporary methods in pharmacotherapy in the opiate dependence treatment. *Przegl. Lek.* 57 (2000) 509-18.
- Bisaga A**, Comer SD, Ward AS, Popik P, Kleber HD, Fischman MW: The NMDA antagonist memantine attenuates the expression of opioid physical dependence in humans. *Psychopharmacology* 157 (2001) 1-10.
- Haney M, **Bisaga A**, Foltin RW. Interaction between naltrexone and oral THC in heavy marijuana smokers. *Psychopharmacology*, 166 (2003) 77-85.
- Popik P, Wrobel M, Rygula R, **Bisaga A**, Bespalov AY. Effects of memantine, an NMDA receptor antagonist on place preference conditioned with drug and non-drug reinforcers in mice. *Behav Pharmacol.* 14 (2003) 237-44.
- Bisaga A**, Evans SM. The acute effects of memantine in combination with alcohol in moderate drinkers. *Psychopharmacology*, 172, (2004) 16-24.
- Bisaga A**, Aharonovich E, Garawi F, Levin FR, Rubin E, Raby WN, Vosburg SK, Nunes EV. Utility of lead-in period in cocaine dependence pharmacotherapy trials. *Drug Alcohol Depend*, 77, (2004) 7-11.
- Bisaga A**, Xie S, Laposata M, Evans SM. Comparison of serum fatty acid ethyl esters and urinary 5-hydroxytryptophol as markers of recent ethanol consumption. *Alcohol Alcohol*, 40, (2005) 214-8.
- Popik P, Wrobel M, **Bisaga A**. Reinstatement of morphine-conditioned reward is blocked by memantine. *Neuropsychopharmacology*, 31 (2006) 160-70.
- Bisaga A**, Evans SM. The acute effects of gabapentin in combination with alcohol in heavy drinkers. *Drug Alcohol Depend*, 83 (2006), 25-32.
- Bisaga A**, Aharonovich E, Garawi F, Levin FR, Rubin E, Raby WN, Nunes EV. A randomized placebo controlled trial of gabapentin for cocaine dependence. *Drug Alcohol Depend*, 2006, 81, 267-274.
- Aharonovich E, Hasin D, Brooks A, Xinhua L, **Bisaga A**, Nunes EV. Cognitive Deficits as Predictors of Treatment Retention in Cocaine Dependent Patients. *Drug Alcohol Depend.* 2006, 81, 313-322.
- Raby WN, Carpenter K, Nunes EV, Aharonovich E, Rubin E, **Bisaga A**, Levin FR. Temperament characteristics, as assessed by the tridimensional personality questionnaire, moderate the response to sertraline in depressed opiate-dependent methadone patients. *Drug Alcohol Depend.* 2006, 81, 283-292.
- Levin FR, Brooks DJ, **Bisaga A**, Raby WN, Rubin E, Aharonovich E, Nunes EV. Severity of Dependence and Motivation for Treatment: Comparison of Marijuana and Cocaine-Dependent Treatment Seekers. *J. Addict. Dis.*, 2006, 25, 33-41.
- Kowalczyk WJ, Evans SE, **Bisaga A**, Sullivan MA, Comer SD. Sex differences and hormonal influences on response to cold pressor pain in humans. *J Pain.* 2006, 7, 151-160.
- Aharonovich E, Garawi F, **Bisaga A**, Brooks D, Raby WN, Rubin E, Nunes EV, Levin FR. Concurrent cannabis use during treatment for co-morbid ADHD and cocaine dependence: effects on outcome. *Am J Drug Alcohol Abuse*, 2006, 32, 629-635.
- Bisaga A**, Padilla M, Garawi F, Sullivan M, Haney M. Effects of alternative reinforcer and craving on the choice to smoke cigarettes in the laboratory. *Hum Psychopharm Clin.* 2006, 22, 41-47.
- Rubin E., Aharonovich E., **Bisaga A.**, Levin F.R., Raby W.N., Nunes E.V.: Early abstinence in cocaine dependence: Influence of comorbid major depression. *Am J Addictions.* 2007, 16, 283-290.

- Sullivan MA, Garawi F, **Bisaga A**, Comer SD, Carpenter K, Raby WN, Brooks AC, Jiang H, Akerele E, Nunes EV. Management of Relapse in Naltrexone Maintenance for Heroin Dependence. *Drug Alcohol Depend*, 2007, 91, 289-292.
- Vorel SR, **Bisaga A**, McKhann G, Kleber HD. Insula damage and quitting smoking. *Science*, 2007, 317(5836): 318-9.
- Levin FR, **Bisaga A**, Raby WN, Aharonovich E, Rubin E, Mariani J, Brooks D, Garawi F, Nunes EV. Effects of major depression and attention deficit/hyperactivity disorder on the outcome of treatment for cocaine-dependence. *J Substance Abuse Treat*. 2008, 34, 80-89.
- Akerele E, **Bisaga A**, Nunes EV, Garawi F, Sullivan MA, Comer SD, Kleber HD. Dextromethorphan and quinidine combination for heroin detoxification. *Am. J. Addictions*, 2008, 17, 176-180.
- Bisaga A**, Kos T, Wojcikowski J, Daniel WA, Popik P. Brain levels of dextromethorphan and the intensity of opioid withdrawal in mice. *Drug Alcohol Depend*. 2008, 95, 147-151.
- Mariani J, Horey J, **Bisaga A**, Aharonovich E, Raby W, Nunes E, Levin FR. Antisocial behavioral syndromes in cocaine and cannabis dependence. *Am. J. Drug Alcohol Abuse*, 2008, 34, 405-414.
- Foltin R, Danysz W, **Bisaga A**. A novel procedure for assessing the effects of drugs on satiation in baboons: effects of memantine and dexfenfluramine. *Psychopharmacology*, 2008, 199, 583-592.
- Bisaga A**, Daysz W, Foltin R. Antagonism of glutamatergic NMDA and mGluR5 receptors decreases consumption of food in baboon model of binge-eating disorder. *Eur. Neuropsychopharmacology*, 2008, 18:794-802.
- Evans SM, **Bisaga A**. Acute Interaction of Baclofen in Combination with Alcohol in Heavy Drinkers. *Alcohol Clin. Exp. Res*. 2009, 33, 19-30.
- Carpenter K, Jiang HP, Sullivan MA, **Bisaga A**, Comer SD, Raby WN, Brooks AC, Nunes EV. Betting on Change: Modeling transitional probabilities to guide therapy development for opioid dependence. *Psychol. Addict. Behaviors*. 2009, 23, 47-55.
- Aharonovich E, Hasin D, **Bisaga A**, Nunes AV, Amrhein P. The Clinical Relations between Cognition, Commitment Language and Behavioral Change in Cocaine Dependent Patients. *Psychol. Addict. Behaviors*. 2008, 22, 557-562.
- Raby WN, Carpenter KM, Rothenberg JL, Brooks AC, Jiang H, **Bisaga A**, Comer SD and Nunes EV. Intermittent marijuana use is associated with improved retention in naltrexone treatment for opiate-dependence. *Am. J. Addictions*. 2009, 18, 301-308.
- Levin FR, Mariani JJ, Secora A, Brooks D, Cheng WY, **Bisaga A**, Nunes E, Aharonovich E, Raby W, Hennessy G. Atomoxetine Treatment for Cocaine Abuse and Adult Attention-Deficit Hyperactivity Disorder (ADHD): A Preliminary Open Trial. *J. Dual. Diagn*. 2009, 5, 41-56.
- Brooks A, Sullivan MA, Comer SD, **Bisaga A**, Carpenter KM, Raby, Yu E, O'Brien, and Nunes EV Long acting injectable versus oral naltrexone maintenance therapy with psychosocial intervention for heroin dependence: A quasi-experiment. *J. Clin. Psych*, 2010:1371-8.
- Kowalczyk WJ, Sullivan MA, Evans SE, **Bisaga A**, Vosburg SK, Comer SD. Sex differences and hormonal influences on response to mechanical pressure pain in humans. *J Pain*. 2010, 11, 330-42.
- Comer SD, Cooper Z, Kowalczyk W, Sullivan M, Evans S, **Bisaga A**, Vosburg S. Evaluation of potential sex differences in the subjective and analgesic effects of morphine in normal, healthy volunteers. *Psychopharmacology*, 2010, 208, 45-55.
- Bisaga A**, Aharonovich E, Cheng W, Levin FR, Mariani JM, Raby WN, Nunes EV. A placebo controlled trial of memantine for cocaine dependence with high-value voucher incentives during a pre-randomization lead-in period. *Drug Alcohol Depend*, 2010, 111, 97-104.
- Popik P, Kos T, Zhang Y, **Bisaga A**. Memantine reduces consumption of highly palatable food in a rat model of binge eating. *Amino Acids*, 2011, 40, 477-485.
- Dakwar E, Nunes EV, **Bisaga A**, Carpenter K, Mariani J, Sullivan M, Raby W, Levin FR. A comparison of independent depression and substance-induced depression in cannabis, cocaine, and opioid dependent treatment seekers. *Am J Drug Alcohol Abuse*, 2011, 441-446.
- Mariani JJ, Cheng WY, **Bisaga A**, Sullivan MA, Carpenter K, Nunes EV, Levin FR, Comparison of Clinical Trial Recruitment Populations: Treatment-Seeking Characteristics of Opioid-, Cocaine-, and Cannabis-Using Participants, *J Subst Abuse Treat*, 2011, 40, 426-430.

- Bisaga A**, Sullivan MA, Cheng W, Carpenter KM, Mariani JM, Levin FR, Raby WN, Nunes EV. A placebo controlled trial of memantine as an adjunct to oral naltrexone for opioid dependence. *Drug Alcohol Depend*, 2011, Dec 1;119(1-2):e23-9
- Sigmon, S.C., **Bisaga, A.**, Nunes, E.V., O'Connor, P.G., Kosten, T., Woody, G. Opioid Detoxification and Naltrexone Induction Strategies: Recommendations for Clinical Practice. *Am. J. Drug & Alc. Abuse*, 2012, 38. 187-199.
- Horey JT, Mariani, JJ, Cheng WY, **Bisaga A**, Sullivan MA, Nunes EV, Levin. FR, Comparison of substance use milestones in cannabis- and cocaine-dependent patients. *J. Addict. Dis*, 2012, 31, 60-66.
- Mariani JJ, Pavlicova M, **Bisaga A**, Nunes EV, Brooks DJ, Levin FR. Extended-Release Mixed Amphetamine Salts and Topiramate for Cocaine Dependence: A Randomized Controlled Trial. *Biol Psych*, 2012, 72, 950-956.
- Herron AJ, Mariani JJ, Pavlicova M, Parinello CM, Williams KL, Levin FR, Nunes EV, Sullivan MA, Raby WN, **Bisaga A**. Assessment of Riboflavin as a Tracer Substance: Comparison of a Qualitative to a Quantitative Method of Riboflavin Measurement. *Drug Alcohol Dependence*, 2013, 128:77-82.
- Levin FR, Marini JJ, Brooks DJ, Pavlicova M, Nunes EV, Agosti V, **Bisaga A**, Sullivan MA, Carpenter KM. A Randomized Double-blind, Placebo Controlled Trial of Venlafaxine-Extended Release for Co-occurring Cannabis Dependence and Depressive Disorders. *Addiction* 2013, 108, 1084-1094.
- Holuj M, **Bisaga A**, Popik P. Conditioned rewarding effects of morphine and methadone in mice pre-exposed to cocaine. *Pharmacological Reports*, 2013, 65, 1176-1184.
- Sullivan MA, **Bisaga A**, Mariani JM, Glass A, Levin FR, Comer SD, Nunes EV. Naltrexone treatment for opioid dependence: does its effectiveness depend on testing the blockade? *Drug Alcohol Depend*, 2013, 133, 80-85
- Raby WN, Rubin EA, Garawi F, Cheng W, Mason E, Sanfilippo L, Lord S, **Bisaga A**, Aharonovich E, Levin F, McDowell D, Nunes EV. A randomized, double-blind, placebo-controlled trial of venlafaxine for the treatment of depressed cocaine-dependent patients. *Am J Addict* 23, 68-75. 2014
- Bisaga A**, Sullivan MA, Glass A, Mishlen K, Carpenter KM, Mariani JJ, Levin FR, Nunes EV. A placebo-controlled trial of memantine as an adjunct to injectable extended-release naltrexone for opioid dependence. *J Subst Abuse Treat*. 2014, 46:546-52.
- Mariani JJ, Pavlicova M, Mamczur AK, **Bisaga A**, Nunes EV, Levin FR. Open-label pilot study of quetiapine treatment for cannabis dependence. *Am J Drug Alcohol Abuse*. 2014, 40: 280-284.
- Kelly MA, Pavlicova M, Glass A, Mariani JJ, **Bisaga A**, Sullivan MA, Nunes EV, Levin RF. Do withdrawal-like symptoms mediate increased marijuana smoking in individuals treated with Venlafaxine-XR? *Drug Alcohol Dependence*, 2014, 144, 42–46.
- Mogali S, Khan NA, Drill ES, Pavlicova M, Sullivan MA, Nunes EV, **Bisaga A**. Baseline Characteristics of Patients Predicting Suitability for Rapid Naltrexone Induction. *Am J Addictions*. 2014, 1-8.
- Sullivan MA, **Bisaga A**, Glass A, Mishlen K, Pavlicova M, Carpenter KM, Mariani JJ, Levin FR, Nunes EV. Opioid use and dropout in patients receiving oral naltrexone with or without single administration of injection naltrexone. *Drug Alcohol Depend*, 2015, 147: 122-129.

## BOOK CHAPTERS

- Popik P, **Bisaga A**. Cocaine and opiate abuse. In: Therapeutic potential of ionotropic glutamate receptor antagonists and modulators. Lodge D, Danysz W, Parsons C, Eds. Graham Publishing Co., 2002
- Bisaga A**, Fischman MW. Clinical studies using NMDA receptor antagonists in cocaine and opioid dependence. In: Glutamate and addiction. Herman B.H. Ed. Humana Press 2003.
- Bisaga A**. Glutamatergic agents for nicotine dependence. In: Medication Treatments for Nicotine Dependence. George T.P. Editor. Taylor & Francis CRC Press. 2006.
- Bisaga A**. Benzodiazepines and Sedative-Hypnotics. In: The American Psychiatric Publishing Textbook of Substance Abuse Treatment 4<sup>th</sup> Edition. Galanter M and Kleber H,D, Editors. The American Psychiatric Publishing, 2008.