Curriculum Vitae (6-17-24)

CAMRON D. BRYANT, PH.D.
Professor
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Lab webpage: https://bryantlab.sites.northeastern.edu/
Twitter: https://twitter.com/CamronBryantPhD
Linkedin: https://www.linkedin.com/in/camron-bryant-5372405/
NCBI My Bibliography: https://www.ncbi.nlm.nih.gov/myncbi/camron.bryant.1/bibliography/public/

ACADEMIC TRAINING

1999 B.S., *Cum Laude*, Psychology, Departmental Distinction, University of Illinois, Urbana-Champaign (UIUC)

2006 Ph.D., Neuroscience, University of California, Los Angeles (UCLA)

ADDITIONAL TRAINING

2007-11 Postdoc, The University of Chicago, Quantitative Genetics
2017 Completion of leadership workshop: Emerging Healthcare Leaders Program, Institute for Health System Innovation Policy, hosted at Boston University's Questrom School of Business. August 9-10, 2017.

ACADEMIC APPOINTMENTS

2011-12 Research Associate, Department of Human Genetics, The University of Chicago
2012-19 Assistant Professor, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine (BUSM). Official appointment date: April 25, 2013
2013-19 Assistant Professor (Secondary Appt.), Department of Psychiatry, Boston University School of Medicine
2019- Associate Professor, Department of Pharmacology and Experimental Therapeutics and Psychiatry, Boston University School of Medicine. Official promotion date: June 18, 2019
2023- Professor, Department of Pharmacology, Physiology and Biophysics, Boston University Chobanian and Avedisian School of Medicine
2023- (starting 8/21/23) Professor, Department of Pharmaceutical Sciences, Northeastern University
2023- Fellow, Center for Drug Discovery, Northeastern University
2023- Awarded Tenure on Entry, Professor of Pharmaceutical Sciences, Northeastern University, December 8, 2023

HONORS

National

2011 Travel Award for NIH/NIDA Miniconvention, "Frontiers in Addiction Research"
2011 American College of Neuropsychopharmacology (ACNP) Early Career Travel Award (abstract was selected for Breakout Session oral presentation).

2014 Junior Investigator Travel Fellowship, Winter Conference on Brain Research (WCBR)
2016 Elected Associate Member of ACNP, January 1, 2016
2021 Elected Full Member, January 1, 2021

International

2002,5,11 International Narcotics Research Conference (INRC) Travel Award
2008 Outstanding Young Investigator Award for Postdocs, International Behavioural and Neural Genetics Society (IBANGS)
2009-12 IBANGS Travel Award
2013 Outstanding Young Scientist Award for Junior Faculty, IBANGS
2013 World Congress of Psychiatric Genetics (WCPG) - poster abstract selected for oral presentation
2014 Young Scientist Award, International Behavioural and Neural Genetics Society (IBANGS)

LICENSES AND CERTIFICATION

2024 MCSRP, DEA Registration

MAJOR ADMINISTRATIVE RESPONSIBILITIES

2013-23 Mentor, NIH/NIGMS T32GM008541, Ph.D. Training Program in Biomolecular Pharmacology
2013-23 Mentor, Transformative Training Program in Addiction Science (Burroughs Wellcome), Boston University School of Medicine
2013-23 Member, Graduate Program for Neuroscience, Boston University
2013-23 Member, Genome Sciences Institute, Boston University School of Medicine
2013-23 Member, Graduate Program in Genetics and Genomics, Program in Biomedical Sciences, Boston University School of Medicine
2020-23 Associate Director (BUSM), Center for Systems Neuroscience, Boston University

DEPARTMENT, SCHOOL, AND UNIVERSITY COMMITEES

Committees, Department of Pharmacology and Experimental Therapeutics, Boston University Chobanian & Avedisian School of Medicine

2014,18 BUSM Pharmacology Sterling Seminar Series Committee
2014-15 Member, Addiction Faculty Candidate Search Committee
2015-20 Chair, Addiction Faculty Search Committee, Department of Pharmacology, BUSM
2016-23 Admissions Committee for T32 NIGMS grant Pharmacology Graduate Program
2020 T32 Biomolecular Pharmacology Trainee Selection Committee
2022 Chair, T32 Biomolecular Pharmacology Trainee Selection Committee
2023 Chair, Addiction Faculty Search Committee
2023 Member, Chair Advisory Committee (Dr. Venetia Zachariou) for the new Pharmacology, Physiology, and Structural Biology Department
2023 Member, Appointments and Promotions Committee for the new Pharmacology, Physiology, and Structural Biology Department
2023 Chair, Graduate Education Committee

Qualifying Exam Committees, PhD Program in Biomolecular Pharmacology, Boston University Chobanian & Avedisian School of Medicine (14 total; 8 as Chair)

2014 Member, Melissa Mcloed
2015 Member, Kathryn Hixson (Advisor: Dr. Shelley Russek)
2016 Chair, Margarita Tararina (Advisor: Dr. Karen Allen)

2016 Chair, Brandon Maziuk (Adivisor: Dr. Benjamin Wolozin)
2017 Member, Qiu Ruan (Advisor: Me)
2018 Member, Jacob Beierle (Advisor: Me)
2018 Member, Sema Quadir (Advisor: Dr. Valentina Sabino)
2018 Chair, and second reader, Xuan (Anita) He (Advisor: Dr. Shannon Fisher)
2019 Member, Kelly Miao (Advisor, Dr. Shannon Fisher)
2019 Member, Shawn Herron (Advisor, Dr. Tsuneya Ikezu)
2021 Chair, Jennifer Freire (Advisor: Dr. Xue Huan)
2021 Chair, Kelly Wingfield (Advisor: Me)
2022 Chair, Jenna Libera (Advisor: Dr. Benjamin Wolozin)
2022 Chair, Stanley Goldstein (Advisor: Dr. Andrew Emili)

Qualifying Exam Committees, PhD Program in Neurobiology, Boston University Chobanian & Avedisian School of Medicine

2022 Member and NRSA Co-Sponsor, Alanna Carey (Advisor: Dr. Jerry Chen)

Qualifying Exam Committees from other Departments and Programs, Boston University
2018 Member, Tanya Karagiannis (Advisor, Dr. Christine Cheng), Bioinformatics, BU
2019-23 Member, Patrick Cleary (Advisor, Dr. Christine Cheng), Biology, BU

Dissertation Advisory Committees, PhD Program in Biomolecular Pharmacology, Boston University Chobanian & Avedisian School of Medicine (13 total; Chaired 7)

2013-17 First Reader, Lisa R. Goldberg (Advisor: Me)
2014-17 First Reader, Neema Yazdani (Advisor: Me)
2016-21 Chair, Brandon Maziuk (Advisor: Dr. Benjamin Wolozin)
2016-19 Member, Margarita Tararina (Advisor: Dr. Karen Allen)
2018-20 Chair, Sema Quadir (Advisor, Dr. Valentina Sabino)
2018-22 First Reader, Jacob Beierle (Advisor: Me)
2018-23 Chair, Xuan (Anita) He (Advisor: Dr. Shannon Fisher)
2019-23 Chair, Kelly Miao (Advisor: Dr. Shannon Fisher)
2019-22 Member, Shawn Herron (Advisor, Dr. Tsuneya Ikezu)
2020-24 Chair, Jonique George (Advisor: Dr. Shelley Russek)
2021-24 Member, Kelly Wingfield (Advisor: Me)
2022-23 Chair, Stanley Goldstein (Advisor: Dr. Andrew Emili)
2022- Chair, Jennifer Freire (Advisor: Dr. Xue Han)
2022-23 Chair, Jenna Libera (Advisor: Dr Benjamin Wolozin)

Qualifying Exam Committees, Graduate Program for Neuroscience, Boston University (5 total; Chaired 3)
2015 Chair, Mariel Seiglie (Advisor: Dr. Valentina Sabino)
2016 Chair, Cassie Moore (Advisor: Dr. Pietro Cottone)
2019 Chair, Lisa Kretsge (Advisor: Dr. Alberto Cruz-Martin)
2019 Member, Kristyn N. Borrelli (Advisor: Me)
2020 Member, William B. Lynch (Advisor: Me)

Dissertation Advisory Committees, Graduate Program for Neuroscience, Boston University (7 total; Chaired 3)
2014 Alternate Member, Audrey J. DiMauro (Advisor: Dr. Howard Eichenbaum)
2015-18 Chair, Mariel Seiglie (Advisor: Dr. Valentina Sabino)
2016-19 Chair, Cassie Moore (Advisor: Dr. Pietro Cottone)
2018-21 First Reader, Kristyn Borrelli (Me)
2019-21 Chair, Lisa Kretsge (Advisor, Dr. Alberto Cruz-Martin)

2020 Member, Patricia Shaw (Advisor, Dr. Tarik Haydar)
2020-24 First Reader, Will Lynch (Advisor: Me)
2023- First Reader, Sophia Miracle (Advisor: Me)

Dissertation Advisory Committees from other Departments and Programs

2017-20 Member, Jiayi Wu (Advisor: Dr. Lindsay Farrer), Program in Biomedical Sciences, Genetics & Genomics
2018-19 Member, Tanya Karagiannis (Advisor: Dr. Christine Cheng), Bioinformatics, BU
2019- Member, Patrick Cleary (Advisor: Dr. Christine Cheng), Biology, BU

Transformative Training Program in Addiction Science (TTPAS) Committees (Director, Lindsay Farrer, Ph.D.; Burroughs Wellcome Fund Training Program)

2014-17 Neema Yazdani (Mentor)
2016-20 Qiu Ruan (Mentor)
2016-19 Jiayi Wu (Co-Mentor)
2017-22 Jacob Beierle (Mentor)
2018-22 Kristyn Borrelli (Mentor)
2020-24 Will Lynch (Mentor)

Division of Graduate Medical Sciences (GMS) Committees, Boston University Chobanian & Avedisian School of Medicine

2015-16 Academic Policy Committee (APC)

Other Committees at Boston University

2013-14 Committee on Future of Transgenic Core Facility, Deans Office, Boston University Chobanian & Avedisian School of Medicine
2014-16 Mouse Users Advisory Committee, Boston University Chobanian & Avedisian School of Medicine
2015- Core Advisory Committee, Boston University Chobanian & Avedisian School of Medicine
2020-23 Graduate Program in Neuroscience Diversity, Equity, Inclusion, and Justice (DEIJ) Committee, DEIJ Faculty Recruitment Subcommittee, DEIJ Student Recruitment Subcommittee
2021-23 Graduate Program for Neuroscience (GPN) Education Committee (ad hoc, reviewed GPN applications for PhD program)
2021-23 Search Committee for Center for Systems Neuroscience (CSN) & Psychological and Brain Sciences (PBS), Boston University Chobanian & Avedisian School of Medicine
2021 Search Committee for faculty hire at Associate Professor level, Anatomy and Neurobiology, Boston University Chobanian & Avedisian School of Medicine (Chair: Dr. Jennifer Luebke)
2022-23 Selection Committee for postdoc slots for the Center for Systems Neuroscience, Boston University

Committees outside of Boston University

2023 External Examiner, Hayley Thorpe, PhD Candidate at University of Guelph in Dr. Jibran Khokar's laboratory

Committees at Northeastern University

2023- Chair, Search Committee, Translational Research in Psychiatry and Addiction, Center for Drug Discovery.
2023- Chair, Tenure and Promotions Committee for Dr. Leigh Plant, Pharmaceutical Sciences
2024- Academic and Professional Standing Committee, Department of Pharmaceutical Sciences (**DPS**) Faculty 2, School of Pharmacy and Pharmaceutical Sciences (**SOPPS**)

TEACHING EXPERIENCE AND RESPONSIBILITIES (BUSM)

Dates	Title Course	Role	Contact hours/week	Enrollment N
2012-	**NE500-501:** Frontiers in Neuroscience	Discussion Leader	2h/year	10-15
2013-20	**MED MS 220-226:** Disease and Therapy (DRx 1) Foundations Module	Discussion Leader	4h/year	100-150
2013-	**GMS GE 701:** Principles in Genetics and Genomics	Faculty Lecturer	4h/year	10-15
2014-	**GMS PM 702:** Molecular Neurobiology and Pharmacology	Lecturer	2h/year	10-15
2014-	**GMS PM 801:** Systems Pharmacology	Lecturer	2h/year	10-15
2014-	**SDM MD 530:** Dental Pharmacology	Lecturer	2h/year	100-150
2016-18	**GMS PM 810:** Current Topics in Pharmaceutical Sciences	Discussion Leader	2h/week	8-10
2016	**BI/NE 741:** Neural Systems I: Functional Circuit Analysis	Lecturer	1h/year	10-15
2016-	**GMS PM 701:** Molecular and Translational Pharmacology	Lecturer	4h/year	10-15
2017-	**GMS PM 820:** Behavioral Pharmacology	Lecturer (1h), Discussion Leader (1h)	2h/year	8-10
2019-	**GMS FC 705:** Translational Genetics and Genomics	Lecturer (2h), Discussion Leader (2h)	4h/year	5-10
2020-	**GMS 710 A1:** Addiction Science	Lecturer	2h/year	10-15
2021-	MS 146 M3: PriSM Foundations of Pharmacology and Pathology	Lecturer (2h) and Discussion Leader (4h)	6h/year	100-150

COURSES AT NORTHEASTERN UNIVERSITY

2024- PHSC 6224: Behavioral Pharmacology & Drug Discovery (spring). Director/Coordinator
2024- PHCS 5360: Anti-infectives (summer). Director/Coordinator

OTHER TEACHING EXPERIENCE

1998 **Undergraduate physiology** course, University of Illinois, Urbana-Champaign. I was chosen among the top physiology students to tutor undergraduates for the course. Dr. Esmail Meisami was the Course Director.

2001 **Behavioral Neuroscience, UCLA**. I was a T.A. for the course and ran a weekly two-hour discussion section. Dr. Barney A. Schlinger, Ph.D. was the Course Director.

2007 **Addiction Biology, Banbury Center Course, Cold Spring Harbor.** I served as a T.A. for the course. Drs. Mark Von Zastrow and Christopher J. Evans were the Course Directors.

DIVERSITY, EQUITY, INCLUSION, AND BELONGING ACTIVITIES

See also BU Profile: https://profiles.bu.edu/Camron.Bryant

2015- Mentor for the NIH/NIDA Summer Undergraduate Research Fellow program
2016 Visit University of the Virgin Islands and helped recruit two PhD students
2020- Faculty member, DEIJ Committee, Graduate Program for Neuroscience
2021 Attended "Fundamentals: Equity in Graduate Admissions"
2021- Mentor for the BU PREP Program for postbaccalaureate researchers from underrepresented backgrounds
2022- Presented at NIH/NIDA Mock Study Section Workshop: "Introspection on my grant writing successes and failures
2022 Attended "Strategies for Equity-Based Holistic Review in Ph.D. Admissions"
2022 Attended workshop on evaluating DEIJ statements
2022 Attended workshop on DEIJ activities and preparing statement
2022 Attended ACNP panel, "Mentoring people different than you"
2023 Participated in "speed mentoring" workshop at IBANGS 2023, Galway, Ireland

SELECT MENTORING ACTIVITIES

Mentee, degree(s)	Dates	Manuscript or product produced	Mentee Current Position
PhD Student			
Lisa R. Goldberg, Ph.D., Pharmacology	2012-2017	**5:** PMIDs: 34677900 (**1st author**), 30632432, 29273772, 28594147 (**1st author**), 27914629	Data Analyst, Gould Lab, Penn State Univ, Project Manager, Taconic
Neema Yazdani, Ph.D., Pharmacology	2013-2017	PIMDs: 33145940, 32401417, 31704785, 30003938, 29273772, 28594147, 27914629, 27222804, 26658939 (**1st author**), 26643147, **Outstanding Graduate Student Award, IBANGS**	Product Lifecyle Program Manager at Exact Sciences
Qiu T. Ruan, Ph.D., Pharmacology	2016-2020	**5:** PMIDs: 34479978, 33145940, 32401417 (**1st author**), 31704785 1st author), 31324746, 30003938 (**1st author**)	Scientific Account Manager, Genedata
Jiayi Wu Cox (Co-Mentor), Ph.D., Genetics & Genomics	2016-2019	**2:** PMIDs: 27914629, 34677900	Data Scientist, Novartis
Jacob A. Beierle, Ph.D., Pharmacology	2017-2022	**11:** PMIDs: 35910681, 35688478 (**1st author**), 35625888, 35088629 (**1st author**), 34677900, 34479978, 32401417, 32209386, 31704785, 31324746, 30003938; **Outstanding Graduate Student Award, IBANGS**	Graduates in September 2022 Planned postdoc in Abraham Palmer's lab at UCSD
Kristyn N. Borrelli, Ph.D., Neuroscience	2017-2021	**4:** 35625888 (1st author), 34479978 (**1st author**), 33978997, 33758972 (**1st author**)	Consultant at Acsel Health, NYC, a life sciences consulting firm
William B. Lynch, Ph.D. candidate, Neuroscience	2020-	**1:** 35688478	Expected graduation in 2024

Mentee, degree(s)	Dates	Manuscript or product produced	Mentee Current Position
Kelly K. Wingfield, Ph.D. candidate, Neuroscience	2022-	**Outstanding Graduate Student Award, IBANGS 2022**	Expected graduation in 2024
Post-Doc/Fellow			
R. Keith Babbs, Ph.D.	2016-2018	**7:** 34479978, 33978997, 32209386 (**1st author**), 31324746 (**1st author**), 30261172 (**1st author**), 28594147, 27914629	Senior Scientist, Keros Therapeutics
Britahny Baskin, Ph.D.	2022-		Starts October 3, 2022
Postbacc Scholar			
Kayla T. Richardson	2021-2022	**1:** PMID: 35910681	PhD Student, Biomedical Sciences, UNC-Chapel Hill
Technicians/Lab Managers			
Stacey L. Kirkpatrick (Lab Manager)	2012-2016	**7:** PMID: 27914629 (**1st author**), 34677900, 31324746, 30632432, 28594147, 26658939, 25628547	University of Florida, medical school. Graduated in 2020. Currently a 3rd year General Surgery Resident at University of Florida
Julia C. Kelliher (Lab Manager)	2016-2018	**7:** PMIDs: 34677900, 34479978, 33978997, 32209386, 31324746, 30632432, 30261172	Ph.D. student in physiology, Pennsylvania State University
Kimberly P. Luttik (Technician)	2017-2018	8: PMIDs: 33978997, 33145940, 32401417, 31704785, 30261172, 30003938, 28594147, 27914629	Ph.D. candidate, neuroscience, Yale University
Melanie M. Chen (Lab Manager)	2018-2019	6: 34677900, 34479978, 33145940, 32209386, 31324746, 30632432	Research Technician, Satorious
Emily J. Yao (Lab Manager)	2018-2021	**6:** PMIDs: 33978997(**1st author**), 32209386, 34479978, 34677900, 35088629, 35688478	Currently employed at Dr. Karl Deisseroth's company, MapLight Therapeutics
Bridgette Reilly (Technician)	2023-2023		Research Technician at MGH
Yahia Adla (Technician)	2024		

Rotation Graduate Students
I've hosted 22 rotation students since 2013, including 13 pharm, 6 GPN, 1 Bioinformatics, and 2 PIBS

Undergraduate Students
I've mentored more than 50 undergraduate students since taking on my first student in 2013. Several of them have been awarded UROPs, often multiple awards per student. More than half of those students who have remained in the lab for at least two semesters have earned authorship on publications.

Visiting summer students and scholars
2013-23 I've hosted 18 summer students/scholars since 2013, including 5 RISE high school students, 1 medical student (Stanford), 8 NIH/NIDA undergraduate fellows, 1 STARS student (New Mexico), and 3 volunteers

OTHER PROFESSIONAL ACTIVITIES

PROFESSIONAL SOCIETIES: MEMBERSHIP, OFFICES, AND COMMITTEE ASSIGNMENTS

International Behavioural and Neural Genetics Society (IBANGS)

2007- Member
2014-15 Awards Committee, International Behavioural and Neural Genetics Society
2015-18 Member-at-Large, ExComm, IBANGS (2015-2018)
2015-18 Chair, Membership Committee
2019- Program Committee, IBANGS 2022, Memphis, TN USA
9/23/20 Chair, Trainee Day, International Behavioural and Neural Genetics Society (virtual)
2020-21 Local Organizing Committee
2020-21 Chair of Program Committee and Local Organizing Committee, Host of the 2020 IBANGS Meeting in Woods Hole, MA (re-scheduled for 2021 due to COVID-19)
2020-23 President, IBANGS

American College of Neuropsychopharmacology

2011-15 Travel Awardee (competitive; invited award)
2016-19 Associate Member (competitive)
2020- Full Member (competitive)

Society for Neuroscience (SFN)

2000- Member

NeuroBoston (Boston Area Neuro Group; BANG; Local Society for Neuroscience Chapter)

2021-22 Chair, Planning Committee, and local host in 2021 (virtual) and 2022 (Boston University)

International Narcotics Research Conference (INRC)

2001- Member
2022 Mentor for “speed mentoring” workshop at the 2022 INRC meeting in Valencia, Spain.

Complex Trait Community (CTC)

2009- Member

World Congress of Psychiatric Genetics

2013- Member
2018- Member of the Psychiatric Genetics Consortium (PGC) workgroup on Eating Disorders (PGC-ED)

Winter Conference on Brain Research

2014- Member

NIH/NIDA Genetics and Epigenetics Cross-Cutting Research Team (GECCRT) Meeting

2016- Member

Study Sections

***Ad Hoc* Reviewer**

2015 NIDA/NIH RFA- DA-16-004, 2016/01 ZDA JXR-G (68)
2016 NIDA/NIH PAR-DA-15-120 (RFA-DA-16-014)
2016 MNPS, *Ad Hoc* Reviewer
2019 NIH BRLE, ZRG1 BBBP-X(03) M

2019 NIH BRLE
2020 NIH/NIDA PAR-18-789
2020 NIH/NIDA PA-20-188, PA-20-187, PAR-18-746
2020 NIH BRLE, ZRG1 BBBP-Y03, *Ad hoc* Reviewer
2021 NIH/NIDA PAR-20-241 2021/05 ZRG1 ETTN-B(55) R
2021 NIH/NIDA PAR-19-278
2021 NIH/NIDA PA-19-278

Standing Study Section Member

2021-25 NIH BRLE – Biobehavioral Regulation, Learning and Ethology Study Section

National Science Center, Poland

2022 Invitation to review grant proposal for the National Science Center, Poland. ID: 537993, OPUS-22, NZ5, Maj Institute of Pharmacology, Polish Academy of Sciences,

Editorial Boards

2022- *Genes, Brain and Behavior*. Editor-In-Chief: Dr. Andrew Holmes (NIH/NIAAA). Effective 9/16/22

***Ad Hoc* Reviewer**

2005- *Pain*
2006- *Neuroscience*
2009- *Drug and Alcohol Dependence*
2010- *Physiology and Behavior*
2010- *Psychopharmacology*
2011- *Experimental and Clinical Psychopharmacology*
2011- *Genes, Brain and Behavior*
2011 *Neurogastroenterology and Motility*
2012- *Frontiers in Genetics* - Review Editor
2013- *PLoS One*
2013- *Mammalian Genome*
2014- *Frontiers in Behavioral Neuroscience*
2014- *Biological Psychiatry*
2015- *Alcoholism: Clinical and Experimental Research*
2015- *Frontiers in Neuroscience*
2015- *BMC Medical Genetics*
2015- *Behavior Genetics*
2015- *Stress*
2015- *PLOS Genetics*
2015- *Genetics* (Invited; declined to review due to COI)
2016- *Nature Genetics*
2016- *Behavioural Brain Research*
2016- *PNAS - invitation*
2017- *Scientific Reports*
2017- *Genomics*
2017- *Pharmacology, Biochemistry, and Behavior*
2017- *Neuropsychopharmacology*
2018- *Molecular Psychiatry*
2018- *Frontiers in Psychiatry*
2019- *Obesity*
2019- *Addiction Biology*

2019- *Translational Psychiatry*
2019- *Neuropharmacology*
2019- *Nutrients*
2019- *BMC Genetics*
2020- *Journal of Alzheimer's Disease*
2020- *eNeuro*
2020- *Molecular Brain*
2021- *Communications Biology*
2021- *Nature Neuroscience*
2022- *Progress in Neuropsychopharmacology and Biological Psychiatry*
2022- *Addiction Neuroscience*
2022- *Cell Reports*
2023- *Neurobiology of Learning and Memory*
2024- *Trends in Neurosciences (TINS) (invited)*
2024- *Neurotoxicology and Teratology*

Additional Service

2013-23 Hosted 26 seminar speakers at Boston University
2016 Invited panel discussant for poster session for NIDA Genetics Consortium Meeting
2020-23 Member, Russek Student Achievement Day Awards Committee, Boston University
2021 Basic Science Review of the departments, Boston University Chobanian & Avedisian School of Medicine.
2022 Grant applications reviewer for Center for Translational Neuroscience Institute (CTSI), Boston University, January 2022
2022 Grant applications reviewer for the Genome Sciences Institute (GSI), Boston University Chobanian & Avedisian School of Medicine, March 2022

OTHER SUPPORT

Current:

05/01/2022-02/28/2027 **U01DA055299** PI: Bryant; MPI: Kantak
Systems genetics of premorbid and cocaine use traits in a rat reduced complexity cross
Costs, Total: $3,520,916
Role: PI
Calendar Months: 2.4

7/01/2020-8/31/2025 **U01DA050243** PI: Bryant
A reduced complexity cross in BALB/c substrains to identify the genetic basis of oxycodone dependence phenotypes
Cost, Total: $3,339,211
Role: PI
Calendar Months: 3.6

08/01/2023-07/31/2026 F31DA056217 PI: Lynch
The role of Zhx2 in CYP2D regulation, oxycodone metabolism, and opioid addiction model behaviors
Role: Sponsor

02/01/2024-12/31/2024 **T32DA055553** PI: Booth
Training Program on Development of Medications for Substance Use Disorder
Role: Sponsor for Dr. Britahny Baskin (postdoc)

Past:

02/01/2018-1/31/2022 (NCE) **R01CA221260** PI: Damaj
Genetic basis of chemotherapy-induced neuropathy in a reduced complexity cross
Cost, Total: $1,692,742
Role: MPI
Calendar Months: 2.4

07/01/2018-06/30/2023 **T32GM008541** PI: Farb
Training in Biomolecular Pharmacology
Cost, Total: $1,152,650
Role: Faculty Mentor
Calendar Months: 0

07/01/2015-06/30/2020 **R01DA039168** PI: Bryant
Bridging Genetic variation with Behavior: Molecular and Functional Mechanisms of Quantitative Trait Gene Regulation of the Stimulant and Addictive Properties of Methamphetamine in Mice
Cost, Total: $3,026,929
Role: PI
Calendar Months: 3.6

09/01/2019-08/31/2020 **Spivack Award** PI: Bryant
Clinical Training and Science Institute (**CTSI**), Boston University
Cost, Total: $25,000
Role: PI

08/01/2019-07/31/2020 **P30DA044223 (pilot)** PI: Bryant
Deep behavioral phenotyping of addiction phenotypes in rat SHR substrains for a Rat Reduced Complexity Cross
Cost, Total: $23,000
***Role*:** Subaward PI

07/01/2017-06/30/2019 **U01DA044399** PI: Peltz (subaward: Bryant)
Computational methods for identification of genetic factors affecting the response to drug abuse
Cost, Total: $1,045,193
***Role*:** Subaward PI

05/01/2016-04/30/2019 **F31DA040324-01A1** PI: Yazdani
Functional mechanisms of *Hnrnph1* in methamphetamine addictive behaviors
Cost, Total: $101,579
Role: Sponsor

09/15/2015-08/31/2017 **R21DA038738** PI: Bryant
Genetic basis of binge eating and its motivational components in a reduced complexity cross
Cost, Total: $464,874
***Role*:** PI

07/01/2015-06/30/2020 **3R01DA039168-03S1** PI: Bryant
Bridging Genetic variation with Behavior: Molecular and Functional Mechanisms of Quantitative Trait Gene Regulation of the Stimulant and Addictive Properties of Methamphetamine in Mice
Cost, Total: $164,243 (supplement)
***Role*:** PI
Calendar Months: 0

06/01/2015-08/30/2015 **R00DA029635 05S1** PI: Bryant
Genetic Basis of Opioid Reward and Aversion in Mice
Cost, Total: $7926 (supplement for NIDA summer undergrad researcher)

01/01/2015-12/31/2015 **Spivack Award** PI: Bryant
Clinical Training and Science Institute (**CTSI**), Boston University

Cost, Total: $8000

07/01/2014-06/30/2016 **R03DA038287** PI: Bryant
Mapping G x E Interactions for Addiction Traits in a Reduced Complexity Cross
Cost, Total: $175,472

05/01/2011-04/30/2016 **R00DA029635** PI: Bryant
Genetic Basis of Opioid Reward and Aversion in Mice
Cost, Total: $737,472

05/01/2011-04/30/2013 **K99DA029635** PI: Bryant
Genetic Basis of Opioid Reward and Aversion in Mice
Cost, Total: $297,387
Role: PI
Calendar Months: 12

06/01/2009-05/31/2010 **F32DA026697** PI: Bryant
Translational Genetics and Dopamine Signaling in Sensitivity to Amphetamines
Cost, Total: $50,054
***Role*:** PI
Calendar Months: 12

INVITED LECTURES, PRESENTATIONS, SYMPOSIA, AND WORKSHOPS

National Level

04/03/2013 ***"****Successes and cautionary tales in the congenic approach to high resolution QTL mapping."* **Department of Genetics, University of North Carolina, Chapel Hill, USA**

01/29/2014 *"A role for casein kinase 1-epsilon in the motivational properties of drugs of abuse."* **Winter Conference on Brain Research, Steamboat Springs, CO, USA**

04/04/2014 *"From drugs to food: Genetic approaches to the neurobiology of substance abuse in mice."* **Department of Psychology Seminar, Middlebury College, Middlebury, VT**

04/28/2014 *"Mouse genomics and the neurobiology of substance abuse behavior: From drugs to food."* **Center for Studies of Addiction, Department of Psychiatry Penn Public Health, Perleman School of Medicine, University of Pennsylvania, Philadelphia, PA**

05/10/2014 Chair, "Behavioral, neural and genetic studies of compulsive eating in model organisms and humans." Cynthia M. Bulik, Ph.D., Nicole Avena, Ph.D., Iris Bolis, Ph.D., Garret Stuber, Ph.D. **International Behavioural and Neural Genetics Society, Chicago, IL, USA**

01/27/2015 Chair, "Genomic and neurobiological studies of RNA binding proteins in complex traits relevant to psychiatric disorders." Camron D. Bryant, Ph.D., Laura N. Smith, Ph.D., Joseph Dougherty, Ph.D., Vivek Kumar, Ph.D. **Winter Conference on Brain Research, Big Sky, Montana USA**

03/05/2015 *"Quantitative trait gene mapping and transcriptomics of drug and food addiction behaviors."* **University of Massachusetts Chan Medical School, Neuroscience Seminar Series**

02/03/2016 *"Finding new genes and neural mechanisms of addiction traits using quantitative genetics, gene editing, and transcriptomics".* **University of the Virgin Islands**

10/18/2016 *"Systems genetic analysis of drug and food addiction traits in mice".* **McLean Hospital Neuroscience Seminar Series, Harvard Medical School**

03/9/2017 *"Systems genetic analysis of drug and food addiction traits in mice".* **Department of Genetics and Genome Sciences, University of Connecticut**

09/21/2017 *"Harnessing reduced genetic complexity to rapidly identify quantitative trait genes underlying addiction traits".* **James S. McDonnell Department of Genetics Fall Seminar Series, Washington University School of Medicine, St. Louis, MO USA**

08/02/2018 *"Gene mapping made "easy: Reduced complexity crosses for discovering genes*

influencing opioid and psychostimulant addiction traits". **3rd Annual Chemistry and Pharmacology of Drug Abuse (CPDA) Conference, Northeastern University, Boston, MA USA**

09/09/2019 *"Power, speed, and precision: Reduced complexity crosses for genetic mapping of complex traits relevant to pain and psychiatric disorders."* **Department of Genetics, Genomics, and Informatics, University of Tennessee Health Science Center**

01/13/2020 *"Expanding reduced complexity crosses from mice to rats".* International Rat Omics Consortium and NIDA Genetics and Epigenetics Consortium, **NIDA Headquarters, Rockville, MD USA**

12/09/2020 *"How to download and use Twitter_An ACNP tutorial".* ACNP Career Development Session- Social Media in Science: Contributing to the Online Social Platforms as a Scientist. I have a social media profile…Now what? **American College of Neuropsychopharmacology**, https://youtu.be/QMi2Wpuj3kc

05/21/2021 *"Embracing genetic simplicity: Systems genetic analysis of thermal nociception and chemotherapy-induced peripheral neuropathy using reduced complexity crosses".* #Pain2021, **Translational Pain Research Consortium of the Gulf Coast Consortia and Texas Pain Research Consortium. May 21, 2021**

09/21/2021 *From lemons to lemonade: Embracing genetic and phenotypic drift in rodent substrains for efficient gene mapping of addiction traits".* **Department of Pharmacology and Toxicology, Virginia Commonwealth University**

09/24/2021 ***"****The curses and blessings of extremely reduced genetic complexity: Landmines and goldmines",* **Division of Neuroscience and Behavior (DNB), NIH/NIDA**

05/18/2022 *"Introspection on my grant writing successes and failures".* NIDA Mock Study Section Workshop. I was invited by my Program Officer, Dr. Amy Lossie, to speak on this issue based on my grant success rate and recently funded awards. **NIH/NIDA**

02/02/2023 *"From landmines to goldmines: Exploiting reduced genetic complexity for rapid gene identification of pharmacogenomic traits."* **Behavioral and Translational Science of Addiction, Northeastern University**

04/11/2023 *"Exploiting reduced genetic complexity for rapid pharmacogenomic discovery in addiction-relevant traits."* **Center for Drug Discovery, Department of Pharmaceutical Sciences, Northeastern University**

08/03/2023 The dynamic, methamphetamine-induced targetome of the RNA-binding protein hnRNP H and its relationship to methamphetamine behaviors. **Chemistry and Pharmacology of Drug Abuse (CPDA) Conference, Northeastern University**

Submitted **Chair, Symposium,** "Expectations, Contextual, and Placebo Effects: Brain Mechanisms and tangible applications." **ACNP 2024, Phoenix, AZ USA**

International Level

5/21/2013 *"A 0.23 Mb region regulates methamphetamine sensitivity in mice."* Outstanding Junior Faculty Travel Award Presentation, **IBANGS, Leuven, Belgium**

10/18/2013 *"A 0.23 Mb Region Regulates Methamphetamine Sensitivity in Mice."* **World Congress of Psychiatric Genetics, Boston, MA USA**

05/12/2014 *"Genes, brain and addiction traits: Moving from discovery toward validation and mechanism".* Young Scientist Award, **IBANGS, Chicago, IL, USA**

06/11/2015 *"Food, Drugs, and QTLs: Mapping behavioral addiction traits in the reduced complexity cross."* **Complex Trait Community, Portland, OR USA**

05/15/2016 *Chair, Symposium, ""RNA binding proteins in neural development, plasticity and psychiatric disorders." Talk: "Transcriptional and splicing networks associated with methamphetamine behavioral and neuroanatomical dysfunction in Hnrnph1 (heterogeneous nuclear ribonucleoprotein H1) knockouts.* **IBANGS, Bar Harbor, ME USA**

06/15/2017 *"Systems genetics combined with in a rapid fine mapping strategy in a reduced complexity cross identifies Rgs7 and other candidates underlying opioid addiction traits."*

Complex Trait Community, Memphis, TN, USA

10/14/2018 Chair, Symposium: *"Mammalian Genetics of Eating Disorders: Preclinical and Clinical Genetic and Biological Risk Factors."* Talk: *"Dissecting Cyfip1 and Cyfip2 contributions to compulsive-like behavior and binge eating in mice: Implications for eating disorders and neurodevelopmental disorders with hyperphagia."* **World Congress on Psychiatric Genetics, October 11-15, 2018, Glasgow, Scotland**

05/11/2019 Chair, *"Genetics and neurobiology of disordered eating in mice and humans".* Speakers: Dr. Camron D. Bryant, Dr. Stephanie C. Dulawa, Dr. Andrea Hierenga, Dr. Christopher Hubel. **International Behavioural and Neural Genetics Society, Edinburgh, Scotland UK.**

10/19/2020 *"Systems genetic analysis of binge-like eating in a C57BL/6J x DBA/2J-F2 cross identifies Adipor2 and Plxnd1 as positional and functional candidate genes."* **World Congress on Psychiatric Genetics**

05/15/2021 Chair, "Neonatal Opioid Withdrawal Syndrome in Mice and Humans". Speakers Dr. Julie Blendy, Dr. Elizabeth Yen, Kristyn Borrelli (my student), and Dr. Elisha Wachman. **International Behavioural and Neural Genetics Society**

09/01/2021 *"Genetic basis of thermal nociceptive sensitivity and brain weight in a BALB/c reduced complexity cross."* **Complex Trait Community, Manchester, UK**

07/07/2022 Talk from invited symposium (Chair: Julie Blendy), *"Behavioral and transcriptomic adaptations in outbred CFW mice and inbred FVB substrain differences in a model for neonatal opioid withdrawal syndrome".* **International Narcotics Research Conference, Valencia, Spain**

06/26/2023 *"Gazing into the crystal BALB": Opportunities for neurobehavioral genetic discovery in near-isogenic BALB/c substrains.".* Symposium: "Recent progress in identifying the genes and genetic pathways that impact addiction-traits". Chaired by Drs. Jared Bagley and J. David Jentsch. **International Behavioral Neuroscience Society, Niagara Falls, Ontario, Canada**

10/09/2023 "Oxycodone addiction model behaviors following constitutive, reciprocal gene editing vs. adult brain/liver overexpression in BALB/cJ substrains.", Session on Addiction, **Complex Trait Community, Memphis, TN USA**

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***** co-first authorship

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Original, Peer-Reviewed Articles

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2. Eitan S, **Bryant CD**, Saliminejad N, Yang YC, Vojdani E, Polakiewicz R, Evans CJ **(2003).** Brain region-specific mechanisms of morphine-induced MAPK modulation and distinct patterns of activation during analgesic tolerance and locomotor sensitization. ***Journal of Neuroscience*** *23(23):8360-9.*

3. Lutfy K, Eitan S, **Bryant CD**, Yang YC, Walwyn W, Saliminejad N, Kieffer BL, Takeshima H, Carroll FI, Maidment NT, and Evans CJ **(2003).** Buprenorphine-induced antinociception is mediated by mu receptors and compromised by concomitant activation of opioid-like receptor-1 receptors. ***Journal of Neuroscience*** *23(32):10331-7.*

4. **Bryant CD,** Eitan S, Sinchak K, Fanselow MS, Evans CJ **(2006)**. NMDA receptor antagonism disrupts the development of morphine analgesic tolerance in male, but not female C57BL/6J mice.

American Journal of Physiology: Regulatory, Comparative and Integrative Physiology *292(2):R315-R326.*

5. **Bryant CD**, Roberts KW, Byun JS, Fanselow, MS, Evans CJ **(2006)**. Morphine analgesic tolerance in 129P3/J and 129S6/SvEv mice. ***Pharmacology, Biochemistry and Behavior*** *85(4):769-79.*

6. Gioiosa L, Chen X, Watkins R, Klanfer N, **Bryant CD**, Evans CJ, Arnold AP **(2008).** Sex chromosome complement affects nociception in tests of acute and chronic exposure to morphine in mice. ***Hormones and Behavior*** *53(1):124-130.*

7. **Bryant CD**, Zhang NN, Sokoloff G, Fanselow MS, Ennes HS, Palmer AA, McRoberts JA **(2008)**. Behavioral differences among C57BL/6 substrains: Implications for transgenic and knockout studies. ***Journal of Neurogenetics*** *22(4):315-31.*

8. **Bryant CD**, Graham ME, Distler MG, Munoz MB, Li D, Vezina P, Sokoloff G, Palmer AA **(2009)**. A role for casein kinase 1 epsilon in the locomotor stimulant response to methamphetamine. ***Psychopharmacology*** *203(4):703-11.*

9. **Bryant CD**, Roberts KW, Culbertson CS, Le A, Evans CJ, Fanselow MS **(2009)**. Pavlovian conditioning of multiple opioid-like responses in mice. ***Drug and Alcohol Dependence*** *103:74-83.*

10. Hofford RS, Hodgson SR, Roberts KW, **Bryant CD**, Evans CJ, Eitan S **(2009)**. Extracellular signal-regulated kinase activation in the amygdala mediates elevated plus maze behavior during opioid withdrawal. ***Behavioural Pharmacology*** *20(7):576-583.*

11. **Bryant CD**, Chang HP, Zhang J, Wiltshire T, Tarantino LM, Palmer AA **(2009)**. A major QTL on chromosome 11 influences psychostimulant and opioid sensitivity in mice. ***Genes, Brain and Behavior*** *8(8):795-805.*

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13. **Bryant CD**, Kole LA, Guido MA, Sokoloff G, Palmer AA **(2012)**. Congenic dissection of a major QTL for methamphetamine sensitivity implicates epistasis**.** ***Genes, Brain and Behavior*** *11(5):623-32*

14. **Bryant CD**, Kole LA, Guido MA, Cheng R, Palmer AA **(2012).** Methamphetamine-induced conditioned place preference in LG/J and SM/J mouse strains and an F_{45}/F_{46} advanced intercross line. ***Frontiers in Genetics*** *3:126*

15. **Bryant CD**, Guido MA, Kole LA, Cheng R. The heritability of oxycodone reward and concomitant phenotypes in a LG/J x SM/J F48 mouse advanced intercross line **(2014)**. ***Addiction Biology,*** *19(4): 552-561*

16. Zhou L, **Bryant CD**, Loudon AS, Palmer AA, Vitaterna MH, Turek FW **(2014).** The circadian clock gene *Csnk1e* regulates REM sleep and NREM sleep architecture in mice. ***Sleep,*** *37(4): 785-93.*

17. Kirkpatrick SL, **Bryant CD (2015).** Behavioral architecture of opioid reward and aversion in C57BL/6 substrains. ***Frontiers in Behavioral Neuroscience,*** *8:450, 1-11.*

18. Yazdani N, Parker CC, Shen Y, Reed ER, Guido MA, Kole LA, Kirkpatrick SL, Lim JE, Sokoloff G, Cheng R, Johnson WE, Palmer AA, **Bryant CD (2015)**. *Hnrnph1* is a quantitative trait gene for methamphetamine sensitivity. ***PLOS Genetics*** 11(12):e1005713. PMC4675533

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46. Goldberg LR, Yao EJ, Kelliher JC, Reed ER, Wu Cox J, Parks C, Kirkpatrick SL, Beierle JA, Chen MM, Johnson WE, Homanics GE, Williams RW, **Bryant CD*, Mulligan MK* (2021).** A quantitative trait variant in *Gabra2* underlies increased methamphetamine stimulant sensitivity. ***Genes, Brain and Behavior,*** Oct 22; e12774, PMC9083095

    *****Equal co-senior author contribution. The Bryant Lab generated the parental strain, behavioral QTL, and eQTL datasets that led to identification of Gabra2 as a candidate gene; The Mulligan Lab generated the critical Gabra2 knockin validation dataset.***

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Preprints currently under review

1. Goldberg LR, Baskin BM, Adla Y, Beierle JA, Kelliher JC, Yao EJ, Kirkpatrick SL, Reed ER, Jenkins DF, Luong AM, Luttik KP, Scotellaro JA, Drescher TA, Crotts SB, Yazdani N, Ferris MT, Johnson WE, Mulligan MK, **Bryant CD (2024).** Atp1a2 and Kcnj9 are candidate genes underlying oxycodone behavioral sensitivity and withdrawal in C57BL/6 substrains. ***In resubmission***; ***bioRxiv:*** https://doi.org/10.1101/2024.04.16.589731

Additional preprints

1. Ruan QT, Lynch WB, Cole RH, Rieger MA, Beierle JA, Yao EJ, Cox JW, Kandola A, Richardson KT, Chen MM, Kelliher JC, Babbs RK, Ash PEA, Wolozin B, Szumlinski KK, Johnson WE, Dougherty JD, **Bryant CD (2022).** Cacna2d2 is an hnRNP H target of the striatal hnRNP H targetome and regulates methamphetamine behavior. ***bioRxiv***: https://doi.org/10.1101/2021.07.06.451358

Peer-Reviewed Review articles

1. **Bryant CD**, Zaki PA, Carroll FI, Evans CJ **(2005).** Opioids and Addiction: Emerging pharmaceutical strategies for reducing reward and opponent processes. ***Clinical Neuroscience Research*** 5:103-115. https://doi.org/10.1016/j.cnr.2005.08.006

2. **Bryant CD (2011).** The blessings and curses of C57BL/6 substrains in mouse genetic studies. ***Annals of the New York Academy of Sciences*** *1245(1):31-3* PMC4944652

3. **Bryant CD,** Yazdani N **(2016).** RNA binding proteins, neural development and the addictions. Review, ***Genes, Brain and Behavior*** 15: 169-186. Review, PMC4944654
*Highly downloaded article. Retroactive journal cover image was awarded by Editor-in-Chief, Andrew Holmes.

4. **Bryant CD**, Smith DJ, Williams RW, Damaj MI, Redei EE, Chen H, Mulligan MK **(2020).** Facilitating complex trait analysis via reduced complexity crosses. ***Trends in Genetics***; 36(8): 549-562. PMC7365571

5. Bulik CM, Coleman JRI, Hardaway JA, Breithaupt L, Watson HJ, **Bryant CD**, Breen G **(2022).** Genetics and Neurobiology of Eating Disorders. In press, ***Nature Neuroscience***, Review Article, PMID: 35524137 – PMC in process 10.1038/s41593-022-01071-z

6. Ray MH, Williams BR, Kuppe MK, **Bryant CD**, Logan RW **(2022)**. A glitch in the matrix: The role of the extracellular matrix remodeling in opioid addiction. In press, ***Frontiers in Integrative Neuroscience*** PMC9218427

Book chapters

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