

CURRICULUM VITAE

Nome: Antonello Bonci, M.D.

Posizioni attuali:

Fondatore, Partner e Presidente, GIA Healthcare

Direttore Scientifico, Brain & Care (www.brainandcare.com)

Citazioni su Google Scholar: 37893

H-Indice: 100

Indice i-10: 196

Stato del visto: cittadino statunitense e italiano

Istruzione:

1985-1991 Università Cattolica del Sacro Cuore, Facoltà di Medicina, Roma, Italia, M.D.
Summa cum laude

1991-1995 Specializzando nella Scuola di Neurologia, Università di Roma 'Tor Vergata', Roma,
Italia
Summa cum laude

1994-1996 Borsa di studio post-dottorato, Vollum Institute for Advanced Biomedical Research,
Portland, OR, Sponsor: Dr. J.T. Williams

Abilitazione:

1995-Presente Laureato in Medicina (1991) e neurologo (1995), Italia. Licenza # 01099.

Impiego passato:

2010-2019 Direttore Scientifico, National Institute on Drug Abuse, National Institutes of Health

2010-2019 Direttore, Sezione plasticità sinaptica, NIDA, NIH

2009-2010 Direttore Associato, Affari Extramurali, Ernest Gallo Clinic and Research Center

2007-2010 Professore Ordinario in Residence, Dipartimento di Neurologia, UCSF

2006-2010 Cattedra Endowed Howard J. Weinberger in Ricerca sulle Dipendenze presso UCSF

2004-2007 Professore Associato in Residence, Dipartimento di Neurologia, UCSF

1999-2010 Investigatore Principale, Ernest Gallo Clinic and Research Center

1999-2004 Assistant Professor in Residenza, Dipartimento di Neurologia, UCSF

1999-1999 Visiting Assistant Professor, Dipartimento di Neurologia, UCSF

1998-1999 Visiting Assistant Professor, Dipartimento di Psichiatria, Università della California, Francisco (UCSF), Sponsor: Prof. Robert C. Malenka

1996-1998 Dirigente Medico, primo livello, Ospedale IRCCS S. Lucia, Dipartimento di Neuroriabilitazione e Dipartimento di Farmacologia, Roma, Italia

Affiliazioni passate:

2010-2019 Adjunct Professor of Neuroscience, Solomon H. Snyder Department of Neuroscience, Johns Hopkins University School of Medicine

2010-2019 Adjunct Professor of Psychiatry, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine

2010-2019 Adjunct Professor of Psychiatry, Department of Psychiatry University of Maryland, School of Medicine

2010-2019 Adjunct Professor, Department of Neuroscience, Georgetown University Medical Center, School of Medicine

2010-2012 Adjunct Professor, Department of Neurology, UCSF School of Medicine

Premi e Onorificenze:

Aprile 2019 Membro, American Academy of Physicians
Dic 2018 Presidente, Sezione IG03, National Academy of Medicine
Febbraio 2017 Premio Scienziato Distinto, Università della Carolina del Nord - Chapel Hill
Gennaio 2017 Membro, The Dana Alliance for Brain Initiatives (DABI)
Ott 2016 Membro, National Academy of Medicine
Giugno 2015 Premio di Ricerca della Federazione Europea delle Società di Neuroscienze (FENS) dell'European Journal of Neuroscience (ENJ)
2015-2018 Membro, Consiglio del Comitato Esecutivo ACNP
Dic 2014 Ricercatore, American College of Neuropsychopharmacology
Febbraio 2014 Ufficiale, Ordine della Stella d'Italia
Agosto 2013 Presidente, Gordon Research Conference on Catecholamines, West Dover, VT
Maggio 2013 Premio per l'Eccellente Medico Scienziato, GeneExpression Systems Inc. e Appasani Research Conferences and Educational Institute
Dic 2009-2010 Presidente, Comitato Scientifico, Presidenza del Consiglio dei Ministri, Dipartimento per le Politiche Antidroga, Italia
Dicembre 2009 Premio D. Efron, American College of Neuropsychopharmacology
Ottobre 2004 Jacob P. Waletzky Memorial Award, Society for Neuroscience
Mar 1999 Premio, Fondazione Cassa di Risparmio di Rimini

Attività professionali

Attività extramurali

2019 Membro, Gruppo di Lavoro per le Minoranze Sottorappresentate, ACNP
2018 Presidente, Sezione IG03, National Academy of Medicine
2017-2019 Membro, Comitato di Selezione del Jacob P. Waletzky Award, Society for Neuroscience
2017 Membro del Consiglio Consultivo, Brain & Behavior Research Foundation
2017 Membro, The Dana Alliance for Brain Initiatives (DABI)
2017 Membro, National Academy of Medicine (NAM)
2017 Membro del Comitato Consultivo di Revisione del Neurobiology of Addiction Research Center (NARC), MUSC
2016-2017 Membro, Consiglio Consultivo della Personal Support Network Clinic (PerSoN)
2015 Membro, European Project Advisory Board, Università di Firenze
2015-2016 Membro, Discovery Engine Advisory Board
2015-2016 Membro, Consiglio Consultivo del Consorzio, Institute for Translational Neuroscience, UCSF
2014-2016 Membro, International Advisory Board, Dopamina 2016
2012-2016 Membro, UCLA, Consiglio Consultivo CSORDA
2012-2014 Membro, Institute for Molecular Neuroscience Advisory Council, UCSF
2006 Membro *Ad Hoc*, Scientific Advisory Board for the Extramural Program, National Institute on Alcohol Abuse and Alcoholism

2005-2008 Membro, Research Society on Alcoholism Priorities Committee

Attività Cliniche, ed attività correlate

Presente: Neurologo abilitato, in Italia.

Coordinatore degli studi clinici sull'abuso di sostanze, in collaborazione con ASLL 20, Verona, Italia.
(Terminato ad agosto 2010)

Professional Societies and Related Services

2005-Present American Neurological Association
2007-Present American College of Neuropsychopharmacology (ACNP)
2012-2014 ACNP, Membership Committee
2013-2014 ACNP, Program Planning Committee
2013-2014 Italian Institute of Technology, Advisory Board Member

Servizi alle pubblicazioni professionali

Direct Submission Editor, *PNAS*
Section Editor, *European Journal of Neuroscience*
Editorial Board Member, *Biological Psychiatry*
Associate Editor, *Frontiers in Addictive Disorders*
Editorial Board Member, *Open Neuroscience*
Editorial Board Member, *Biological Psychiatry*, Cognitive Neuroscience and Neuroimaging
Co-Editor, *Frontiers Journal*, Brain Activity Mapping
Associate Editor, *The Journal of Neuroscience* (term ended)
Associate Editor, *Alcoholism: Clinical and Experimental Research* (term ended)

Revisore Ad Hoc:

Cell
Nature
Science
Neuron
Nature Neuroscience
Nature Medicine
Nature Communications
Proceedings of the National Academy of Science USA
Journal of Neuroscience
Journal of Neurophysiology
European Journal of Neuroscience
Journal of Pharmacology and Experimental Therapeutics
Neuroscience
Biological Psychiatry
Neuropsychopharmacology
Psychopharmacology
PLOS One

E-life
Annals of Neurology
The Lancet
Neurophysiologie Clinique

Revisioni Fondi di Ricerca

1999 UCSF, Center for the Neurobiology of Drug Addiction, intramurale
2000 UCSF, Center for the Neurobiology of Drug Addiction, intramurale
2002 NIH/NIDA CEBRA program grant reviewer
2002 Loyola University, intramural grant reviewer
2002 University of Texas at Austin, intramural grant reviewer
2003 UC Discovery program, grant reviewer
2003 National Science Foundation, grant reviewer
2003 NIH, grant reviewer
2004 NIH RFA study section, grant reviewer
2005 NIH CEBRA program, grant reviewer
2005 NIH special study section, grant reviewer
2005-2010 NIH NMB, study section, regular member, grant reviewer
2013 NIH NMB study section, *ad-hoc* grant reviewer
2014-2016 Biomedicine & F.I.R.S.T Program Israel Science, grant reviewer
2014-2016 The French National Research Agency (ANR), grant reviewer
2015 German Research Foundation (DFG), *ad-hoc* grant reviewer
2016 National Science Centre Poland, grant reviewer
2016 Swiss National Science Foundation, grant reviewer
2016 Helis Henry Medical Research Foundation, grant reviewer
2016 US-Israel Binational Science Foundation, grant reviewer
2017 European Research Council, grant reviewer
2017 Swiss National Science Foundation, grant reviewer
2017 Fund for Scientific Research-FNRS (F.R.S.-FNRS), grant reviewer
2018 European Research Council (ERC), grant reviewer
2018 Alcohol and Substance Abuse Disorders Research Program, grant reviewer
2018 US-Israel Binational Science Foundation, grant reviewer
2018 Boehringer Ingelheim Fonds PhD fellowship, reviewer
2018 Swiss National Science Foundation, grant reviewer
2018 Fund for Scientific Research-FNRS (F.R.S.-FNRS), grant reviewer
2018 Department of Veteran Affairs Office of Research Development, grant reviewer
2018 MRC Peer Review, grant reviewer
2018 Karolinska Institutet to the Knut and Alice Wallenberg Foundation, grant reviewer
2019 Brain and Behavior Research Foundation, grant reviewer
2020 US-Israel Binational Science Foundation, grant reviewer

Speaker ad eventi Speciali

2019

- Keynote Speaker, OptoDBS 2019 (Invited Speaker) University of Geneva / Synaptic Disease Association. Geneva, Switzerland.
- Keynote Speaker, 13th International Congress of Addictology. Paris, France
- Keynote Speaker, Perinatal Origins of Neuropsychiatric Disorders: from Molecular Mechanisms to Therapeutic Perspectives, Palermo, Italy
- Presidential lecture, Society on NeuroImmune Pharmacology (SNIP) 25th Scientific Conference, Oregon
- Keynote Speaker, Medicinal Chemistry and Molecular Pharmacology (MCMP) graduate student body seminar at Purdue University. West Lafayette, IN
- Keynote Speaker, Department of Physiology and Pharmacology Seminar Series, Wake Forest School of Medicine. Winston-Salem, NC

2018

- Keynote Speaker, American College of Neuropsychopharmacology, Hollywood, FL
- Keynote Speaker, Society for Neuroscience (Member), San Diego, CA
- Keynote Speaker, Shanghai Institute for Advanced Immunochemical Studies (SIAIS) Bioforum on Shanghai Tech University, Shanghai, China
- Keynote Speaker, Frontiers in Addiction Research and Pregnancy at the Morehouse School of Medicine, Georgia, ATL
- Keynote Speaker, National Academy of Medicine Member, Washington DC
- Keynote Speaker, American Society of Addiction Medicine (ASAM) State of the Art Course in Addiction Medicine, Washington DC
- Plenary Speaker, University of Minnesota, Minneapolis, MN
- Keynote Speaker, UC Irvine Center for Addictive Neuroscience (ICAN), Irvine, CA
- Keynote Speaker, Distinguished Lecture Series, University of California, Los Angeles (UCLA), Los Angeles, CA

2017

- Keynote Speaker, 2nd Annual 2017 Brookstone Conference, Northwestern University, Chicago, IL
- Plenary Speaker, The International Taiwanese Congress of Neurology, Taipei, Taiwan
- Plenary Speaker, Academia Sinica, Taipei, Taiwan
- Plenary Speaker, National Taiwan Medical School
- Plenary Speaker, Johns Hopkins Neurology Research Retreat

2016

- Plenary Speaker, Universita di Camerino, Camerino (MC) Italy
- Plenary Speaker, First World Congress on Alcohol and Alcoholism (ISBRA& ESBRA meeting), Berlin, Germany
- Federation of European Neuroscience Societies (FENS) European Journal of Neuroscience (ENJ) Research Award Lecture
- Keynote Speaker, Louisiana State University Health Sciences Center, Alcohol & Drug Abuse Center
- Keynote Speaker, The 11th Conference of Italian Researchers in the World, Houston TX

2015

- Keynote speaker, University of Maryland Festival of Science, Baltimore, MD
- Keynote Speaker, Brown University, Providence, RI

- Plenary Speaker, IPA International Psychogeriatric Association International Congress, Berlin, Germany
- Plenary Lecture, Study in Multidisciplinary Pain Research (SIMPAN) 7th Meeting, Italy

2014

- Keynote Speaker, Baltimore Chapter Society for Neuroscience, Baltimore, MD
- Plenary Speaker, NIH Research Festival, Bethesda, MD
- Keynote Speaker, International Narcotics Research Conference, Montreal, Canada
- Plenary Speaker, 8th ALBATROS Congress, International Congress of Addictology, Paris, France
- Plenary Speaker, World Society of Intravenous Anesthesia, Bulgaria
- Plenary Speaker, 16th Annual IBANGs Meeting, Chicago, IL
- Plenary Speaker, Study in Multidisciplinary Pain Research (SIMPAN), Rome, Italy

2013

- Flexner Lecture, University of Pennsylvania, Philadelphia, PA

2012

- Special Lecture, Society for Neuroscience (SfN), New Orleans, LA

2007

- Keynote Speaker, Dutch Endo-Neuro-Psycho National Meeting, Doorwerth, NL

Partecipazioni a Simposi e Inviti a Presentazioni orali

2019

- University of Minnesota, Minneapolis, MN
- MSN 2019, Marrakech, Morocco
- OptoDBS 2019, Geneva, Switzerland
- Ernst Strüngmann Forum: Intrusive Thinking across Neuropsychiatric Disorders: From Molecules to Free Will, Frankfurt, Germany
- Perinatal Origins of Neuropsychiatric Disorders (PONDS): from Molecular Mechanisms to Therapeutic Perspectives, Palermo, Italy
- 25th Scientific Conference of SNIP
- Wake Forest School of Medicine, Winston-Salem, NC

2018

- 4rd Bio Forum of the Shanghai Institute of Advanced Immunochemical Studies of Shanghai Tech University, Shanghai, China
- Frontiers in Addiction Research and Pregnancy, Atlanta, GA
- University of Minnesota NIDA T32 Training Program Retreat, Minneapolis, MN
- UC Irvine Center for Addictive Neuroscience (ICAN), Irvine, CA
- 83rd Cold Spring Harbor Laboratory Symposium on Quantitative Biology addressing Brains & Behavior: Order & Disorder in the Nervous System, Cold Spring Harbor, NY
- Society for Biological Psychiatry (SOBP) 73rd Annual Scientific Convention, New York, NY
- 2018 American Psychiatry Association Annual Meeting, New York, NY
- David Geffen School of Medicine Distinguished Lectures, UCLA, Los Angeles, CA
- University of Massachusetts, Amherst, MA

2017

- 2nd Annual Zardi Gori Foundation Conference, Milan, Italy
- 38th National Congress of the Italian Society of Pharmacology, Rimini, Italy

- Second Annual 2017 Brookstone Conference, Northwestern University, Chicago, IL
- Department of Molecular Biology and Genetics, University of Aarhus, Aarhus, Denmark
- School of Psychology, Nanjing Normal University, Nanjing, China
- Annual Neuroscience Conference of China, Tianjin, China
- Beijing University, Beijing, China
- Mediterranean Neuroscience society, LaValletta, Malta
- Ministry of Science and Technology, Taipei, Taiwan
- Academia Sinica, Taipei, Taiwan, Taipei, Taiwan
- National Taiwan Medical School, Taipei, Taiwan
- The 2nd International Taiwanese Congress of Neurology and Annual meeting of Taiwan Neurological Society, Taipei Taiwan
- Johns Hopkins Research Retreat, Baltimore, MD
- Alcoholism and Stress: A Framework for Future Treatment Strategies, Volterra, Italy
- Institute of Biotechnology, University of Helsinki, Helsinki, Finland
- Study in Multidisciplinary Pain Research (SIMPAN) Florence, Italy
- University of Napoli Parthenope, Naples, Italy
- Catholic University of Rome and Gemelli Hospital, Rome, Italy
- National Institutes of Health and Karolinska Institutet Joint Neuroscience Symposium, Stockholm Sweden
- Karolinska Institutet Solna Campus, Stockholm, Sweden
- Columbia University, New York, NY
- University of North Carolina, Chapel Hill, NC

2016

- Italian Scientist and Scholars of North American Foundation (ISSNAF), Washington, DC
- Università di Camerino, Camerino (MC) Italy
- DECODE summit Translating Neural Circuit Research into Transformative CNS Therapeutics, Palo Alto, CA
- Dopamine 2016, Vienna, Austria
- Brotzu Hospital, Cagliari, Italy
- San Camillo Hospital, Application of TMS on Drug Addiction, Venice, Italy
- Study in Multidisciplinary Pain Research (SIMPAN) Rome, Italy
- Frontiers in Pain Research, McGill University, Montreal Canada
- Gordon Conference on Alcoholism, Galveston, TX
- Neuroscience Research Colloquia, Vancouver, BC

2015

- American College of Neuropsychopharmacology, Hollywood, FL
- Karolinska Institutet, Stockholm, Sweden
- Società Italiana Tossicodipendenze (SITD), Milan, Italy
- Department of Pharmacology, Cambridge University, Cambridge, UK
- The Jackson Laboratory, Bar Harbor, ME
- Gordon Research Conference on Catecholamine's, Newry, ME
- Cold Spring Harbor, Cellular Biology of Addiction Course, Cold Spring Harbor, NY
- University of California Los Angeles (UCLA), Los Angeles, CA
- Universidad Nacional Autónoma de México, Mexico City, NM
- Vanderbilt University, Nashville, TN
- Stanford Neuroscience Institute, Stanford, CA

2014

- American College of Neuropsychopharmacology (ACNP), Phoenix, AZ
- Italian Scientist and Scholars of North American Foundation (ISSNAF), Washington, DC
- Servizio Sanitario Regionale, Emilia-Romagna, Rimini, Italy
- Liceo Scientifico Einstein, Rimini, Italy
- WeFree Days, San Patrignano Community, San Patrignano, Italy
- University of Buffalo, Buffalo, NY
- Massachusetts Institute of Technology, Cambridge, MA
- 8th ALBATROS Congress, International Congress of Addictology, Paris, France
- Pfizer, Cambridge, MA
- Bordeaux Neuroscience Federation, Bordeaux, France
- Guest Speaker at the Neuroscience Retreat, Medical University of South Carolina, Charleston, SC
- Harvard Medical School Department of Neurobiology Seminar, Boston, MA
- Inaugural Lecture, Joint Neuroscience and Clinical Neuroscience Series, Karolinska Institutet, Stockholm, Sweden
- Gordon Research Conference on Alcohol, Galveston, TX
- Cornell University, Ithaca, NY

2013

- University of Puerto Rico, Santiago, PR
- Co-Chair, Cellular Biology of Addiction Course, Cold Spring Harbor, NY
- Université de Montreal, Montreal, Canada
- Congress Dopamine 2013, Alghero, Italy
- Yale University, New Haven, CT
- Study in Multidisciplinary Pain Research (SIMPAN) 5th Meeting, Pavia, Italy
- University of California San Francisco, San Francisco, CA
- Columbia University, New York, NY

2012

- American College of Neuropsychopharmacology (ACNP) Annual Meeting, Hollywood, FL
- Karolinska Institutet, Stockholm Sweden
- The Tenth International Catecholamine Symposium (XICS), Pacific Grove, CA
- Co-Chair, Cold Spring Harbor Cell Biology of Addiction Course, Barcelona, Spain
- Research Society of Alcoholism (RSA), San Francisco, CA
- Taiwan Medical University, Taipei, Taiwan
- Chen Kung University, Tainan, Taiwan
- Stony Brook University, Stony Brook, NY
- Rockefeller University, New York, NY
- University of Maryland School of Medicine, Baltimore, MD
- National Institutes of Health, Demystifying Medicine Lecture Series, Bethesda, MD
- University of Texas at Dallas, Dallas, TX

2011

- University of Medicine & Dentistry of New Jersey, Medical School Grand Rounds, Newark, NJ
- University of Texas, Austin, TX
- University of Washington, Seattle, WA
- Neurology Grand Rounds Johns Hopkins School of Medicine, Baltimore, MD
- Stanford University, Stanford, CA

- Johns Hopkins University (Homewood Campus) Baltimore, MD
- Co-Chair, Cellular Biology of Addiction Course, Cold Spring Harbor, NY
- Vice-Chair, Gordon Research Conference on Catecholamines, Lewiston, ME
- Mount Sinai School of Medicine, New York, NY
- The College on Problems of Drug Dependence (CPDD), Hollywood, FL
- Association of University Anesthesiologists, Philadelphia, PA
- New York University Medical School, New York, NY
- Cold Spring Harbor Laboratory, HHMI, Cold Spring Harbor, NY
- Georgetown University, Washington, DC
- University of Texas, San Antonio, TX
- Johns Hopkins School of Medicine, Baltimore, MD
- University of Texas, Austin, TX
- Cold Spring Harbor Laboratory, HHMI, Cold Spring, NY

2010

- American College of Neuropsychopharmacology (ACNP), Miami Beach, FL
- Janelia Farm Research Campus Conference, Howard Hughes Medical Institute, Ashburn, VA
- The Ernest Gallo Clinic and Research Center, San Francisco, CA
- National Academy of Sciences, Japanese-American Frontiers of Science Symposium, Chiba, Japan
- National Institute on Alcohol Abuse and Alcoholism (NIAAA), Bethesda, MD
- Maryland Psychiatric Research Center, Catonsville, MD
- National Hispanic Science Network, New Orleans, LA
- Emory University, Atlanta, GA
- Duke University, Durham, NC
- University of California San Francisco, San Francisco, CA
- University of Texas, Southwestern, Dallas, TX
- University of California at Los Angeles, Los Angeles, CA

2009

- American College of Neuropsychopharmacology (ACNP), symposium speaker, Hollywood, FL
- California Society on Addiction Medicine, San Francisco, CA
- Northwestern University, Chicago, IL
- Cellular Biology of Addiction Course, Cold Spring Harbor, NY
- Gordon Conference on Catecholamines, University of New England, Biddeford, ME
- University of Tennessee, Knoxville, TN
- Baylor College, Houston, TX

2008

- American College of Neuropsychopharmacology (ACNP), Symposium Chair, Scottsdale, AZ
- Addiction Conference on Dopamine (co-organizer), Kunming, China
- Gordon Conference, Neurobiology of Brain Disorders, Oxford, England, United Kingdom
- Eli Lilly and Company, Indianapolis, IN
- University of North Carolina, Chapel Hill, NC
- Alcoholism and Stress: A Framework for Future Treatment Strategies, Volterra, Italy
- Aspen Meeting, San Diego, CA
- Rockefeller University, New York, NY
- University of Maryland, Adelphi, MD
- Yale University, New Haven, CT

- Howard Hughes Medical Institute, Janelia Farm Research Campus, Ashburn, VA

2007

- American College of Neuropsychopharmacology (ACNP), Boca Raton, FL
- University of Alabama, Birmingham, AL
- University of California Irvine, Irvine, CA
- European Behavioral Pharmacology Society (EBPS) Meeting, Tübingen, Germany
- University of Vienna, Wien, Austria
- European Society for Biomedical Research on Alcoholism (ESBRA), Berlin, Germany
- Research Society for Alcoholism (RSA) Meeting, Chicago, IL
- Dutch Endo-Neuro-Psycho National Meeting, Doorwerth, NL
- DA 50th Anniversary, Gothenburg, Sweden
- VU University Amsterdam, Amsterdam, Netherlands
- University of Pittsburgh, Pittsburgh, PA
- University of Pennsylvania, Philadelphia, PA
- Mayo Clinic, Rochester, MN
- University of Minnesota, Minneapolis, MN

2006

- American College of Neuropsychopharmacology (ACNP) Meeting, Hollywood, FL
- North America Congress of Clinical Toxicology (NACCT) Meeting, San Francisco, CA
- Research Society on Alcoholism (RSA) Meeting, Baltimore, MD
- University of Minnesota, Minneapolis, MN
- University of Washington, Seattle, WA

2005

- University of San Antonio, San Antonio, TX
- Cantoblanco Workshop on Learning and Memory, Madrid, Spain
- National Institute on Alcohol Abuse and Alcoholism (NIAAA), Bethesda, MD
- Gordon Conference on Catecholamines, Andover, NH
- The Scripps Clinic, University of California, San Diego, San Diego, CA
- Virginia Commonwealth University, Richmond, VA
- Medical University of South Carolina (MUSC), Charleston, SC
- Boston University, Boston, MA
- Loyola University, Chicago, IL
- Calgary University, Calgary, Canada

2004

- Vanderbilt University, Memphis, TN
- Washington University, Seattle, WA
- Society for Neuroscience (SfN) Annual Meeting, NIDA Symposium on Drug Addiction, San Diego, CA
- Gordon Conference on Synaptic Transmission, Meriden, NH
- University of Albany, Albany, NY
- University of Chicago, Chicago, IL
- NIDA, Intramural Research Program Seminar Series, Bethesda, MD
- International Congress of Biological Psychiatry, Sydney, Australia
- Winter Conference on Brain Research, Copper Mountain, CO

2003

- Gordon Conference on Catecholamines, Oxford, England, United Kingdom

- University of Bologna, Italy
- International Brain Research Organization Meeting, Prague, Czech Republic
- University of North Carolina, Chapel Hill, NC
- Wake Forest University, Winston-Salem, NC
- Winter Conference on Brain Research (Symposium speaker and Chair), Snowbird, UT

2002

- American College of Neuropsychopharmacology (ACNP), San Juan, Puerto Rico
- Baylor College, Houston, TX
- Society for Neuroscience (SfN), Orlando, FL
- The Scripps Clinic, University of California at San Diego, CA
- Northwestern University, Chicago, IL
- National Institute of Mental Health (NIMH), Bethesda, MD
- National Institute on Alcohol Abuse and Alcoholism (NIAAA), Bethesda, MD
- Research Society on Alcoholism (RSA), San Francisco, CA
- Dallas Southwestern Medical School, Dallas, TX
- Brown Bag Lecture, University of California San Francisco, San Francisco, CA
- Winter Conference on Brain Research, Snowmass, CO

2001

- World Neuroinformatics Meeting, Vienna, Italy
- Research Society for Alcoholism (RSA), Montreal, Canada
- Brain Science Institute, Riken, Japan
- Frontiers in Neurology and Neuroscience, University of California San Francisco, San Francisco, CA
- Winter Conference on Brain Research, Steamboat Springs, CO

2000

- Karolinska Institute, Stockholm, Sweden
- Oregon Health Science University, Portland, OR
- University of Bologna, Bologna, Italy

1999

- Gladstone Institute, University of California San Francisco, San Francisco, CA
- Gordon Conferences on Catecholamines, Queen's College Oxford, UK

Servizi ed attività' prestate in ambito Universitario (fino all' Agosto 2010)

Director, Optogenetic Core, Ernest Gallo Clinic and Research Center
 Member, Executive Committee, Ernest Gallo Clinic and Research Center
 Member, Wheeler Center for the Neurobiology of Drug Addiction, UCSF
 Member, Preclinical Development Committee, Gallo Center
 Member, Memory and Aging Clinic, UCSF
 Member, Student Merit Committee, UCSF
 Member, MD with Thesis Committee, UCSF
 Chair, Committee on Animal Use, Department of Neurology

Partecipazioni a Comitati al National Institutes on Health (dal 2010 al 2019)

Member, Scientific Director Search Committee, National Center for Complementary and Alternative Medicine
 Member, Senior Biomedical Research Service Policy Board
 Member, National Institute on Alcohol Abuse and Alcoholism, Laboratory of Clinical and Translational Studies Search Committee
 Member, Scientific Director Agenda Subcommittee
 Member, Promoting the IRP Subcommittee
 Member, Shared Resources Subcommittee
 Member, Scientific Directors Search Committee, National Institute of Mental Health
 Member, Clinical Search Committee, National Institute of Neurological Disorders and Stroke
 Member, Facilities Working Group Committee
 Co-Chair, NIH Research Festival
 Chair, NIDA DBCBR Director Search Committee
 Member, Center for Scientific Review (CSR/NIH), Grant Review
 Member, 2014-2017 Administrative Strategic Plan Initiative
 Member, 2015-2017 NIDA's HIV/AIDS Research Working Group, National Institute on Drug Abuse, Nation Advisory Council on Drug Abuse

Brevetti

- US 60/491,069 Modulation of CRF Potentiation of NMDA Receptor Currents via CRF Receptor 2
- US 10/903,849 Modulation of CRF Potentiation of NMDA Receptor Currents via CRF Receptor 2
- US 60/460,270 Modulating Cooperative Activity of Dopamine D1 and D2 Receptors to Mitigate Substance Abuse
- US 10/818,709 Modulating Cooperative Activity of Dopamine D1 and D2 Receptors to Mitigate Substance Abuse
- US 60/757,821 Use of SK Channel Activators to Prevent Relapse/ Reinstatement of Drugs of Abuse
- PCT/US07/00308 Use of SK Channel Activators to Prevent Relapse/ Reinstatement of Drugs of Abuse
- US 60/647,748 Modulation of NMDA Receptor Currents via Orexin Receptor and/or CRF Receptors
- US 11/343,259 Modulation of NMDA Receptor Currents via Orexin Receptor and/or CRF Receptor
- PCT/US06/03133 Modulation of NMDA Receptor Currents via Orexin Receptor and/or CRF Receptor
- US 61/166,632 Chimera Compositions and Uses Thereof
- US 61,182,032 Chimera Compositions and Uses Thereof

Insegnamenti (formali)

2018 Guest Lecturer, Neuroscience School of Advanced Studies (NSAS), Venice (~20 students)

2018 Adjunct Professor, Neurobiology of Drug Abuse, Master's Program in integrative Neuroscience, Georgetown University (~20 students)

2016 Neuroscience School of Advanced Studies (NSAS) Course, Tuscany (~20 students)

2015 Guest Lecturer, Catholic University of Sacred Heart, Italy (~50 students)

2014 Guest Lecturer, Summer School Cortona, Lecture, Tuscany (~20 Students) 4 hours

2011-2019 Guest Lecturer, Lecture on Reward, Conditioning, and Drug Abuse, Georgetown University, (~20 students) 1 hour

2007-2019 Course Co-Chair, Current Topics in Neuroscience, JHU Neuroscience Graduate Program, (6 students) 40 hours/year

2012-2019 Adjunct Professor, NIDA IRP and John Hopkins Neuroscience Course, Neurobiology of Substance abuse Disorders, lecture, JHU (~20 students) 1 hour

2012-2019 Adjunct Professor, Novel Approaches to Studying Drug Abuse in Synaptic Plasticity, JHU (~20 students) 2 hours/Year

2011 Adjunct Professor, Neurobiology of Substance Abuse Disorders, John Hopkins University (JHU) (20 Students) 1 hour

2009 Group Leader, Brain, Mind and Behavior, UCSF (~12 Students) 20 hours/year

2007-2010 Guest Lecturer, Memory and Aging Center, UCSF (40 – 50 Students) 30 hours/year

2006 Guest Lecturer, Neuroscience 201A course, UCSF (~12 Students) 15 hours/year

2003-2006 Group Leader, Brain, Mind and Behavior, UCSF (10-15 Students) 20 hours/year

Spring 2000 Guest Lecturer, Neurobiology of Addiction Course (N263), UCSF - (20 students)
 April 6, 2000 - Physiology of mesolimbocortical dopamine pathway, 2 hours
 April 11, 2000 - Paper discussion on mesolimbic dopamine system, 2 hours

Fall 1997 Guest Lecturer, Physiology of Basal Ganglia, School of Physiotherapy, Rome University, (~24 Students) 6 hours

Fall 1996 Guest Lecturer, Neurophysiology and Neurochemistry, School of Physiotherapy, Rome University, (~22 Students) 7 hours

Fondi di Ricerca ricevuti durante la Carriera

5 R01 DA015096-07 (Bonci) 04/15/07 - 11/30/11, 3.30 calendar months, NIH/NIDA, \$176,400
(27.5% effort)

Synaptic Plasticity in the VTA after Behavioral Sensitization & Cocaine Self-administration

The major goal of this project is to elucidate the relationship between plasticity at excitatory synapses in the ventral tegmental area (VTA) and addictive behaviors such as behavioral sensitization and self-administration of cocaine.

2 R01 DA016782-05A1 07/01/09 - 06/30/14, 3 calendar months, NIH/NIDA, \$225,335
(25% effort)

CRF Modulation of NMDA Currents and Behavior in the VTA

The major goal of this project is to elucidate the role of CRFR1 and CRFR2 in promoting stress-enhanced relapse to cocaine seeking.

N/A (Bartlett/Bonci/EGCRC), 04/01/09 – 03/31/10, 60 calendar months, UCSF Dept. of Neurology, \$100,000
(5% effort)

Corticotropin-releasing Factor-binding Protein (CRF-BP)

The major goal of this project is to study the role of corticotrophin-releasing factor binding protein and how it is related to medications development.

1 RC2 AA019429-01, 10/01/09 - 09/30/11, 1.2 calendar months, NIH/NIDA, \$756,151
(10% effort)

Characterizing Alpha 5 Nicotinic Receptors in Alcohol and Nicotine Co-Dependence*

The major goal of this project is to accelerate the development of more effective medications and to improve and personalize treatment strategies for substance use disorders.

Log No. 09044003 (Bartlett/Bonci), 10/01/09 – 09/30/10, 1.2 calendar months.
U.S. Department of the Army, \$201,883
(10 % effort)

Neurobiology of Relapse: The Role of Orexin Receptors

The main objective of this project is to determine whether therapies that combine orexin antagonists and PKC inhibitors would be of greater utility as therapeutic interventions for stress-dependent disorders and alcoholism.

R01 AA026589 (PI: Sheffler; Subaward PI: Haass-Koffler)
NIH/NIAAA 05/01/2019 - 03/31/2022 (\$865,843)

Lead optimization of novel CRFBP-CRFR2 complex modulators for alcohol use disorder

This project will develop CRF-BP/CRFR2 negative allosteric modulators (NAMs) using structure activity relationship (SAR) and electrophysiology for treating Alcohol Use Disorder

Pubblicazioni peer-reviewed internazionali

1. Troiani D, Draicchio F, Bonci A, Zannoni B. Responses of vestibular neurons to stimulation of cortical sensorimotor areas in the cat. *Arch Ital Biol.* 1993 Apr;131(2-3):137-46. PubMed PMID: 8338385.
2. Mercuri NB, Stratta F, Calabresi P, Bonci A, Bernardi G. Activation of metabotropic glutamate receptors induces an inward current in rat dopamine mesencephalic neurons. *Neuroscience.* 1993 Sep;56(2):399-407. PubMed PMID: 7504216.
3. Carlesimo GA, Fadda L, Bonci A, Caltagirone C. Differential rates of forgetting from long-term memory in Alzheimer's and multi-infarct dementia. *Int J Neurosci.* 1993 Nov;73(1-2):1-11. PubMed PMID: 8132410.
4. Mercuri NB, Bonci A, Johnson SW, Stratta F, Calabresi P, Bernardi G. Effects of anoxia on rat midbrain dopamine neurons. *J Neurophysiol.* 1994 Mar;71(3):1165-73. PubMed PMID: 8201410.
5. Mercuri NB, Bonci A, Calabresi P, Stratta F, Stefani A, Bernardi G. Effects of dihydropyridine calcium antagonists on rat midbrain dopaminergic neurones. *Br J Pharmacol.* 1994 Nov;113(3):831-8. PubMed PMID: 7858874; PubMed Central PMCID: PMC1510432.
6. Mercuri NB, Bonci A, Calabresi P, Stratta F, Bernardi G. Responses of rat mesencephalic dopaminergic neurons to a prolonged period of oxygen deprivation. *Neuroscience.* 1994 Dec;63(3):757-64. PubMed PMID: 7898675.
7. Stefani A, Pisani A, Bernardi G, Bonci A, Mercuri NB, Stratta F, Calabresi P. The modulation of dopamine receptors in rat striatum. *J Neural Transm Suppl.* 1995;45:61-6. Review. PubMed PMID: 8748610.
8. Stratta F, Bonci A, Calabresi P, Stefani A, Pisani A, Bernardi G, Mercuri NB. Basic research in substantia nigra and ventral tegmental area: clinical implications. *J Neural Transm Suppl.* 1995;45:47-55. Review. PubMed PMID: 8748608.
9. Mercuri NB, Bonci A, Calabresi P, Stefani A, Bernardi G. Properties of the hyperpolarization-activated cation current I_h in rat midbrain dopaminergic neurons. *Eur J Neurosci.* 1995 Mar 1;7(3):462-9. PubMed PMID: 7773443.
10. Stefani A, Pisani A, Bonci A, Stratta F, Bernardi G. Outward potassium currents activated by depolarization in rat globus pallidus. *Synapse.* 1995 Jun;20(2):131-6. PubMed PMID: 7570342.
11. Stefani A, De Murtas M, Pisani A, Stratta F, Bonci A, Mercuri NB, Calabresi P. Electrophysiology of dopamine D-1 receptors in the basal ganglia: old facts and new perspectives. *Prog Neuropsychopharmacol Biol Psychiatry.* 1995 Sep;19(5):779-93. Review. PubMed PMID: 8539419.

12. Mercuri NB, Bonci A, Pisani A, Calabresi P, Bernardi G. Actions of glycine on non-dopaminergic neurons of the rat substantia nigra. *Eur J Neurosci*. 1995 Nov 1;7(11):2351-4. PubMed PMID: 8563984.
13. Mercuri NB, Bonci A, Siniscalchi A, Stefani A, Calabresi P, Bernardi G. Electrophysiological effects of monoamine oxidase inhibition on rat midbrain dopaminergic neurones: an in vitro study. *Br J Pharmacol*. 1996 Feb;117(3):528-532. PubMed PMID: 8821544; PubMed Central PMCID: PMC1909293.
14. Bonci A, Williams JT. A common mechanism mediates long-term changes in synaptic transmission after chronic cocaine and morphine. *Neuron*. 1996 Mar;16(3):631-9. PubMed PMID: 8785060.
15. Mercuri NB, Bonci A, Calabresi P, Bernardi G. Characterization of a barium-sensitive outward current following glutamate application on rat midbrain dopaminergic cells. *Eur J Neurosci*. 1996 Aug;8(8):1780-6. PubMed PMID: 8921268.
16. Siniscalchi A, Bonci A, Mercuri NB, Bernardi G. Effects of riluzole on rat cortical neurones: an in vitro electrophysiological study. *Br J Pharmacol*. 1997 Jan;120(2):225-30. PubMed PMID: 9117114; PubMed Central PMCID: PMC1564377.
17. Bonci A, Williams JT. Increased probability of GABA release during withdrawal from morphine. *J Neurosci*. 1997 Jan 15;17(2):796-803. PubMed PMID: 8987801.
18. Mercuri NB, Scarponi M, Bonci A, Siniscalchi A, Bernardi G. Monoamine oxidase inhibition causes a long-term prolongation of the dopamine-induced responses in rat midbrain dopaminergic cells. *J Neurosci*. 1997 Apr 1;17(7):2267-72. PubMed PMID: 9065488.
19. Mercuri NB, Bonci A, Bernardi G. Electrophysiological pharmacology of the autoreceptor-mediated responses of dopaminergic cells to antiparkinsonian drugs. *Trends Pharmacol Sci*. 1997 Jul;18(7):232-5. Review. PubMed PMID: 9253853.
20. Mercuri NB, Saiardi A, Bonci A, Picetti R, Calabresi P, Bernardi G, Borrelli E. Loss of autoreceptor function in dopaminergic neurons from dopamine D2 receptor deficient mice. *Neuroscience*. 1997 Jul;79(2):323-7. PubMed PMID: 9200717.
21. Bonci A, Grillner P, Siniscalchi A, Mercuri NB, Bernardi G. Glutamate metabotropic receptor agonists depress excitatory and inhibitory transmission on rat mesencephalic principal neurons. *Eur J Neurosci*. 1997 Nov;9(11):2359-69. PubMed PMID: 9464930.
22. Fiorillo CD, Williams JT, Bonci A. D1-receptor regulation of synaptic potentials in the ventral tegmental area after chronic drug treatment. *Adv Pharmacol*. 1998;42:1002-5. PubMed PMID: 9328067.

23. Mercuri NB, Scarponi M, Federici M, Bonci A, Siniscalchi A, Bernardi G. Modification of levodopa responses by deprenyl (selegiline): an electrophysiological and behavioral study in the rat relevant to Parkinson's disease. *Ann Neurol.* 1998 May;43(5):613-7. PubMed PMID: 9585355.
24. Bonci A, Grillner P, Mercuri NB, Bernardi G. L-Type calcium channels mediate a slow excitatory synaptic transmission in rat midbrain dopaminergic neurons. *J Neurosci.* 1998 Sep 1;18(17):6693-703. PubMed PMID: 9712641.
25. Grillner P, Bonci A, Svensson TH, Bernardi G, Mercuri NB. Presynaptic muscarinic (M3) receptors reduce excitatory transmission in dopamine neurons of the rat mesencephalon. *Neuroscience.* 1999;91(2):557-65. PubMed PMID: 10366013.
26. Bonci A, Malenka RC. Properties and plasticity of excitatory synapses on dopaminergic and GABAergic cells in the ventral tegmental area. *J Neurosci.* 1999 May 15;19(10):3723-30. PubMed PMID: 10234004.
27. Thomas MJ, Malenka RC, Bonci A. Modulation of long-term depression by dopamine in the mesolimbic system. *J Neurosci.* 2000 Aug 1;20(15):5581-6. PubMed PMID: 10908594.
28. Ungless MA, Whistler JL, Malenka RC, Bonci A. Single cocaine exposure in vivo induces long-term potentiation in dopamine neurons. *Nature.* 2001 May 31;411(6837):583-7. PubMed PMID: 11385572.
29. Thomas MJ, Beurrier C, Bonci A, Malenka RC. Long-term depression in the nucleus accumbens: a neural correlate of behavioral sensitization to cocaine. *Nat Neurosci.* 2001 Dec;4(12):1217-23. PubMed PMID: 11694884.
30. Melis M, Camarini R, Ungless MA, Bonci A. Long-lasting potentiation of GABAergic synapses in dopamine neurons after a single in vivo ethanol exposure. *J Neurosci.* 2002 Mar 15;22(6):2074-82. PubMed PMID: 11896147.
31. Yaka R, Thornton C, Vagts AJ, Phamluong K, Bonci A, Ron D. NMDA receptor function is regulated by the inhibitory scaffolding protein, RACK1. *Proc Natl Acad Sci U S A.* 2002 Apr 16;99(8):5710-5. Epub 2002 Apr 9. PubMed PMID: 11943848; PubMed Central PMCID: PMC122836.
32. Saal D, Dong Y, Bonci A, Malenka RC. Drugs of abuse and stress trigger a common synaptic adaptation in dopamine neurons. *Neuron.* 2003 Feb 20;37(4):577-82. Erratum in: *Neuron.* 2003 Apr 24;38(2):359. PubMed PMID: 12597856.
33. Bonci A, Bernardi G, Grillner P, Mercuri NB. The dopamine-containing neuron: maestro or simple musician in the orchestra of addiction? *Trends Pharmacol Sci.* 2003 Apr;24(4):172-7. Review. PubMed PMID: 12707003.

34. Hopf FW, Cascini MG, Gordon AS, Diamond I, Bonci A. Cooperative activation of dopamine D1 and D2 receptors increases spike firing of nucleus accumbens neurons via G-protein betagamma subunits. *J Neurosci*. 2003 Jun 15;23(12):5079-87. PubMed PMID: 12832531.
35. Ungless MA, Singh V, Crowder TL, Yaka R, Ron D, Bonci A. Corticotropin-releasing factor requires CRF binding protein to potentiate NMDA receptors via CRF receptor 2 in dopamine neurons. *Neuron*. 2003 Jul 31;39(3):401-7. PubMed PMID: 12895416.
36. Margolis EB, Hjelmstad GO, Bonci A, Fields HL. Kappa-opioid agonists directly inhibit midbrain dopaminergic neurons. *J Neurosci*. 2003 Nov 5;23(31):9981-6. PubMed PMID: 14602811.
37. Davies AG, Pierce-Shimomura JT, Kim H, VanHoven MK, Thiele TR, Bonci A, Bargmann CI, McIntire SL. A central role of the BK potassium channel in behavioral responses to ethanol in *C. elegans*. *Cell*. 2003 Dec 12;115(6):655-66. PubMed PMID: 14675531.
38. Chandler LJ, Bonci A, Wand GS, Morrisett RA. Recent advances in cyclic-adenosine monophosphate/protein kinase A signaling in ethanol-induced synaptic and behavioral alterations. *Alcohol Clin Exp Res*. 2004 Jul;28(7):1129-36. PubMed PMID: 15252301.
39. Choi DS, Cascini MG, Mailliard W, Young H, Paredes P, McMahon T, Diamond I, Bonci A, Messing RO. The type 1 equilibrative nucleoside transporter regulates ethanol intoxication and preference. *Nat Neurosci*. 2004 Aug;7(8):855-61. Epub 2004 Jul 18. PubMed PMID: 15258586.
40. Borgland SL, Malenka RC, Bonci A. Acute and chronic cocaine-induced potentiation of synaptic strength in the ventral tegmental area: electrophysiological and behavioral correlates in individual rats. *J Neurosci*. 2004 Aug 25;24(34):7482-90. PubMed PMID: 15329395.
41. Dong Y, Saal D, Thomas M, Faust R, Bonci A, Robinson T, Malenka RC. Cocaine-induced potentiation of synaptic strength in dopamine neurons: behavioral correlates in *GluRA(-/-)* mice. *Proc Natl Acad Sci U S A*. 2004 Sep 28;101(39):14282-7. Epub 2004 Sep 16. PubMed PMID: 15375209; PubMed Central PMCID: PMC521147.
42. Hopf FW, Mailliard WS, Gonzalez GF, Diamond I, Bonci A. Atypical protein kinase C is a novel mediator of dopamine-enhanced firing in nucleus accumbens neurons. *J Neurosci*. 2005 Jan 26;25(4):985-9. PubMed PMID: 15673680.
43. Jones S, Bonci A. Synaptic plasticity and drug addiction. *Curr Opin Pharmacol*. 2005 Feb;5(1):20-5. Review. PubMed PMID: 15661621.
44. Margolis EB, Hjelmstad GO, Bonci A, Fields HL. Both kappa and mu opioid agonists inhibit glutamatergic input to ventral tegmental area neurons. *J Neurophysiol*. 2005 Jun;93(6):3086-93. Epub 2004 Dec 22. PubMed PMID: 15615834.
45. Bonci A, Hopf FW. The dopamine D2 receptor: new surprises from an old friend. *Neuron*. 2005 Aug 4;47(3):335-8. Review. PubMed PMID: 16055058.

46. Bartlett SE, Enquist J, Hopf FW, Lee JH, Gladher F, Kharazia V, Waldhoer M, Mailliard WS, Armstrong R, Bonci A, Whistler JL. Dopamine responsiveness is regulated by targeted sorting of D2 receptors. *Proc Natl Acad Sci U S A*. 2005 Aug 9;102(32):11521-6. Epub 2005 Jul 27. PubMed PMID: 16049099; PubMed Central PMCID: PMC1183554.
47. Suvarna N, Borgland SL, Wang J, Phamluong K, Auberson YP, Bonci A, Ron D. Ethanol alters trafficking and functional N-methyl-D-aspartate receptor NR2 subunit ratio via H-Ras. *J Biol Chem*. 2005 Sep 9;280(36):31450-9. Epub 2005 Jul 11. PubMed PMID: 16009711.
48. Bonci A, Carlezon WA Jr. Ion channels and intracellular signaling proteins as potential targets for novel therapeutics for addictive and depressive disorders. *Pharmacol Ther*. 2005 Oct;108(1):65-75. Review. PubMed PMID: 16095714.
49. Borgland SL, Taha SA, Sarti F, Fields HL, Bonci A. Orexin A in the VTA is critical for the induction of synaptic plasticity and behavioral sensitization to cocaine. *Neuron*. 2006 Feb 16;49(4):589-601. PubMed PMID: 16476667.
50. Bonci A, Singh V. Dopamine dysregulation syndrome in Parkinson's disease patients: from reward to penalty. *Ann Neurol*. 2006 May;59(5):733-4. PubMed PMID: 16634013.
51. Martin M, Chen BT, Hopf FW, Bowers MS, Bonci A. Cocaine self-administration selectively abolishes LTD in the core of the nucleus accumbens. *Nat Neurosci*. 2006 Jul;9(7):868-9. Epub 2006 May 28. PubMed PMID: 16732275.
52. Schilström B, Yaka R, Argilli E, Suvarna N, Schumann J, Chen BT, Carman M, Singh V, Mailliard WS, Ron D, Bonci A. Cocaine enhances NMDA receptor-mediated currents in ventral tegmental area cells via dopamine D5 receptor-dependent redistribution of NMDA receptors. *J Neurosci*. 2006 Aug 16;26(33):8549-58. Erratum in: *J Neurosci*. 2006 Sep 13;26(37):9604. PubMed PMID: 16914681.
53. Inoue Y, Yao L, Hopf FW, Fan P, Jiang Z, Bonci A, Diamond I. Nicotine and ethanol activate protein kinase A synergistically via G(i) betagamma subunits in nucleus accumbens/ventral tegmental cocultures: the role of dopamine D(1)/D(2) and adenosine A(2A) receptors. *J Pharmacol Exp Ther*. 2007 Jul;322(1):23-9. Epub 2007 Apr 27. PubMed PMID: 17468300.
54. Sarti F, Borgland SL, Kharazia VN, Bonci A. Acute cocaine exposure alters spine density and long-term potentiation in the ventral tegmental area. *Eur J Neurosci*. 2007 Aug;26(3):749-56. PubMed PMID: 17686047.
55. Singh V, Carman M, Roeper J, Bonci A. Brief ischemia causes long-term depression in midbrain dopamine neurons. *Eur J Neurosci*. 2007 Sep;26(6):1489-99. PubMed PMID: 17880389.

56. Hopf FW, Martin M, Chen BT, Bowers MS, Mohamedi MM, Bonci A. Withdrawal from intermittent ethanol exposure increases probability of burst firing in VTA neurons in vitro. *J Neurophysiol.* 2007 Oct;98(4):2297-310. Epub 2007 Aug 15. PubMed PMID: 17699688.
57. Bowers MS, Chen BT, Chou JK, Osborne MP, Gass JT, See RE, Bonci A, Janak PH, Olive MF. Acamprosate attenuates cocaine- and cue-induced reinstatement of cocaine-seeking behavior in rats. *Psychopharmacology (Berl).* 2007 Dec;195(3):397-406. Epub 2007 Sep 2. PubMed PMID: 17764007.
58. Wanat MJ, Hopf FW, Stuber GD, Phillips PE, Bonci A. Corticotropin-releasing factor increases mouse ventral tegmental area dopamine neuron firing through a protein kinase C-dependent enhancement of Ih. *J Physiol.* 2008 Apr 15;586(Pt 8):2157-70. doi: 10.1113/jphysiol.2007.150078. Epub 2008 Feb 28. PubMed PMID: 18308824; PubMed Central PMCID: PMC2465205.
59. Tye KM, Stuber GD, de Ridder B, Bonci A, Janak PH. Rapid strengthening of thalamo-amygdala synapses mediates cue-reward learning. *Nature.* 2008 Jun 26;453(7199):1253-7. doi: 10.1038/nature06963. Epub 2008 May 11. PubMed PMID: 18469802; PubMed Central PMCID: PMC2759353.
60. Richards JK, Simms JA, Steensland P, Taha SA, Borgland SL, Bonci A, Bartlett SE. Inhibition of orexin-1/hypocretin-1 receptors inhibits yohimbine-induced reinstatement of ethanol and sucrose seeking in Long-Evans rats. *Psychopharmacology (Berl).* 2008 Jul;199(1):109-17. doi: 10.1007/s00213-008-1136-5. Epub 2008 May 10. PubMed PMID: 18470506; PubMed Central PMCID: PMC2668563.
61. Chen BT, Bowers MS, Martin M, Hopf FW, Guillory AM, Carelli RM, Chou JK, Bonci A. Cocaine but not natural reward self-administration nor passive cocaine infusion produces persistent LTP in the VTA. *Neuron.* 2008 Jul 31;59(2):288-97. doi: 10.1016/j.neuron.2008.05.024. PubMed PMID: 18667156; PubMed Central PMCID: PMC2593405.
62. Zweifel LS, Argilli E, Bonci A, Palmiter RD. Role of NMDA receptors in dopamine neurons for plasticity and addictive behaviors. *Neuron.* 2008 Aug 14;59(3):486-96. doi: 10.1016/j.neuron.2008.05.028. PubMed PMID: 18701073; PubMed Central PMCID: PMC2556153.
63. Bowers MS, Hopf FW, Chou JK, Guillory AM, Chang SJ, Janak PH, Bonci A, Diamond I. Nucleus accumbens AGS3 expression drives ethanol seeking through G betagamma. *Proc Natl Acad Sci U S A.* 2008 Aug 26;105(34):12533-8. doi: 10.1073/pnas.0706999105. Epub 2008 Aug 21. PubMed PMID: 18719114; PubMed Central PMCID: PMC2527946.
64. Argilli E, Sibley DR, Malenka RC, England PM, Bonci A. Mechanism and time course of cocaine-induced long-term potentiation in the ventral tegmental area. *J Neurosci.* 2008 Sep 10;28(37):9092-100. doi: 10.1523/JNEUROSCI.1001-08.2008. PubMed PMID: 18784289; PubMed Central PMCID: PMC2586328.

65. Stuber GD, Klanker M, de Ridder B, Bowers MS, Joosten RN, Feenstra MG, Bonci A. Reward-predictive cues enhance excitatory synaptic strength onto midbrain dopamine neurons. *Science*. 2008 Sep 19;321(5896):1690-2. doi: 10.1126/science.1160873. PubMed PMID: 18802002; PubMed Central PMCID: PMC2613864.
66. Stuber GD, Hopf FW, Hahn J, Cho SL, Guillory A, Bonci A. Voluntary ethanol intake enhances excitatory synaptic strength in the ventral tegmental area. *Alcohol Clin Exp Res*. 2008 Oct;32(10):1714-20. doi: 10.1111/j.1530-0277.2008.00749.x. Epub 2008 Jul 8. PubMed PMID: 18627359; PubMed Central PMCID: PMC3040033.
67. Wanat MJ, Bonci A. Dose-dependent changes in the synaptic strength on dopamine neurons and locomotor activity after cocaine exposure. *Synapse*. 2008 Oct;62(10):790-5. doi: 10.1002/syn.20546. PubMed PMID: 18655120.
68. Borgland SL, Storm E, Bonci A. Orexin B/hypocretin 2 increases glutamatergic transmission to ventral tegmental area neurons. *Eur J Neurosci*. 2008 Oct;28(8):1545-56. doi: 10.1111/j.1460-9568.2008.06397.x. Epub 2008 Sep 10. PubMed PMID: 18793323.
69. Bonci A, Borgland S. Role of orexin/hypocretin and CRF in the formation of drug-dependent synaptic plasticity in the mesolimbic system. *Neuropharmacology*. 2009;56 Suppl 1:107-11. doi: 10.1016/j.neuropharm.2008.07.024. Epub 2008 Jul 24. Review. PubMed PMID: 18694770.
70. Hopf FW, Bonci A. Striatal-enriched protein-tyrosine-phosphatase, synaptic plasticity, and psychostimulant-induced stereotypies. *Biol Psychiatry*. 2009 Apr 15;65(8):635-6. doi: 10.1016/j.biopsych.2009.02.008. PubMed PMID: 19328273.
71. Wanat MJ, Sparta DR, Hopf FW, Bowers MS, Melis M, Bonci A. Strain specific synaptic modifications on ventral tegmental area dopamine neurons after ethanol exposure. *Biol Psychiatry*. 2009 Apr 15;65(8):646-53. doi: 10.1016/j.biopsych.2008.10.042. Epub 2008 Dec 31. PubMed PMID: 19118821; PubMed Central PMCID: PMC3040034.
72. Chung S, Hopf FW, Nagasaki H, Li CY, Belluzzi JD, Bonci A, Civelli O. The melanin-concentrating hormone system modulates cocaine reward. *Proc Natl Acad Sci U S A*. 2009 Apr 21;106(16):6772-7. doi: 10.1073/pnas.0811331106. Epub 2009 Apr 2. PubMed PMID: 19342492; PubMed Central PMCID: PMC2672513.
73. Hahn J, Hopf FW, Bonci A. Chronic cocaine enhances corticotropin-releasing factor-dependent potentiation of excitatory transmission in ventral tegmental area dopamine neurons. *J Neurosci*. 2009 May 20;29(20):6535-44. doi: 10.1523/JNEUROSCI.4773-08.2009. PubMed PMID: 19458224; PubMed Central PMCID: PMC3077990.
74. Tsai HC, Zhang F, Adamantidis A, Stuber GD, Bonci A, de Lecea L, Deisseroth K. Phasic firing in dopaminergic neurons is sufficient for behavioral conditioning. *Science*. 2009 May 22;324(5930):1080-4. doi: 10.1126/science.1168878. Epub 2009 Apr 23. PubMed PMID: 19389999.

75. Abdallah L, Bonasera SJ, Hopf FW, O'Dell L, Giorgetti M, Jongsma M, Carra S, Pierucci M, Di Giovanni G, Esposito E, Parsons LH, Bonci A, Tecott LH. Impact of serotonin 2C receptor null mutation on physiology and behavior associated with nigrostriatal dopamine pathway function. *J Neurosci*. 2009 Jun 24;29(25):8156-65. doi: 10.1523/JNEUROSCI.3905-08.2009. PubMed PMID: 19553455; PubMed Central PMCID: PMC3077993.
76. Mulholland PJ, Hopf FW, Bukiya AN, Martin GE, Liu J, Dopico AM, Bonci A, Treistman SN, Chandler LJ. Sizing up ethanol-induced plasticity: the role of small and large conductance calcium-activated potassium channels. *Alcohol Clin Exp Res*. 2009 Jul;33(7):1125-35. doi: 10.1111/j.1530-0277.2009.00936.x. Epub 2009 Apr 9. Review. PubMed PMID: 19389201; PubMed Central PMCID: PMC2760381.
77. Borgland SL, Chang SJ, Bowers MS, Thompson JL, Vittoz N, Floresco SB, Chou J, Chen BT, Bonci A. Orexin A/hypocretin-1 selectively promotes motivation for positive reinforcers. *J Neurosci*. 2009 Sep 9;29(36):11215-25. doi: 10.1523/JNEUROSCI.6096-08.2009. PubMed PMID: 19741128; PubMed Central PMCID: PMC2771749.
78. Stuber GD, Hopf FW, Tye KM, Chen BT, Bonci A. Neuroplastic alterations in the limbic system following cocaine or alcohol exposure. *Curr Top Behav Neurosci*. 2010;3:3-27. doi: 10.1007/7854_2009_23. Review. PubMed PMID: 21161748.
79. Chen BT, Hopf FW, Bonci A. Synaptic plasticity in the mesolimbic system: therapeutic implications for substance abuse. *Ann N Y Acad Sci*. 2010 Feb;1187:129-39. doi: 10.1111/j.1749-6632.2009.05154.x. Review. PubMed PMID: 20201850; PubMed Central PMCID: PMC2886008.
80. Borgland SL, Ungless MA, Bonci A. Convergent actions of orexin/hypocretin and CRF on dopamine neurons: Emerging players in addiction. *Brain Res*. 2010 Feb 16;1314:139-44. doi: 10.1016/j.brainres.2009.10.068. Epub 2009 Nov 3. Review. PubMed PMID: 19891960.
81. Madhavan A, He L, Stuber GD, Bonci A, Whistler JL. micro-Opioid receptor endocytosis prevents adaptations in ventral tegmental area GABA transmission induced during naloxone-precipitated morphine withdrawal. *J Neurosci*. 2010 Mar 3;30(9):3276-86. doi: 10.1523/JNEUROSCI.4634-09.2010. PubMed PMID: 20203187; PubMed Central PMCID: PMC2943338.
82. Hopf FW, Bowers MS, Chang SJ, Chen BT, Martin M, Seif T, Cho SL, Tye K, Bonci A. Reduced nucleus accumbens SK channel activity enhances alcohol seeking during abstinence. *Neuron*. 2010 Mar 11;65(5):682-94. doi: 10.1016/j.neuron.2010.02.015. PubMed PMID: 20223203; PubMed Central PMCID: PMC2847608.
83. Tye KM, Tye LD, Cone JJ, Hekkelman EF, Janak PH, Bonci A. Methylphenidate facilitates learning-induced amygdala plasticity. *Nat Neurosci*. 2010 Apr;13(4):475-81. doi: 10.1038/nn.2506. Epub 2010 Mar 7. PubMed PMID: 20208527; PubMed Central PMCID: PMC2988577.

84. Hopf FW, Seif T, Mohamedi ML, Chen BT, Bonci A. The small-conductance calcium-activated potassium channel is a key modulator of firing and long-term depression in the dorsal striatum. *Eur J Neurosci*. 2010 Jun;31(11):1946-59. doi: 10.1111/j.1460-9568.2010.07231.x. Epub 2010 May 24. PubMed PMID: 20497469; PubMed Central PMCID: PMC3077989.
85. Stuber GD, Hnasko TS, Britt JP, Edwards RH, Bonci A. Dopaminergic terminals in the nucleus accumbens but not the dorsal striatum corelease glutamate. *J Neurosci*. 2010 Jun 16;30(24):8229-33. doi: 10.1523/JNEUROSCI.1754-10.2010. PubMed PMID: 20554874; PubMed Central PMCID: PMC2918390.
86. Kapfhamer D, Berger KH, Hopf FW, Seif T, Kharazia V, Bonci A, Heberlein U. Protein Phosphatase 2a and glycogen synthase kinase 3 signaling modulate prepulse inhibition of the acoustic startle response by altering cortical M-Type potassium channel activity. *J Neurosci*. 2010 Jun 30;30(26):8830-40. doi: 10.1523/JNEUROSCI.1292-10.2010. PubMed PMID: 20592205; PubMed Central PMCID: PMC3842471.
87. Bowers MS, Chen BT, Bonci A. AMPA receptor synaptic plasticity induced by psychostimulants: the past, present, and therapeutic future. *Neuron*. 2010 Jul 15;67(1):11-24. doi: 10.1016/j.neuron.2010.06.004. Review. PubMed PMID: 20624588; PubMed Central PMCID: PMC2904302.
88. Hopf FW, Bonci A. Dnmt3a: addiction's molecular forget-me-not? *Nat Neurosci*. 2010 Sep;13(9):1041-3. doi: 10.1038/nn0910-1041. PubMed PMID: 20740031.
89. Hopf FW, Chang SJ, Sparta DR, Bowers MS, Bonci A. Motivation for alcohol becomes resistant to quinine adulteration after 3 to 4 months of intermittent alcohol self-administration. *Alcohol Clin Exp Res*. 2010 Sep 1;34(9):1565-73. doi: 10.1111/j.1530-0277.2010.01241.x. Epub 2010 Jun 25. PubMed PMID: 20586757; PubMed Central PMCID: PMC2997761.
90. Madhavan A, Bonci A, Whistler JL. Opioid-Induced GABA potentiation after chronic morphine attenuates the rewarding effects of opioids in the ventral tegmental area. *J Neurosci*. 2010 Oct 20;30(42):14029-35. doi: 10.1523/JNEUROSCI.3366-10.2010. PubMed PMID: 20962224; PubMed Central PMCID: PMC3637958.
91. Ungless MA, Argilli E, Bonci A. Effects of stress and aversion on dopamine neurons: implications for addiction. *Neurosci Biobehav Rev*. 2010 Nov;35(2):151-6. doi: 10.1016/j.neubiorev.2010.04.006. Epub 2010 May 8. Review. PubMed PMID: 20438754.
92. Hopf FW, Sparta DR, Bonci A. Translational models of interactions between stress and alcohol consumption: strengths and limitations. *ILAR J*. 2011;52(3):239-50. doi: 10.1093/ilar.52.3.239. PubMed PMID: 23382142.
93. Hopf FW, Simms JA, Chang SJ, Seif T, Bartlett SE, Bonci A. Chlorzoxazone, an SK-type potassium channel activator used in humans, reduces excessive alcohol intake in rats. *Biol*

Psychiatry. 2011 Apr 1;69(7):618-24. doi: 10.1016/j.biopsycho.2010.11.011. Epub 2010 Dec 31. PubMed PMID: 21195386; PubMed Central PMCID: PMC3062269.

94. Zweifel LS, Fadok JP, Argilli E, Garelick MG, Jones GL, Dickerson TM, Allen JM, Mizumori SJ, Bonci A, Palmiter RD. Activation of dopamine neurons is critical for aversive conditioning and prevention of generalized anxiety. *Nat Neurosci*. 2011 May;14(5):620-6. doi: 10.1038/nn.2808. Epub 2011 Apr 17. PubMed PMID: 21499253; PubMed Central PMCID: PMC3083461.
95. Stuber GD, Sparta DR, Stamatakis AM, van Leeuwen WA, Hardjoprajitno JE, Cho S, Tye KM, Kempadoo KA, Zhang F, Deisseroth K, Bonci A. Excitatory transmission from the amygdala to nucleus accumbens facilitates reward seeking. *Nature*. 2011 Jun 29;475(7356):377-80. doi: 10.1038/nature10194. PubMed PMID: 21716290; PubMed Central PMCID: PMC3775282.
96. Hopf FW, Seif T, Bonci A. The SK channel as a novel target for treating alcohol use disorders. *Channels (Austin)*. 2011 Jul-Aug;5(4):289-92. doi: 10.4161/chan.5.4.16577. Epub 2011 Jul 1. PubMed PMID: 21712648.
97. Adamantidis AR, Tsai HC, Boutrel B, Zhang F, Stuber GD, Budygin EA, Touriño C, Bonci A, Deisseroth K, de Lecea L. Optogenetic interrogation of dopaminergic modulation of the multiple phases of reward-seeking behavior. *J Neurosci*. 2011 Jul 27;31(30):10829-35. doi: 10.1523/JNEUROSCI.2246-11.2011. PubMed PMID: 21795535; PubMed Central PMCID: PMC3171183.
98. Kotowski SJ, Hopf FW, Seif T, Bonci A, von Zastrow M. Endocytosis promotes rapid dopaminergic signaling. *Neuron*. 2011 Jul 28;71(2):278-90. doi: 10.1016/j.neuron.2011.05.036. PubMed PMID: 21791287; PubMed Central PMCID: PMC3417347.
99. Seif T, Makriyannis A, Kunos G, Bonci A, Hopf FW. The endocannabinoid 2-arachidonoylglycerol mediates D1 and D2 receptor cooperative enhancement of rat nucleus accumbens core neuron firing. *Neuroscience*. 2011 Oct 13;193:21-33. doi: 10.1016/j.neuroscience.2011.07.055. Epub 2011 Jul 27. PubMed PMID: 21821098; PubMed Central PMCID: PMC3579619.
100. Britt JP, McDevitt RA, Bonci A. Use of channelrhodopsin for activation of CNS neurons. *Curr Protoc Neurosci*. 2012;Chapter 2:Unit2.16. doi: 10.1002/0471142301.ns0216s58. PubMed PMID: 23042500; PubMed Central PMCID: PMC3466483.
101. Srinivasan S, Simms JA, Nielsen CK, Lieske SP, Bito-Onon JJ, Yi H, Hopf FW, Bonci A, Bartlett SE. The dual orexin/hypocretin receptor antagonist, almorexant, in the ventral tegmental area attenuates ethanol self-administration. *PLoS One*. 2012;7(9):e44726. doi: 10.1371/journal.pone.0044726. Epub 2012 Sep 21. PubMed PMID: 23028593; PubMed Central PMCID: PMC3448615.
102. Addolorato G, Leggio L, Hopf FW, Diana M, Bonci A. Novel therapeutic strategies for alcohol and drug addiction: focus on GABA, ion channels and transcranial magnetic stimulation. *Neuropsychopharmacology*. 2012 Jan;37(1):163-77. doi: 10.1038/npp.2011.216. Epub 2011 Oct 26. Review. PubMed PMID: 22030714; PubMed Central PMCID: PMC3238087.

103. Güler AD, Rainwater A, Parker JG, Jones GL, Argilli E, Arenkiel BR, Ehlers MD, Bonci A, Zweifel LS, Palmiter RD. Transient activation of specific neurons in mice by selective expression of the capsaicin receptor. *Nat Commun.* 2012 Mar 20;3:746. doi: 10.1038/ncomms1749. PubMed PMID: 22434189; PubMed Central PMCID: PMC3592340.
104. Morales M, Bonci A. Getting to the core of addiction: Hooking CB2 receptor into drug abuse? *Nat Med.* 2012 Apr 5;18(4):504-5. doi: 10.1038/nm.2722. PubMed PMID: 22481411.
105. Stuber GD, Britt JP, Bonci A. Optogenetic modulation of neural circuits that underlie reward seeking. *Biol Psychiatry.* 2012 Jun 15;71(12):1061-7. doi: 10.1016/j.biopsych.2011.11.010. Epub 2011 Dec 22. Review. PubMed PMID: 22196983; PubMed Central PMCID: PMC3332148.
106. Anzalone A, Lizardi-Ortiz JE, Ramos M, De Mei C, Hopf FW, Iaccarino C, Halbout B, Jacobsen J, Kinoshita C, Welter M, Caron MG, Bonci A, Sulzer D, Borrelli E. Dual control of dopamine synthesis and release by presynaptic and postsynaptic dopamine D2 receptors. *J Neurosci.* 2012 Jun 27;32(26):9023-34. doi: 10.1523/JNEUROSCI.0918-12.2012. PubMed PMID: 22745501; PubMed Central PMCID: PMC3752062.
107. Tai LH, Lee AM, Benavidez N, Bonci A, Wilbrecht L. Transient stimulation of distinct subpopulations of striatal neurons mimics changes in action value. *Nat Neurosci.* 2012 Sep;15(9):1281-9. doi: 10.1038/nn.3188. Epub 2012 Aug 19. PubMed PMID: 22902719; PubMed Central PMCID: PMC3951287.
108. Britt JP, Benaliouad F, McDevitt RA, Stuber GD, Wise RA, Bonci A. Synaptic and behavioral profile of multiple glutamatergic inputs to the nucleus accumbens. *Neuron.* 2012 Nov 21;76(4):790-803. doi: 10.1016/j.neuron.2012.09.040. PubMed PMID: 23177963; PubMed Central PMCID: PMC3607383.
109. Kourrich S, Su TP, Fujimoto M, Bonci A. The sigma-1 receptor: roles in neuronal plasticity and disease. *Trends Neurosci.* 2012 Dec;35(12):762-71. doi: 10.1016/j.tins.2012.09.007. Epub 2012 Oct 23. Review. PubMed PMID: 23102998; PubMed Central PMCID: PMC3587126.
110. Kravitz AV, Bonci A. Optogenetics, physiology, and emotions. *Front Behav Neurosci.* 2013 Nov 19;7:169. doi: 10.3389/fnbeh.2013.00169. eCollection 2013. PubMed PMID: 24312032; PubMed Central PMCID: PMC3833017.
111. Chatterjee S, Santos N, Holgate J, Haass-Koffler CL, Hopf FW, Kharazia V, Lester H, Bonci A, Bartlett SE. The $\alpha 5$ subunit regulates the expression and function of $\alpha 4^*$ -containing neuronal nicotinic acetylcholine receptors in the ventral-tegmental area. *PLoS One.* 2013 Jul 15;8(7):e68300. doi: 10.1371/journal.pone.0068300. Print 2013. PubMed PMID: 23869214; PubMed Central PMCID: PMC3712017.
112. Kourrich S, Hayashi T, Chuang JY, Tsai SY, Su TP, Bonci A. Dynamic interaction between sigma-1 receptor and Kv1.2 shapes neuronal and behavioral responses to cocaine. *Cell.* 2013 Jan

17;152(1-2):236-47. doi: 10.1016/j.cell.2012.12.004. PubMed PMID: 23332758; PubMed Central PMCID: PMC4159768.

113. Marchant NJ, Khuc TN, Pickens CL, Bonci A, Shaham Y. Context-induced relapse to alcohol seeking after punishment in a rat model. *Biol Psychiatry*. 2013 Feb 1;73(3):256-62. doi: 10.1016/j.biopsych.2012.07.007. Epub 2012 Aug 9. PubMed PMID: 22883434; PubMed Central PMCID: PMC3517691.
114. Wanat MJ, Bonci A, Phillips PE. CRF acts in the midbrain to attenuate accumbens dopamine release to rewards but not their predictors. *Nat Neurosci*. 2013 Apr;16(4):383-5. doi: 10.1038/nn.3335. Epub 2013 Feb 17. PubMed PMID: 23416448; PubMed Central PMCID: PMC3609940.
115. Chen BT, Yau HJ, Hatch C, Kusumoto-Yoshida I, Cho SL, Hopf FW, Bonci A. Rescuing cocaine-induced prefrontal cortex hypoactivity prevents compulsive cocaine seeking. *Nature*. 2013 Apr 18;496(7445):359-62. doi: 10.1038/nature12024. Epub 2013 Apr 3. PubMed PMID: 23552889.
116. Kempadoo KA, Tourino C, Cho SL, Magnani F, Leininger GM, Stuber GD, Zhang F, Myers MG, Deisseroth K, de Lecea L, Bonci A. Hypothalamic neurotensin projections promote reward by enhancing glutamate transmission in the VTA. *J Neurosci*. 2013 May 1;33(18):7618-26. doi: 10.1523/JNEUROSCI.2588-12.2013. PubMed PMID: 23637156; PubMed Central PMCID: PMC3865559.
117. Madhavan A, Argilli E, Bonci A, Whistler JL. Loss of D2 dopamine receptor function modulates cocaine-induced glutamatergic synaptic potentiation in the ventral tegmental area. *J Neurosci*. 2013 Jul 24;33(30):12329-36. doi: 10.1523/JNEUROSCI.0809-13.2013. PubMed PMID: 23884939; PubMed Central PMCID: PMC3721842.
118. Seif T, Chang SJ, Simms JA, Gibb SL, Dadgar J, Chen BT, Harvey BK, Ron D, Messing RO, Bonci A, Hopf FW. Cortical activation of accumbens hyperpolarization-active NMDARs mediates aversion-resistant alcohol intake. *Nat Neurosci*. 2013 Aug;16(8):1094-100. doi: 10.1038/nn.3445. Epub 2013 Jun 30. PubMed PMID: 23817545; PubMed Central PMCID: PMC3939030.
119. Britt JP, Bonci A. Optogenetic interrogations of the neural circuits underlying addiction. *Curr Opin Neurobiol*. 2013 Aug;23(4):539-45. doi: 10.1016/j.conb.2013.01.010. Epub 2013 Jan 31. Review. PubMed PMID: 23375167; PubMed Central PMCID: PMC3776408.
120. Britt JP, Bonci A. Alcohol and tobacco: how smoking may promote excessive drinking. *Neuron*. 2013 Aug 7;79(3):406-7. doi: 10.1016/j.neuron.2013.07.018. PubMed PMID: 23931990; PubMed Central PMCID: PMC4130210.
121. Mereu M, Bonci A, Newman AH, Tanda G. The neurobiology of modafinil as an enhancer of cognitive performance and a potential treatment for substance use disorders. *Psychopharmacology (Berl)*. 2013 Oct;229(3):415-34. doi: 10.1007/s00213-013-3232-4. Epub 2013 Aug 10. Review. PubMed PMID: 23934211; PubMed Central PMCID: PMC3800148.

122. Sparta DR, Hopf FW, Gibb SL, Cho SL, Stuber GD, Messing RO, Ron D, Bonci A. Binge ethanol-drinking potentiates corticotropin releasing factor R1 receptor activity in the ventral tegmental area. *Alcohol Clin Exp Res.* 2013 Oct;37(10):1680-7. doi: 10.1111/acer.12153. Epub 2013 Jun 13. PubMed PMID: 23763790; PubMed Central PMCID: PMC3985436.
123. Takahashi YK, Chang CY, Lucantonio F, Haney RZ, Berg BA, Yau HJ, Bonci A, Schoenbaum G. Neural estimates of imagined outcomes in the orbitofrontal cortex drive behavior and learning. *Neuron.* 2013 Oct 16;80(2):507-18. doi: 10.1016/j.neuron.2013.08.008. PubMed PMID: 24139047; PubMed Central PMCID: PMC3806218.
124. Kumar V, Kim K, Joseph C, Kourrich S, Yoo SH, Huang HC, Vitaterna MH, de Villena FP, Churchill G, Bonci A, Takahashi JS. C57BL/6N mutation in cytoplasmic FMRP interacting protein 2 regulates cocaine response. *Science.* 2013 Dec 20;342(6165):1508-12. doi: 10.1126/science.1245503. PubMed PMID: 24357318; PubMed Central PMCID: PMC4500108.
125. Ikemoto S, Bonci A. Neurocircuitry of drug reward. *Neuropharmacology.* 2014 Jan;76 Pt B:329-41. doi: 10.1016/j.neuropharm.2013.04.031. Epub 2013 May 7. Review. PubMed PMID: 23664810; PubMed Central PMCID: PMC3772961.
126. Ilango A, Kesner AJ, Keller KL, Stuber GD, Bonci A, Ikemoto S. Similar roles of substantia nigra and ventral tegmental dopamine neurons in reward and aversion. *J Neurosci.* 2014 Jan 15;34(3):817-22. doi: 10.1523/JNEUROSCI.1703-13.2014. PubMed PMID: 24431440; PubMed Central PMCID: PMC3891961.
127. Haws ME, Jaramillo TC, Espinosa F, Widman AJ, Stuber GD, Sparta DR, Tye KM, Russo SJ, Parada LF, Stavarache M, Kaplitt M, Bonci A, Powell CM. PTEN knockdown alters dendritic spine/protrusion morphology, not density. *J Comp Neurol.* 2014 Apr 1;522(5):1171-90. doi: 10.1002/cne.23488. PubMed PMID: 24264880; PubMed Central PMCID: PMC3945606.
128. Marchant NJ, Rabei R, Kaganovsky K, Caprioli D, Bossert JM, Bonci A, Shaham Y. A critical role of lateral hypothalamus in context-induced relapse to alcohol seeking after punishment-imposed abstinence. *J Neurosci.* 2014 May 28;34(22):7447-57. doi: 10.1523/JNEUROSCI.0256-14.2014. PubMed PMID: 24872550; PubMed Central PMCID: PMC4035512.
129. Tejada HA, Bonci A. Shedding "UV" light on endogenous opioid dependence. *Cell.* 2014 Jun 19;157(7):1500-1. doi: 10.1016/j.cell.2014.06.009. PubMed PMID: 24949960.
130. Jayanthi S, McCoy MT, Chen B, Britt JP, Kourrich S, Yau HJ, Ladenheim B, Krasnova IN, Bonci A, Cadet JL. Methamphetamine downregulates striatal glutamate receptors via diverse epigenetic mechanisms. *Biol Psychiatry.* 2014 Jul 1;76(1):47-56. doi: 10.1016/j.biopsych.2013.09.034. Epub 2013 Oct 16. PubMed PMID: 24239129; PubMed Central PMCID: PMC3989474.
131. Lee AM, Hoy JL, Bonci A, Wilbrecht L, Stryker MP, Niell CM. Identification of a brainstem circuit regulating visual cortical state in parallel with locomotion. *Neuron.* 2014 Jul 16;83(2):455-

66. doi: 10.1016/j.neuron.2014.06.031. PubMed PMID: 25033185; PubMed Central PMCID: PMC4151326.
132. McDevitt RA, Tiran-Cappello A, Shen H, Balderas I, Britt JP, Marino RA, Chung SL, Richie CT, Harvey BK, Bonci A. Serotonergic versus nonserotonergic dorsal raphe projection neurons: differential participation in reward circuitry. *Cell Rep.* 2014 Sep 25;8(6):1857-69. doi: 10.1016/j.celrep.2014.08.037. Epub 2014 Sep 18. PubMed PMID: 25242321; PubMed Central PMCID: PMC4181379.
133. Siniscalchi A, Bonci A, Mercuri NB, De Siena A, De Sarro G, Malferrari G, Diana M, Gallelli L. Cocaine dependence and stroke: pathogenesis and management. *Curr Neurovasc Res.* 2015;12(2):163-72. Review. PubMed PMID: 25742568.
134. Kusumoto-Yoshida I, Liu H, Chen BT, Fontanini A, Bonci A. Central role for the insular cortex in mediating conditioned responses to anticipatory cues. *Proc Natl Acad Sci U S A.* 2015 Jan 27;112(4):1190-5. doi: 10.1073/pnas.1416573112. Epub 2015 Jan 12. PubMed PMID: 25583486; PubMed Central PMCID: PMC4313852.
135. Mejias-Aponte CA, Ye C, Bonci A, Kiyatkin EA, Morales M. A subpopulation of neurochemically-identified ventral tegmental area dopamine neurons is excited by intravenous cocaine. *J Neurosci.* 2015 Feb 4;35(5):1965-78. doi: 10.1523/JNEUROSCI.3422-13.2015. PubMed PMID: 25653355; PubMed Central PMCID: PMC4315830.
136. Kourrich S, Calu DJ, Bonci A. Intrinsic plasticity: an emerging player in addiction. *Nat Rev Neurosci.* 2015 Mar;16(3):173-84. doi: 10.1038/nrn3877. Review. PubMed PMID: 25697160.
137. Zhang S, Qi J, Li X, Wang HL, Britt JP, Hoffman AF, Bonci A, Lupica CR, Morales M. Dopaminergic and glutamatergic microdomains in a subset of rodent mesoaccumbens axons. *Nat Neurosci.* 2015 Mar;18(3):386-92. doi: 10.1038/nn.3945. Epub 2015 Feb 9. PubMed PMID: 25664911; PubMed Central PMCID: PMC4340758.
138. Jasinska AJ, Chen BT, Bonci A, Stein EA. Dorsal medial prefrontal cortex (MPFC) circuitry in rodent models of cocaine use: implications for drug addiction therapies. *Addict Biol.* 2015 Mar;20(2):215-26. doi: 10.1111/adb.12132. Epub 2014 Mar 13. Review. PubMed PMID: 24620898; PubMed Central PMCID: PMC4163139.
139. Wang DV, Yau HJ, Broker CJ, Tsou JH, Bonci A, Ikemoto S. Mesopontine median raphe regulates hippocampal ripple oscillation and memory consolidation. *Nat Neurosci.* 2015 May;18(5):728-35. doi: 10.1038/nn.3998. Epub 2015 Apr 13. PubMed PMID: 25867120; PubMed Central PMCID: PMC4414896.
140. Pignatelli M, Bonci A. Role of Dopamine Neurons in Reward and Aversion: A Synaptic Plasticity Perspective. *Neuron.* 2015 Jun 3;86(5):1145-57. doi: 10.1016/j.neuron.2015.04.015. Review. PubMed PMID: 26050034.

141. Zhang F, Tsai HC, Airan RD, Stuber GD, Adamantidis AR, de Lecea L, Bonci A, Deisseroth K. Optogenetics in Freely Moving Mammals: Dopamine and Reward. *Cold Spring Harb Protoc.* 2015 Aug 3;2015(8):715-24. doi: 10.1101/pdb.top086330. PubMed PMID: 26240415.
142. Seif T, Simms JA, Lei K, Wegner S, Bonci A, Messing RO, Hopf FW. D-Serine and D-Cycloserine Reduce Compulsive Alcohol Intake in Rats. *Neuropsychopharmacology.* 2015 Sep;40(10):2357-67. doi: 10.1038/npp.2015.84. Epub 2015 Mar 24. PubMed PMID: 25801502; PubMed Central PMCID: PMC4538350.
143. Adamantidis A, Arber S, Bains JS, Bamberg E, Bonci A, Buzsáki G, Cardin JA, Costa RM, Dan Y, Goda Y, Graybiel AM, Häusser M, Hegemann P, Huguenard JR, Insel TR, Janak PH, Johnston D, Josselyn SA, Koch C, Kreitzer AC, Lüscher C, Malenka RC, Miesenböck G, Nagel G, Roska B, Schnitzer MJ, Shenoy KV, Soltesz I, Sternson SM, Tsien RW, Tsien RY, Turrigiano GG, Tye KM, Wilson RI. Optogenetics: 10 years after ChR2 in neurons--views from the community. *Nat Neurosci.* 2015 Sep;18(9):1202-12. doi: 10.1038/nn.4106. Review. PubMed PMID: 26308981.
144. Webber ES, Bonci A, Krashes MJ. The elegance of energy balance: Insight from circuit-level manipulations. *Synapse.* 2015 Sep;69(9):461-74. doi: 10.1002/syn.21837. PubMed PMID: 26126768.
145. Tsai SY, Chuang JY, Tsai MS, Wang XF, Xi ZX, Hung JJ, Chang WC, Bonci A, Su TP. Sigma-1 receptor mediates cocaine-induced transcriptional regulation by recruiting chromatin-remodeling factors at the nuclear envelope. *Proc Natl Acad Sci U S A.* 2015 Nov 24;112(47):E6562-70. doi: 10.1073/pnas.1518894112. Epub 2015 Nov 9. PubMed PMID: 26554014; PubMed Central PMCID: PMC4664336.
146. Siniscalchi A, Bonci A, Biagio Mercuri N, Pirritano D, Squillace A, De Sarro G, Gallelli L. The Role of Topiramate in the Management of Cocaine Addiction: a Possible Therapeutic Option. *Curr Neuropharmacol.* 2015 Nov 26;13(6):815-8. PubMed PMID: 26630959.
147. Kravitz AV, Tomasi D, LeBlanc KH, Baler R, Volkow ND, Bonci A, Ferré S. Cortico-striatal circuits: Novel therapeutic targets for substance use disorders. *Brain Res.* 2015 Dec 2;1628(Pt A):186-98. doi: 10.1016/j.brainres.2015.03.048. Epub 2015 Apr 9. Review. PubMed PMID: 25863130.
148. Whitaker LR, Carneiro de Oliveira PE, McPherson KB, Fallon RV, Planeta CS, Bonci A, Hope BT. Associative Learning Drives the Formation of Silent Synapses in Neuronal Ensembles of the Nucleus Accumbens. *Biol Psychiatry.* 2016 Aug 1;80(3):246-56. doi: 10.1016/j.biopsych.2015.08.006. PubMed PMID: 26386479
149. Terraneo A, Leggio L, Saladini M, Ermani M, Bonci A*, Gallimberti L. Transcranial magnetic stimulation of dorsolateral prefrontal cortex reduces cocaine use: A pilot study. *Eur Neuropsychopharmacol.* 2016 Jan;26(1):37-44. doi: 10.1016/j.euroneuro.2015.11.011. Epub 2015 Dec 4. PubMed PMID: 26655188. *Corresponding author

150. Belin-Rauscent A, Fouyssac M, Bonci A, Belin D. How Preclinical Models Evolved to Resemble the Diagnostic Criteria of Drug Addiction. *Biol Psychiatry*. 2016 Jan 1;79(1):39-46. doi: 10.1016/j.biopsych.2015.01.004. Epub 2015 Jan 29. Review. PubMed PMID: 25747744.
151. Chang CY, Esber GR, Marrero-Garcia Y, Yau HJ, Bonci A, Schoenbaum G. Brief optogenetic inhibition of dopamine neurons mimics endogenous negative reward prediction errors. *Nat Neurosci*. 2016 Jan;19(1):111-6. doi: 10.1038/nn.4191. Epub 2015 Dec 7. PubMed PMID: 26642092; PubMed Central PMCID: PMC4696902.
152. Roseberry TK, Lee AM, Lalive AL, Wilbrecht L, Bonci A, Kreitzer AC. Cell-Type-Specific Control of Brainstem Locomotor Circuits by Basal Ganglia. *Cell*. 2016 Jan 28;164(3):526-37. doi: 10.1016/j.cell.2015.12.037. PubMed PMID: 26824660.
153. Marchant NJ, Campbell EJ, Whitaker LR, Harvey BK, Kaganovsky K, Adhikary S, Hope BT, Heins RC, Prinszano TE, Vardy E, Bonci A, Bossert JM, Shaham Y. Role of Ventral Subiculum in Context-Induced Relapse to Alcohol Seeking after Punishment-Imposed Abstinence. *J Neurosci*. 2016 Mar 16;36(11):3281-94. doi: 10.1523/JNEUROSCI.4299-15.2016. PubMed PMID: 26985037.
154. Zhang HY, Gao M, Shen H, Bi GH, Yang HJ, Liu QR, Wu J, Gardner EL, Bonci A, Xi ZX. Expression of functional cannabinoid CB2 receptor in VTA dopamine neurons in rats. *Addict Biol*. 2016 Feb 1. doi: 10.1111/adb.12367. [Epub ahead of print] PubMed PMID: 26833913.
155. Siniscalchi A, Sztajzel R, Bonci A, Malferrari G, De Sarro G, Gallelli L. Editorial: Cocaine and Cerebral Small Vessel: Is it a Negative Factor for Intravenous Thrombolysis? *Curr Vasc Pharmacol*. 2016 Feb 4;14(3):304-6. PubMed PMID: 26845684.
156. Yau HJ, Wang DV, Tsou JH, Chuang YF, Chen BT, Deisseroth K, Ikemoto S, Bonci A. Pontomesencephalic Tegmental Afferents to VTA Non-dopamine Neurons Are Necessary for Appetitive Pavlovian Learning. *Cell Rep*. 2016 Sep 6;16(10):2699-710. doi: 10.1016/j.celrep.2016.08.007. Epub 2016 Aug 25. PubMed PMID: 27568569.
157. Fredriksson I, Adhikary S, Steensland P, Vendruscolo LF, Bonci A, Shaham Y, Bossert JM. Prior Exposure to Alcohol has no Effect on Cocaine Self-Administration and Relapse in Rats: Evidence from a Rat Model that does not Support the Gateway Hypothesis. *Neuropsychopharmacology*. 2016 Sep 21. doi: 10.1038/npp.2016.209. PubMed PMID: 27649640 [Epub ahead of print]
158. Creed M, Bonci A, Leggio L. Modulating Morphine Context-Induced Drug Memory With Deep Brain Stimulation: More Research Questions by Lowering Stimulation Frequencies? *Biol Psychiatry*. 2016 Nov 1;80(9):647-649. doi: 10.1016/j.biopsych.2016.08.022. PubMed PMID: 27697154.
159. Haass-Koffler CL, Henry AT, Melkus G, Simms JA, Naemmuddin M, Nielsen CK, Lasek AW, Magill M, Schwandt ML, Momenan R, Hodgkinson CA, Bartlett SE, Swift RM, Bonci A, Leggio

- L. Defining the role of corticotropin releasing factor binding protein in alcohol consumption. *Transl psychiatry*. 2016 Nov 15; 6(11):e953. PubMed PMID: 27845775
160. Xin W, Edwards N, Bonci A. VTA dopamine neuron plasticity - the unusual suspects. *Eur J Neurosci*. 2016 Dec;44(12):2975-2983 Review. PubMed PMID: 27711998.
161. Tejada HA, Wu J, Kornspun A, Pignatelli M, Kashtelyan V, Krashes MJ, Lowell BB, Carlezon WA, Bonci A. Pathway- and Cell-Specific Kappa-Opioid Receptor Modulation of Excitation-Inhibition Balance Differentially Gates D1 and D2 Accumbens Neuron Activity. *Neuron*. 2017 Jan 4;93(1):147-163. PubMed PMID: 28056342.
162. Edwards NJ, Tejada HA, Pignatelli M, Zhang S, McDevitt RA, Wu J, Bass CE, Bettler B, Morales M, Bonci A. Circuit specificity in the inhibitory architecture of the VTA regulates cocaine-induced behavior. *Nat Neurosci*. 2017 Jan 23. doi: 10.1038/nn.4482. [Epub ahead of print] PubMed PMID: 28114294.
163. Pignatelli M, Umanah G, Riberio SP, Chen R, Yau HJ, Dawson VL, Dawson TM, Bonci A. Synaptic Plasticity onto Dopamine Neurons Shapes Fear Learning. *Neuron*. 2017 Jan 18;93(2):425-440. PubMed PMID: 28103482.
164. De Biase LM, Schuebel KE, Fوسفeld ZH, Jair K, Hawes IA, Cimbri R, Zhang HY, Liu QR, Shen H, Xi ZX, Goldman D, Bonci A. Local Cues Establish and Maintain Region-Specific Phenotypes of Basal Ganglia Microglia. *Neuron*. 2017 Jul 19;95(2):341-356.e6. doi: 10.1016/j.neuron.2017.06.020. Epub 2017 Jul 6. PubMed PMID: 28689984.
165. Gomez JL, Bonaventura J, Lesniak W, Mathews WB, Sysa-Shah P, Rodriguez LA, Ellis RJ, Richie CT, Harvey BK, Dannals RF, Pomper MG, Bonci A, Michaelides M. Chemogenetics revealed: DREADD occupancy and activation via converted clozapine. *Science*. 2017 Aug 4;357(6350):503-507. doi: 10.1126/science.aan2475. PubMed PMID: 28774929.
166. Whitaker LR, Warren BL, Venniro M, Harte TC, McPherson KB, Bossert JM, Shaham Y, Bonci A, Hope BT. Bidirectional modulation of intrinsic excitability in rat prelimbic cortex neuronal ensembles and non-ensembles following operant learning. *J Neurosci*. 2017 Aug 4. pii: 3761-16. doi: 10.1523/JNEUROSCI.3761-16.2017. Epub 2017 Aug 4. PubMed PMID: 28779019; PubMed Central PMCID: PMC5588469.
167. Diana M, Raji T, Melis M, Nummenmaa A, Leggio L, Bonci A. Rehabilitating the addicted brain with transcranial magnetic stimulation. *Nat Rev Neurosci*. 2017 Nov;18(11):685-693. doi: 10.1038/nrn.2017.113. Epub 2017 Sep 29. Review. PubMed PMID: 28951609.
168. Umanah GKE, Pignatelli M, Yin X, Chen R, Crawford J, Neifert S, Scarffe L, Behensky AA, Guiberson N, Chang M, Ma E, Kim JW, Castro CC, Mao X, Chen L, Andrabi SA, Pletnikov MV, Pulver AE, Avramopoulos D, Bonci A, Valle D, Dawson TM, Dawson VL. Thorase variants are associated with defects in glutamatergic neurotransmission that can be rescued by Perampripanel. *Sci Transl Med*. 2017 Dec 13;9(420). pii: eaah4985. doi: 10.1126/scitranslmed.aah4985. PubMed PMID: 29237760.

169. Pignatelli M, Bonci A. Spiraling Connectivity of NAc-VTA Circuitry. *Neuron*. 2018 Jan 17;97(2):261-262. doi: 10.1016/j.neuron.2017.12.046. PubMed PMID: 29346748.
170. Yano H, Cai NS, Xu M, Verma RK, Rea W, Hoffman AF, Shi L, Javitch JA, Bonci A, Ferré S. Gs- versus Golf-dependent functional selectivity mediated by the dopamine D1 receptor. *Nat Commun*. 2018 Feb 5;9(1):486. doi: 10.1038/s41467-017-02606-w. PubMed PMID: 29402888; PubMed Central PMCID: PMC5799184.
171. Pettorruso M, Spagnolo PA, Leggio L, Janiri L, Di Giannantonio M, Gallimberti L, Bonci A, Martinotti G. Repetitive transcranial magnetic stimulation of the left dorsolateral prefrontal cortex may improve symptoms of anhedonia in individuals with cocaine use disorder: A pilot study. *Brain Stimul*. 2018 Jun 5. pii: S1935-861X(18)30165-7. doi: 10.1016/j.brs.2018.06.001. PubMed PMID: 29885861.
172. Zhang HY, Shen H, Jordan CJ, Liu QR, Gardner EL, Bonci A, Xi ZX. CB2 receptor antibody signal specificity: correlations with the use of partial CB2-knockout mice and anti-rat CB2 receptor antibodies. *Acta Pharmacol Sin*. 2018 Jul 2. doi: 10.1038/s41401-018-0037-3. PubMed PMID: 29967455.
173. Xin W, Bonci A. Functional Astrocyte Heterogeneity and Implications for Their Role in Shaping Neurotransmission. *Front Cell Neurosci*. 2018 May 24;12:141. doi: 10.3389/fncel.2018.00141. eCollection 2018. Review. PubMed PMID: 29896091; PubMed Central PMCID: PMC5987431.
174. Xin W, Schuebel KE, Jair KW, Cimbrotto R, De Biase LM, Goldman D, Bonci A. Ventral midbrain astrocytes display unique physiological features and sensitivity to dopamine D2 receptor signaling. *Neuropsychopharmacology*. 2018 Jul 13. doi: 10.1038/s41386-018-0151-4. PubMed PMID: 30054584.
175. Francis TC, Gantz SC, Moussawi K, Bonci A. Synaptic and intrinsic plasticity in the ventral tegmental area after chronic cocaine. *Curr Opin Neurobiol*. 2018 Sep 17;54:66-72. doi: 10.1016/j.conb.2018.08.013. Review. PubMed PMID: 30237117.
176. Tejada HA, Bonci A. Dynorphin/kappa-opioid receptor control of dopamine dynamics: Implications for negative affective states and psychiatric disorders. *Brain Res*. 2018 Sep 19. pii: S0006-8993(18)30488-8. doi: 10.1016/j.brainres.2018.09.023. Review. PubMed PMID: 30244022.
177. De Biase LM, Bonci A. Region-Specific Phenotypes of Microglia: The Role of Local Regulatory Cues. *Neuroscientist*. 2018 Oct 3;1073858418800996. doi: 10.1177/1073858418800996. PubMed PMID: 30280638.

178. Shen H, Marino RAM, McDevitt RA, Bi GH, Chen K, Madeo G, Lee PT, Liang Y, De Biase LM, Su TP, et al. Genetic deletion of vesicular glutamate transporter in dopamine neurons increases vulnerability to MPTP-induced neurotoxicity in mice. *Proc Natl Acad Sci U S A*. 2018 Nov 15. pii: 201800886. doi: 10.1073/pnas.1800886115. PubMed PMID: 30442663.
179. Spagnolo PA, Gómez Pérez LJ, Terraneo A, Gallimberti L, Bonci A. Neural Correlates of Cue- and Stress-induced Craving in Gambling Disorders: Implications for Transcranial Magnetic Stimulation Interventions. *Eur J Neurosci*. 2018 Dec 21. doi: 10.1111/ejn.14313. PubMed PMID: 30575160.
180. Hu Y, Salmeron BJ, Krasnova IN, Gu H, Lu H, Bonci A, Cadet JL, Stein EA, Yang Y. Compulsive Drug Use is Associated with Imbalance of Orbitofrontal- and Prelimbic- Striatal Circuits in Punishment-Resistant Individuals. *PNAS* 2018 Dec 4;115(49): E11532-E11541. doi: 10.1073.
181. Madeo G, Bonci A. Rewiring the Addicted Brain: Circuits-Based Treatment for Addiction. *Cold Spring Harb Symp Quant Biol*. 2018;83:173-184. doi: 10.1101/sqb.2018.83.038158. Epub 2019. May16.
182. Xin W, Mironova YA, Shen H, Marino RAM, Waisman A, Lamers WH, Bergles DE, Bonci A. Oligodendrocytes support neuronal glutamatergic transmission via expression of glutamine synthetase, *Cell Reports* 2019 May 21;27(8):2262-2271.e5. doi: 10.1016.
183. Jackson SN, Barbacci DC, Bonci A, Woods AS. An In Vitro Study of Aromatic Stacking of Drug Molecules. *J Am Soc Mass Spectrom*. 2019 Jul;30(7):1199-1203. doi: 10.1007/s13361-019-02166-x.
184. Cardullo S, Gomez Perez LJ, Marconi L, Terraneo A, Gallimberti L, Bonci A, Madeo G. Clinical Improvements in Comorbid Gambling/Cocaine Use Disorder (GD/CUD) Patients Undergoing Repetitive Transcranial Magnetic Stimulation (rTMS). *J Clin Med*. 2019 May 30;8(6). doi: 10.3390/jcm8060768.
185. Francis TC, Yano H, Demarest TG, Shen H, Bonci A. High Frequency Activation of Nucleus Accumbens D1-MSNs Drives Excitatory Potentiation on D2-MSNs. *Neuron*. 2019 Aug 7;103(3):432-444.e3. doi: 10.1016.
186. Shah RR, Taccone M, Monaci E, Brito LA, Bonci A, O'Hagan DT, Amiji MM, Seubert A. The droplet size of emulsion adjuvants has significant impact on their potency, due to differences in immune cell-recruitment and -activation. *Sci Rep*. 2019 Aug 8;9(1):11520. doi: 10.1038/s41598-019-47885-z. PMCID: PMC6687744.
187. Ekhtiari H, Tavakoli H, Addolorato G, Baeken C, Bonci A, Campanella S, Castelo-Branco L, Challet-Bouju G, Clark VP, Claus E, Dannon PN, Del Felice A, den Uyl T, Diana M, di Giannantonio M, Fedota JR, Fitzgerald P, Gallimberti L, Grall-Bronnec M, Herremans SC,

Herrmann MJ, Jamil A, Khedr E, Kouimtsidis C, Kozak K, Krupitsky E, Lamm C, Lechner WV, Madeo G, Malmir N, Martinotti G, McDonald WM, Montemitro C, Nakamura-Palacios EM, Nasehi M, Noël X, Nosratabadi M, Paulus M, Pettorruso M, Pradhan B, Praharaj SK, Rafferty H, Sahlem G, Salmeron BJ, Sauvaget A, Schluter RS, Sergiou C, Shahbabaie A, Sheffer C, Spagnolo PA, Steele VR, Yuan TF, van Dongen JDM, Van Waes V, Venkatasubramanian G, Verdejo-García A, Verveer I, Welsh JW, Wesley MJ, Witkiewitz K, Yavari F, Zarrindast MR, Zawertailo L, Zhang X, Cha YH, George TP, Frohlich F, Goudriaan AE, Fecteau S, Daughters SB, Stein EA, Fregni F, Nitsche MA, Zangen A, Bikson M, Hanlon CA. Transcranial electrical and magnetic stimulation (tES and TMS) for addiction medicine: A consensus paper on the present state of the science and the road ahead. *Neurosci Biobehav Rev.* 2019 Sep;104:118-140. doi: 10.1016/j.neubiorev.2019.06.007. PMID: 31271802.

188. Bonaventura J, Eldridge MAG, Hu F, Gomez JL, Sanchez-Soto M, Abramyan AM, Lam S, Boehm MA, Ruiz C, Farrell MR, Moreno A, Galal Faress IM, Andersen N, Lin JY, Moaddel R, Morris PJ, Shi L, Sibley DR, Mahler SV, Nabavi S, Pomper MG, Bonci A, Horti AG, Richmond BJ, Michaelides M. High-potency ligands for DREADD imaging and activation in rodents and monkeys. *Nat Commun.* 2019 Oct 11;10(1):4627. doi: 10.1038/s41467-019-12236-z. PMID: PMC6788984.
189. Pettorruso M, Martinotti G, Montemitro C, De Risio L, Spagnolo PA, Gallimberti L, Fanella F, Bonci A, Di Giannantonio M; Brainswitch Study Group. Multiple Sessions of High-Frequency Repetitive Transcranial Magnetic Stimulation as a Potential Treatment for Gambling Addiction: A 3-Month, Feasibility Study. *Eur Addict Res.* 2019 Oct 30;1-5. doi: 10.1159/000504169. PMID: 31665732.
190. Raffaelli W, Malafoglia V, Bonci A, Tenti M, Ilari S, Gremigni P, Iannuccelli C, Gioia C, Di Franco M, Mollace V, Vitiello L, Tomino C, Muscoli C. Identification of MOR-Positive B Cell as Possible Innovative Biomarker (Mu Lympho-Marker) for Chronic Pain Diagnosis in Patients with Fibromyalgia and Osteoarthritis Diseases. *Int J Mol Sci.* 2020 Feb 22;21(4). doi: 10.3390/ijms21041499.
191. Madeo G, Terraneo A, Cardullo S, Gómez Pérez LJ, Cellini N, Sarlo M, Bonci A, Gallimberti L. Long-Term Outcome of Repetitive Transcranial Magnetic Stimulation in a Large Cohort of Patients With Cocaine-Use Disorder: An Observational Study. *Front Psychiatry.* 2020 Feb 28;11:158. doi: 10.3389/fpsyt.2020.00158.
192. Pignatelli M, Tejada HA, Barker DJ, Bontempi L, Wu J, Lopez A, Palma Ribeiro S, Lucantonio F, Parise EM, Torres-Berrio A, Alvarez-Bagnarol Y, Marino RAM, Cai ZL, Xue M, Morales M, Tamminga CA, Nestler EJ, Bonci A. Cooperative synaptic and intrinsic plasticity in a disinaptic limbic circuit drive stress-induced anhedonia and passive coping in mice. *Mol Psychiatry.* 2020 Mar 11. doi: 10.1038/s41380-020-0686-8.
193. Gil-Lievana E, Balderas I, Moreno-Castilla P, Luis-Islas J, McDevitt RA, Tecuapetla F, Gutierrez R, Bonci A, Bermudez-Rattoni F. Glutamatergic basolateral amygdala to anterior insular cortex circuitry maintains rewarding contextual memory. *Commun Biol.* 2020 Mar 20;3(1):139. doi: 10.1038/s42003-020-0862-z.

194. Marino RAM, McDevitt RA, Gantz SC, Shen H, Pignatelli M, Xin W, Wise RA, Bonci A. Control of food approach and eating by a GABAergic projection from lateral hypothalamus to dorsal pons. *Proc Natl Acad Sci U S A*. 2020 Mar 30. doi: 10.1073/pnas.1909340117.
195. Gómez Pérez LJ, Cardullo S, Cellini N, Sarlo M, Monteanni T, Bonci A, Terraneo A, Gallimberti L, Madeo G. Sleep quality improves during treatment with Repetitive Transcranial Magnetic Stimulation (rTMS) in patients with cocaine use disorder: A retrospective observational study. *BMC Psychiatry*. 2020 Apr 6;20(1):153. doi: 10.1186/s12888-020-02568-2.
196. Hope KT, Hawes IA, Moca EN, Bonci A, De Biase LM. Maturation of the microglial population varies across mesolimbic nuclei. *Eur J Neurosci*. 2020 Apr 13. doi: 10.1111/ejn.14740.
197. Moussawi K, Ortiz MM, Gantz SC, Tunstall BJ, Marchette RCN, Bonci A, Koob GF, Vendruscolo LF. Fentanyl vapor self-administration model in mice to study opioid addiction. *Sci Adv*. 2020 Aug 5;6(32):eabc0413. doi: 10.1126/sciadv.abc0413. eCollection 2020 Aug. PMID: 32821843
198. Bontempi L, Bonci A. μ -Opioid receptor-induced synaptic plasticity in dopamine neurons mediates the rewarding properties of anabolic androgenic steroids. *Sci Signal*. 2020 Sep 1;13(647):eaba1169. doi: 10.1126/scisignal.aba1169. PMID: 32873724
199. Klawonn AM, Fritz M, Castany S, Pignatelli M, Canal C, Similä F, Tejada HA, Levinsson J, Jaarola M, Jakobsson J, Hidalgo J, Heilig M, Bonci A, Engblom D. Microglial activation elicits a negative affective state through prostaglandin-mediated modulation of striatal neurons. *Immunity*. 2021 Feb 9;54(2):225-234.e6. doi: 10.1016/j.immuni.2020.12.016. Epub 2021 Jan 20. PMID: 33476547
200. Raffaelli W, Tenti M, Corrado A, Malafoglia V, Ilari S, Balzani E, Bonci A. Chronic Pain: What Does It Mean? A Review on the Use of the Term Chronic Pain in Clinical Practice. *J Pain Res*. 2021 Mar 29;14:827-835. doi: 10.2147/JPR.S303186. eCollection 2021. PMID: 33833560 Free PMC article.
201. Malafoglia V, Tenti M, Ilari S, Balzani E, Fanelli A, Muscoli C, Raffaelli W, Bonci A. Opportunities and challenges for nonaddictive interventions in chronic pain. *Curr Opin Pharmacol*. 2021 Apr;57:184-191. doi: 10.1016/j.coph.2021.02.007. Epub 2021 Mar 30. PMID: 33799001 Review.
202. McDevitt RA, Marino RAM, Tejada HA, Bonci A. Serotonergic inhibition of responding for conditioned but not primary reinforcers. *Pharmacology Biochem Behav*. 2021 Jun; 205:173186. doi: 10.1016/j.pbb.2021.173186. Epub 2021 Apr 6. PMID: 33836219

Books and Book Chapters

1. Bonci A, Bernardi G, Calabresi P, Mercuri NB. (1993) Effetti dell'anossia sui neuroni dopaminergici mesencefalici di ratto. Atti XX Riunione LIMPE. Patologia extrapiramidale degenerativa e iatrogena. Varese. 79-89.
2. Stefani A, Calabresi P, Mercuri NB, Stratta F, Pisani A, Bonci A, Bernardi G. (1994). Basic electrophysiology and possible new therapeutic approaches to movement disorders. In Percheron G (Ed.) *Basal Ganglia IV*. (pp 229-236). New York, NY: Plenum Press.
3. Stefani A, De Murtas M, Pisani A, Stratta F, Bonci A, Mercuri NB, Calabresi P. (1995). Electrophysiology of dopamine D1 receptors in the basal ganglia: old facts and new perspectives. *Prog. Neuro-Psychopharmacology* 19, pp.779-793.
4. Bonci A, Jones S. (2007). The Mesocortical Dopaminergic System. In Miller B, Cummings J. (Eds.), *Human Frontal Lobes, Function and Disorders*, 2nd Ed. (pp.145-162). New York, NY: Guilford Press.
5. Hopf W, Bonci A, Malenka R. (2010) Plasticity of forebrain dopamine systems. In Iverson J, Iverson S, Dunnett S, Bjorklund A (Eds.), *Dopamine Handbook*. (pp. 339-348). New York, NY: Oxford.
6. Bonci A, Volkow V. (Section Eds.) (2013). Substance Use Disorder. In Charney D, Sklar P, Buxbaum J, Nester E. (Eds.) *Neurobiology of Mental Illness 4th edition*. New York, NY: Oxford Press.
7. Kourrich S, Bonci A. (2013). Synaptic and Neural Plasticity. In Charney D, Sklar P, Buxbaum J, Nester E. (Eds.) *Neurobiology of Mental Illness 4th edition*. (pp. 64-75) New York, NY: Oxford Press.
8. Michaelides M & Bonci A. (2015) Emerging experimental techniques in neuroscience: Optogenetics. In: Pfaff, DW & Volkow, ND (Eds.), *Neuroscience in the 21st Century, 2nd edition*. New York: Springer
9. Phillips K, Bonci A. (2017) Chapter 447: Cocaine and Other Commonly Used Drugs. In: Hauser, S (Ed), *Harrison's Principles of Internal Medicine, 20th edition* New York, NY: McGraw-Hill
10. Chen BT, Bonci A. (2017) Chapter 2: The Mesocortical Dopaminergic System. In Miller B, Cummins J (Eds.) *The Human Frontal Lobes Functions and Disorders 3rd Edition*. (pp.13-28) New York, NY: Gilford Press.