

CURRICULUM VITAE

Christopher M. Olsen PhD

Professor

Department of Pharmacology and Toxicology

OFFICE ADDRESS:

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EDUCATION:

1990 - 1994 B.A. Psychology, Baylor University, Waco, TX

1994 - 1998 M.S. Biology/minor Neuroscience, Texas Tech University, Lubbock, TX

1998 - 2004 Ph.D. Neuropharmacology, University of Texas at Austin, Austin, TX

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

2004 - 2008 Postdoctoral Fellow, Department of Molecular Physiology and Biophysics, Vanderbilt University
School of Medicine, Nashville, TN 37240

2022 - 2023 Leadership Academy, MCW

2024 Research Mentoring Academy, MCW

Center for the Improvement of Mentored Experiences in Research (CIMER) Level 1 Facilitator Training

FACULTY APPOINTMENTS:

2008 - 2011 Research Instructor, Department of Molecular Physiology and Biophysics, Vanderbilt University
School of Medicine, Nashville, TN 37240

2012 - Present Assistant Professor, Pharmacology and Toxicology, Medical College of Wisconsin, 8701
Watertown Plank, Medical College of Wisconsin, Milwaukee, WI 53226

2018 - 2025 Associate Professor, Pharmacology & Toxicology and Neurosurgery, MCW

2025 - Present Professor with tenure, Pharmacology & Toxicology and Neurosurgery, MCW

2026 - Present Research Health Scientist, Zablocki VAMC

CENTER/INSTITUTE AFFILIATIONS:

2013 - Present Member, Neuroscience Research Center, MCW

ADMINISTRATIVE APPOINTMENTS:

2019 - Present Director, Neuroscience Research Center Microscopy Core Facility

2022 - Present Director, Graduate Program in Pharmacology, Pharmacology & Toxicology, MCW

07/01/2026 - Present Vice Chair, Department of Pharmacology & Toxicology, MCW

AWARDS AND HONORS:

2013 Honorable Mention: Poster, Research Day: Medical College of Wisconsin

2015 - 2016 Faculty Service Award-Library Committee, Medical College of Wisconsin

2015 - Present Faculty Teaching Award (3 awards total)-Medical Student Curriculum, MCW

2016 - 2019 Presidential Scholar Award, Medical College of Wisconsin

2017 - Present Faculty Teaching Award (6 awards total)-Graduate Student Curriculum

2025 Dean's Choice Award for Outstanding Graduate School Educator

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Journal Review

Recent Patents on CNS Drug Discovery
Biochemical Pharmacology
Neuropsychopharmacology
WIREs Cognitive Science
Addiction Biology
Neuropharmacology
Neuroscience Letters
European Neuropsychopharmacology
Synapse
Psychopharmacology
Behavioural Brain Research
Journal of Visualized Experiments
Scientific Reports
Physiology and Behavior
Psychology of Addictive Behaviors
Ad-Hoc Reviewer
Brain, Behavior, and Immunity

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2013 - Present Ad hoc member, 8 sessions, BRLE Study Section, National Institutes of Health
2015 - Present Ad hoc member, 4 sessions, Brain Disorders and Clinical Neuroscience SEPs, National Institutes of Health
2019 - Present Ad hoc member, 3 sessions, MNPS Study Section, National Institutes of Health
2022 - 2025 Standing Member (Study section dissolved in 2025), NIDA K Study Section, National Institutes of Health
2025 - Present Chair, NIDA SEP for Therapeutics Discovery, National Institutes of Health

INTERNATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2017 Ad hoc reviewer, 1 session, Swiss National Science Foundation (SNSF)

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Active

Peer Review

Title:	Effect of peripheral injury and surgery on traumatic brain injury outcomes
Source:	Advancing a Healthier Wisconsin
Role & Effort:	Co-I
PI:	Roberts
Dates:	2024 - 2026
Direct Funds:	\$250,000
Title:	Flourishing Futures: Empowering Graduate Students for Professional and Personal Excellence
Source:	Kern National Network
Role & Effort:	Co-I
PI:	Pfister
Dates:	2024 - 2027
Direct Funds:	\$335,000
Title:	TBI and opioid interactions in addiction-related outcomes
Source:	VA-ORD
Role & Effort:	Co-I
PI:	Stemper

Dates: 2024 - 2028
Direct Funds: \$1,200,000

Title: Mitigating chronic pain's impact on opioid seeking with non-opioid therapeutics

Source: VA-ORD
Role & Effort: PI
PI: Olsen
Dates: 2025 - 2029
Direct Funds: \$1,200,000

Pending

Peer Review

Title: Pharmacology Research on Individualized factors in Substance Misuse (PRISM) Training Program (T32)

Source: National Institute on Drug Abuse
Role & Effort: MPI (Contact PI)
PI: Olsen and Mantsch
Dates: 2026 - 2031

Prior

Peer Review

Title: Dopaminergic afferents to the extended amygdala in anxiety and depression

Source: NARSAD Young Investigator Award
Role & Effort: PI
PI: CM Olsen
Dates: 2008 - 2010
Direct Funds: \$60,000

Title: Operant sensation seeking in the mouse

Source: National Institute on Drug Abuse (K99/R00)

Role & Effort: PI
PI: CM Olsen
Dates: 2010 - 2015
Direct Funds: \$616,443

Title: Neurobehavioral measurements of addiction in the leptin knockout rat

Source: Medical College of Wisconsin Research Affairs Committee

Role & Effort: PI
PI: CM Olsen
Dates: 2013 - 2014
Direct Funds: \$25,000

Title: PDE inhibitor induced activation of Epac signaling in cocaine addiction

Source: Program Project Development Grant, Neuroscience Research Center-MCW

Role & Effort: Co-PI

PI: QS Liu, CM Olsen, JR Mantsch
Dates: 2014 - 2016
Direct Funds: \$150,000

Title: Mild TBI: Effects on addiction-related phenotypes and mesocorticolimbic function
Source: National Institute on Drug Abuse (R21)
Role & Effort: Co-PI (contact PI)
PI: CM Olsen and MD Budde
Dates: 2015 - 2018
Direct Funds: \$275,000

Title: Presidential Scholar Award
Source: Medical College of Wisconsin
Role & Effort: PI
PI: CM Olsen
Dates: 2016 - 2019
Direct Funds: \$195,000

Title: CB2 Cannabinoid Receptors and Cocaine Action: Studies with Conditional Knock Outs
Source: National Institute on Drug Abuse (R21)
Role & Effort: Co-PI
PI: CJ Hillard and CM Olsen
Dates: 2016 - 2018
Direct Funds: \$275,000

Title: Environmental modulation of cocaine seeking (R01)
Source: NIH/NIDA
Role & Effort: PI
PI: CM Olsen
Dates: 2017 - 2022
Direct Funds: \$1,212,500

Title: Establishment and stability of prefrontal opioid ensembles (F32, terminated early to accept faculty position)
Source: National Institute on Drug Abuse
Role & Effort: Sponsor/Mentor
PI: Slaker
Dates: 2018

Title: Mechanisms of Accumulating Damage from Repetitive Subconcussive Head Impacts in Contact Sports
Source: Advancing a Healthier Wisconsin
Role & Effort: Co-I
PI: Stemper
Dates: 2019 - 2021
Direct Funds: \$200,000

Title: Deconstructing sleep disruption as a major risk factor for relapse in opioid use (R01)

Source:	NHLBI
Role & Effort:	MPI
PI:	Everson, Olsen, Raff
Dates:	2019 - 2023
Direct Funds:	\$1,049,009
Title:	Transcriptional effects of oxycodone in prefrontal cortex: focus on neurons that drive drug seeking
Source:	Advancing a Healthier Wisconsin
Role & Effort:	PI
PI:	Olsen
Dates:	2025
Direct Funds:	\$50,000

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

International

Current Topics in Traumatic Brain Injury Virtual Seminar Series (sponsored by the National Neurotrauma Society), 2020
 Winter Conference on Brain Research (panel chair and speaker), 2022
 Winter Conference on Brain Research (speaker), 2023

National

National Neurotrauma Society (plenary speaker), 2019
 National Neurotrauma Society (speaker), 2021
 Pavlovian Society (speaker), 2022

Local

Waggoner Center for Alcohol and Addiction Research, University of Texas at Austin, 2003
 Dept. of Molecular Physiology and Biophysics, Vanderbilt School of Medicine, 2005
 Dept. of Molecular Physiology and Biophysics, Vanderbilt School of Medicine, 2007
 Dept. of Psychology, Indiana University-Purdue University at Indianapolis, 2010
 Dept. of Neuroscience, University of Puerto Rico School of Medicine, 2010
 Neuroscience Research Center, Medical College of Wisconsin, 2011
 Dept. of Pharmaceutical Sciences, University of Kentucky School of Medicine, 2011
 Dept. of Neuroscience, University of New Mexico School of Medicine, 2011
 Integrative Neuroscience Research Center, Marquette University, 2012
 Department of Physiology, Medical College of Wisconsin, 2015
 Netherlands Institute for Neuroscience, 2016
 Netherlands Institute of Neuroscience, 2016
 Dept. of Biology and Neurosciences Institute, University of Texas at San Antonio, 2016
 Department of Biological Sciences, University of Wisconsin-Parkside, 2017
 Brain Injury Research Day, Medical College of Wisconsin, 2017
 Association of Clinical Research Professionals (ACRP) Symposium, 2017
 Department of Pharmacology, University of Texas at Austin, 2017
 Integrative Neuroscience Research Center, Marquette University, 2019

PEER REVIEWED WORKSHOPS/PRESENTATIONS:

International

Winter Conference on Brain Research (panel chair and speaker), 2008
 Winter Conference on Brain Research (speaker), 2009
 Winter Conference on Brain Research (panel chair and speaker), 2012
 Winter Conference on Brain Research (panel chair and speaker), 2014
 Winter Conference on Brain Research (panel chair and speaker), 2018

Regional

W-SW Regional Conference for Comparative Endocrinology, 1997

W-SW Regional Conference for Comparative Endocrinology, 1998

COMMITTEE SERVICE:

Medical College of Wisconsin

2012 - 2013 Member, Faculty Search Committee, Neuroscience Research Center, Medical College of Wisconsin

2013 Traumatic Brain Injury Research Strategy Workgroup

2015 - 2021 Member, Library Committee

2016 - Present Member, Faculty Council

2016 - 2021 Member, Strategic Library Council

2016 - 2021 Chair, Library Committee

2017 - 2024 Member, Interdisciplinary Graduate Program Recruitment Committee

2017 - Present Member, Neuroscience Doctoral Program Admissions and Mentoring Committee

2018 - 2020 Member, Interdisciplinary Graduate Program Curriculum Development Committee

2019 - 2023 Chair, Interdisciplinary Graduate Program Curriculum Development Committee

2019 - 2024 Founding Director, Interdisciplinary Doctoral Program in Biomedical Sciences Bootcamp

2023 - 2024 Mentor, Leadership Academy Capstone Project: "Opening a Door to Biomedical Technical Careers at MCW"

2023 - 2024 Member, Director of the Neuroscience Research Center Search Committee

2025 - 2026 Co-chair, Career and Professional Development Subcommittee, School of Graduate Studies Strategic Planning Workgroup

07/01/2026 - Present Chair, Graduate Program Directors Group

MCW TEACHING ACTIVITIES:

Medical Student Education

2014 - 2024 Symptoms Unit, 3-3.5 contact hours/year

2015 - 2023 Principles of Drug Action, 5-8 contact hours/year

Graduate Student Education

2013 - Present Modern Drug Discovery, 3 contact hours/year/biennial

2013 - Present Advanced Systems Neuroscience, 3-5 contact hours/year/biennial

2014 - Present Fundamentals of Neuroscience, 3 contact hours/year

2017 - Present Course Director: Pharmacology Student Seminar Series

2017 - 2023 Course Director: Fundamentals of Neuroscience

2017 - Present Ion Channels and Signal Transduction, 2 contact hours/year/biennial

2019 - Present Course Director: Professional Development

2024 - Present Faculty Mentoring Academy Facilitator

EXTRAMURAL TEACHING:

Graduate Student Education

1997 Texas Tech University, Lab Instructor, Comparative Animal Physiology Laboratory

1999 - 2002 University of Texas at Austin, Stereotaxic Surgery Section of Graduate Pharmacology Methods, 4 contact hours/year

2004 Vanderbilt School of Medicine, Systems Neuroscience, 2 contact hours

2005 Vanderbilt School of Medicine, Systems Neuroscience, 2 contact hours

2008 Vanderbilt School of Medicine, Systems Neuroscience, 2 contact hours

Postdoctoral Fellow Education

2009 - 2010 Vanderbilt School of Medicine, Associate Director: An Organ Systems Approach to Experimental Targeting of the Metabolic Syndrome

Community/Lay Public

2009 Summit High School, Winter Conference on Brain Research community outreach program
2011 Summit Middle School, Winter Conference on Brain Research community outreach program
2012 Albion Middle School, Winter Conference on Brain Research community outreach program
2014 Heritage Christian School, Winter Conference on Brain Research community outreach program
2015 Gallatin Gateway School, Winter Conference on Brain Research community outreach program
2017 Medical College of Wisconsin; Advancing a Healthier Wisconsin Endowment, Conversations with Scientists: Chronic Pain & Addiction

MCW STUDENTS, FACULTY, RESIDENTS AND CLINICAL/RESEARCH FELLOWS MENTORED:

Medical Students

2023 Edward Willow, M4 Research Mentor, MCW
2024 - Present Sophia Pittman, Scholarly Concentration Mentor, MCW
2025 - Present Jonghwa Yun, Scholarly Concentration Mentor, MCW

Graduate Students

PhD Students Advised

2019 - 2024 Shuai Liu, MCW
2019 - 2023 Bailey Sarka, PhD, MCW

OTHER MENTORING ACTIVITIES:

2019 - Present Member, Faculty Mentoring Committee for Christopher Roberts, MD, PhD, Department of Anesthesia
2025 - Present Faculty Mentoring Academy Facilitator

COMMUNITY SERVICE ACTIVITIES:

2016 - 2020 Opioid/Heroin Overdose Prevention Academic Workgroup
2017 Conversations with Scientists: Chronic Pain & Addiction
2020 Being Adept Prevention Meeting (Trained organizers from Safe&Sound, Inc. to teach youth about the basic neuroscience of addiction)
2020 Science Café: The Opioid Epidemic, sponsored by the Clinical & Translational Science Institute of Southeast Wisconsin (cancelled due to COVID-19; originally scheduled for March 21, 2020)
2024 Neurotrauma and the Justice System Lunch Series speaker

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Olsen CM, Lovering AT, Carr JA. alpha-melanocyte-stimulating hormone and habituation of prey-catching behavior in the Texas toad, *Bufo speciosus*. *Horm Behav.* 1999 Aug;36(1):62-9.
2. Olsen CM, Duvauchelle CL. Intra-prefrontal cortex injections of SCH 23390 influence nucleus accumbens dopamine levels 24 h post-infusion. *Brain Res.* 2001 Dec 13;922(1):80-6.
3. Ikegami A, Olsen CM, Fleming SM, Guerra EE, Bittner MA, Wagner J, Duvauchelle CL. Intravenous ethanol/cocaine self-administration initiates high intake of intravenous ethanol alone. *Pharmacol Biochem Behav.* 2002 Jul;72(4):787-94.
4. Berlanga ML, Olsen CM, Chen V, Ikegami A, Herring BE, Duvauchelle CL, Alcantara AA. Cholinergic interneurons of the nucleus accumbens and dorsal striatum are activated by the self-administration of cocaine. *Neuroscience.* 2003;120(4):1149-56.
5. D'Souza MS, Ikegami A, Olsen CM, Duvauchelle CL. Chronic D1 agonist and ethanol coadministration facilitate ethanol-mediated behaviors. *Pharmacol Biochem Behav.* 2003 Sep;76(2):335-42.
6. Jones DC, Duvauchelle C, Ikegami A, Olsen CM, Lau SS, de la Torre R, Monks TJ. Serotonergic neurotoxic metabolites of ecstasy identified in rat brain. *J Pharmacol Exp Ther.* 2005 Apr;313(1):422-31.
7. Schramm-Sapyta NL, Olsen CM, Winder DG. Cocaine self-administration reduces excitatory responses in the mouse nucleus accumbens shell. *Neuropsychopharmacology.* 2006 Jul;31(7):1444-51.
8. Olsen CM, Duvauchelle CL. Prefrontal cortex D1 modulation of the reinforcing properties of cocaine. *Brain*

- Res. 2006 Feb 23;1075(1):229-35.
9. Grueter BA, Gosnell HB, Olsen CM, Schramm-Sapyta NL, Nekrasova T, Landreth GE, Winder DG. Extracellular-signal regulated kinase 1-dependent metabotropic glutamate receptor 5-induced long-term depression in the bed nucleus of the stria terminalis is disrupted by cocaine administration. *J Neurosci*. 2006 Mar 22;26(12):3210-9. PMID: PMC6674094
 10. Olsen CM, Winder DG. A method for single-session cocaine self-administration in the mouse. *Psychopharmacology (Berl)*. 2006 Jul;187(1):13-21.
 11. Ikegami A, Olsen CM, D'Souza MS, Duvauchelle CL. Experience-dependent effects of cocaine self-administration/conditioning on prefrontal and accumbens dopamine responses. *Behav Neurosci*. 2007 Apr;121(2):389-400. PMID: PMC2565684
 12. Olsen CM, Huang Y, Goodwin S, Ciobanu DC, Lu L, Sutter TR, Winder DG. Microarray analysis reveals distinctive signaling between the bed nucleus of the stria terminalis, nucleus accumbens, and dorsal striatum. *Physiol Genomics*. 2008 Feb 19;32(3):283-98.
 13. Olsen CM, Winder DG. Operant sensation seeking engages similar neural substrates to operant drug seeking in C57 mice. *Neuropsychopharmacology*. 2009 Jun;34(7):1685-94. PMID: PMC2720253
 14. Olsen CM, Winder DG. Operant sensation seeking in the mouse. *J Vis Exp*. 2010 Nov 10(45). PMID: PMC3159589
 15. Olsen CM, Childs DS, Stanwood GD, Winder DG. Operant sensation seeking requires metabotropic glutamate receptor 5 (mGluR5). *PLoS One*. 2010 Nov 30;5(11):e15085. PMID: PMC2994905
 16. Lindsley CW, Bates BS, Menon UN, Jadhav SB, Kane AS, Jones CK, Rodriguez AL, Conn PJ, Olsen CM, Winder DG, Emmitte KA. (3-Cyano-5-fluorophenyl)biaryl negative allosteric modulators of mGlu(5): Discovery of a new tool compound with activity in the OSS mouse model of addiction. *ACS Chem Neurosci*. 2011 Aug 17;2(8):471-482. PMID: PMC3172161
 17. Mueller R, Dawson ES, Meiler J, Rodriguez AL, Chauder BA, Bates BS, Felts AS, Lamb JP, Menon UN, Jadhav SB, Kane AS, Jones CK, Gregory KJ, Niswender CM, Conn PJ, Olsen CM, Winder DG, Emmitte KA, Lindsley CW. Discovery of 2-(2-benzoxazolyl amino)-4-aryl-5-cyanopyrimidine as negative allosteric modulators (NAMs) of metabotropic glutamate receptor 5 (mGlu?): from an artificial neural network virtual screen to an in vivo tool compound. *ChemMedChem*. 2012 Mar 05;7(3):406-14. PMID: PMC3517057
 18. Olsen CM, Winder DG. Stimulus dynamics increase the self-administration of compound visual and auditory stimuli. *Neurosci Lett*. 2012 Mar 05;511(1):8-11. PMID: PMC3299404
 19. Liu X, Liu Y, Zhong P, Wilkinson B, Qi J, Olsen CM, Bayer KU, Liu QS. CaMKII activity in the ventral tegmental area gates cocaine-induced synaptic plasticity in the nucleus accumbens. *Neuropsychopharmacology*. 2014 Mar;39(4):989-99. PMID: PMC3924533
 20. Stemper BD, Shah AS, Pintar FA, McCrea M, Kurpad SN, Glavaski-Joksimovic A, Olsen C, Budde MD. Head rotational acceleration characteristics influence behavioral and diffusion tensor imaging outcomes following concussion. *Ann Biomed Eng*. 2015 May;43(5):1071-88. PMID: PMC4654450
 21. Zhang N, Zhong P, Shin SM, Metallo J, Danielson E, Olsen CM, Liu QS, Lee SH. S-SCAM, a rare copy number variation gene, induces schizophrenia-related endophenotypes in transgenic mouse model. *J Neurosci*. 2015 Feb 04;35(5):1892-904. PMID: PMC4315826
 22. Zhong L, Brown J, Kramer A, Kaleka K, Petersen A, Krueger JN, Florence M, Muelbl MJ, Battle M, Murphy GG, Olsen CM, Gerges NZ. Increased prefrontal cortex neurogranin enhances plasticity and extinction learning. *J Neurosci*. 2015 May 13;35(19):7503-8. PMID: PMC4429154
 23. Lim YW, Meyer NP, Shah AS, Budde MD, Stemper BD, Olsen CM. Voluntary Alcohol Intake following Blast Exposure in a Rat Model of Mild Traumatic Brain Injury. *PLoS One*. 2015;10(4):e0125130. PMID: PMC4409117
 24. Stemper B.D., Shah A.S., Budde M.D., Chiariello R., Wilkins N., Olsen C., Mehta P., Kurpad S.N., McCrea M., Pintar F.A. . Characterization of differing time-course of cognitive deficits and emotional changes following rotational traumatic brain injury in the rat 2015 IRCOB Conference Proceedings. 198-207.
 25. Stemper BD, Shah AS, Budde MD, Olsen CM, Glavaski-Joksimovic A, Kurpad SN, McCrea M, Pintar FA. Behavioral Outcomes Differ between Rotational Acceleration and Blast Mechanisms of Mild Traumatic Brain Injury. *Front Neurol*. 2016;7:31. PMID: PMC4789366
 26. Stemper BD, Shah AS, Chiariello R, Olsen CM, Budde MD, Glavaski-Joksimovic A, McCrea M, Kurpad SN, Pintar FA. Prediction of Post-Concussive Behavioral Changes in a Rodent Model Based on Head Rotational Acceleration Characteristics. *Ann Biomed Eng*. 2016 Nov;44(11):3252-3265. PMID: PMC5093216
 27. Muelbl MJ, Nawarawong NN, Clancy PT, Nettesheim CE, Lim YW, Olsen CM. Responses to drugs of abuse

- and non-drug rewards in leptin deficient ob/ob mice. *Psychopharmacology (Berl)*. 2016 Jul;233(14):2799-811. PMID: PMC5095929
28. Helfand AI, Olsen CM, Hillard CJ. Cannabinoid Receptor 1 and Fatty Acid Amide Hydrolase Contribute to Operant Sensation Seeking in Mice. *Int J Mol Sci*. 2017 Jul 27;18(8). PMID: PMC5578025
 29. Nelson LD, Furger RE, Ranson J, Tarima S, Hammeke TA, Randolph C, Barr WB, Guskiewicz K, Olsen CM, Lerner EB, McCrea MA. Acute Clinical Predictors of Symptom Recovery in Emergency Department Patients with Uncomplicated Mild Traumatic Brain Injury or Non-Traumatic Brain Injuries. *J Neurotrauma*. 2018 Jan 15;35(2):249-259. PMID: PMC5784791
 30. Muelbl MJ, Slaker ML, Shah AS, Nawarawong NN, Gerndt CH, Budde MD, Stemper BD, Olsen CM. Effects of Mild Blast Traumatic Brain Injury on Cognitive- and Addiction-Related Behaviors. *Sci Rep*. 2018 Jul 02;8(1):9941. PMID: PMC6028456
 31. Nawarawong NN, Slaker M, Muelbl M, Shah AS, Chiariello R, Nelson LD, Budde MD, Stemper BD, Olsen CM. Repeated blast model of mild traumatic brain injury alters oxycodone self-administration and drug seeking. *Eur J Neurosci*. 2019 Aug;50(3):2101-2112. PMID: PMC6814147
 32. Pan J, Lee Y, Cheng G, Zielonka J, Zhang Q, Bajzikova M, Xiong D, Tsaih SW, Hardy M, Flister M, Olsen CM, Wang Y, Vang O, Neuzil J, Myers CR, Kalyanaraman B, You M. Mitochondria-Targeted Honokiol Confers a Striking Inhibitory Effect on Lung Cancer via Inhibiting Complex I Activity. *iScience*. 2018 May 25;3:192-207. PMID: PMC6137433
 33. Nawarawong NN, Olsen CM. Within-animal comparisons of novelty and cocaine neuronal ensemble overlap in the nucleus accumbens and prefrontal cortex. *Behav Brain Res*. 2020 Feb 03;379:112275. PMID: PMC7937550
 34. Jessen K, Slaker Bennett ML, Liu S, Olsen CM. Comparison of prefrontal cortex sucrose seeking ensembles engaged in multiple seeking sessions: Context is key. *J Neurosci Res*. 2022 Apr;100(4):1008-1029. PMID: PMC8940716
 35. Raber J, Holden S, Sudhakar R, Hall R, Glaeser B, Lenarczyk M, Rockwell K, Nawarawong N, Sterrett J, Perez R, Leonard SW, Morr e J, Choi J, Kronenberg A, Borg A, Kwok A, Stevens JF, Olsen CM, Willey JS, Bobe G, Baker J. Effects of 5-Ion Beam Irradiation and Hindlimb Unloading on Metabolic Pathways in Plasma and Brain of Behaviorally Tested WAG/Rij Rats. *Front Physiol*. 2021;12:746509. PMID: PMC8503608
 36. Olsen CM, Corrigan JD. Does Traumatic Brain Injury Cause Risky Substance Use or Substance Use Disorder? *Biol Psychiatry*. 2022 Mar 01;91(5):421-437. PMID: PMC8776913
 37. Raff H, Glaeser BL, Szabo A, Olsen CM, Everson CA. Sleep restriction during opioid abstinence affects the hypothalamic-pituitary-adrenal (HPA) axis in male and female rats. *Stress*. 2023 Jan;26(1):2185864. PMID: PMC10339708
 38. Chiariello R, McCarthy C, Glaeser BL, Shah AS, Budde MD, Stemper BD, Olsen CM. Chronicity of repeated blast traumatic brain injury associated increase in oxycodone seeking in rats. *Behav Brain Res*. 2023 Feb 13;438:114181. PMID: PMC9993345
 39. Olsen CM, Herrold AA, Conti AC, Vonder Haar C. Editorial: Behavioral outcomes of traumatic brain injury. *Front Behav Neurosci*. 2022;16:1010395. PMID: PMC9490366
 40. Stemper BD, Shah A, Chiariello R, McCarthy C, Jessen K, Sarka B, Seifert J, Budde MD, Wang K, Olsen CM, McCrea M. A Preclinical Rodent Model for Repetitive Subconcussive Head Impact Exposure in Contact Sport Athletes. *Front Behav Neurosci*. 2022;16:805124. PMID: PMC8965565
 41. Muelbl MJ, Glaeser BL, Shah AS, Chiariello RA, Nawarawong NN, Stemper BD, Budde MD, Olsen CM. Repeated blast mild traumatic brain injury and oxycodone self-administration produce interactive effects on neuroimaging outcomes. *Addict Biol*. 2022 Mar;27(2):e13134. PMID: PMC8896287
 42. Liu S, Nawarawong N, Liu X, Liu QS, Olsen CM. Dissociable dorsal medial prefrontal cortex ensembles are necessary for cocaine seeking and fear conditioning in mice. *Transl Psychiatry*. 2024 Sep 23;14(1):387. PMID: PMC11420216
 43. Sarka BC, Liu S, Banerjee A, Stucky CL, Liu QS, Olsen CM. Neuropathic pain has sex-specific effects on oxycodone-seeking and non-drug-seeking ensemble neurons in the dorsomedial prefrontal cortex of mice. *Addict Biol*. 2024 Aug;29(8):e13430. PMID: PMC11315577
 44. Liu S, Nawarawong N, Liu X, Liu QS, Olsen CM. Dissociable dorsal medial prefrontal cortex ensembles are necessary for cocaine seeking and fear conditioning in mice. *bioRxiv*. 2024 Mar 18. PMID: PMC10983871
 45. Glaeser B, Panariello V, Banerjee A, Olsen CM. Environmental Enrichment during Abstinence Reduces Oxycodone Seeking and c-Fos Expression in a Subpopulation of Medial Prefrontal Cortex Neurons. *Drug Alcohol Depend*. 2024 Feb 01;255:111077. PMID: PMC10869844

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47. Raber J, Chaudhari M, De la Torre A, Holden S, Kessler K, Glaeser B, Lenarczyk M, Leonard SW, Borg A, Kwok A, Patel C, Kronenberg A, Olsen CM, Willey JS, Morré J, Choi J, Stevens JF, Bobe G, Minnier J, Baker J. Effects of 5-ion 6-beam sequential irradiation in the presence and absence of hindlimb or control hindlimb unloading on behavioral performances and plasma metabolic pathways of Fischer 344 rats. *Front Physiol.* 2024;15:1486767. PMID: PMC11598337
48. Everson CA, Szabo A, Olsen CM, Glaeser BL, Raff H. The effects of chronic sleep restriction on the hypothalamic-pituitary-adrenal axis and its interaction with abstinence from opioid use. *Sleep.* 2025 Sep 09;48(9). PMID: PMC12417021

Books, Chapters, and Reviews

1. Olsen CM. Natural rewards, neuroplasticity, and non-drug addictions. *Neuropharmacology.* 2011 Dec;61(7):1109-22. PMID: PMC3139704
2. CM Olsen and QS Liu Phosphodiesterase 4 inhibitors and drugs of abuse: current knowledge and therapeutic opportunities. *Frontiers in Biology.* 2016. 11:376-86.