PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF PSYCHIATRY

<u>Jonathan D. Morrow, M.D., Ph.D.</u>, assistant professor of psychiatry, Department of Psychiatry, Medical School, is recommended for promotion to associate professor of psychiatry, with tenure, Department of Psychiatry, Medical School.

Academic D	egrees)
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M.D.	2006	University of Michigan
Ph.D.	2004	Neuroscience, University of Michigan
B.S.	1997	Biological Sciences, University of Southern California,
		Los Angeles

Professional Record

2011 - present Assistant Professor of Psychiatry, University of Michigan

Summary of Evaluation:

Teaching: Dr. Morrow supervises residents in the University of Michigan Addiction Treatment Services clinic. He has mentored 19 undergraduates, four graduate students, one medical student, 21 residents, and three fellows. He also gives regular lectures to groups at all different levels of training, as well as the lay community, and will soon start buprenorphine trainings for faculty. As a physician-scientist, Dr. Morrow is able to leverage his expertise to improve both the relevance of science and quality of care to patients. He has organized journal clubs, clinical case conferences, and presentation series for medical trainees. He lectures annually in Psychology 326 Alcohol and Other Behavior Disorders in Community Settings, in Neuroscience 611 Neuropharmacology, in Neuroscience 601/615 Behavioral Neuroscience, and in Psychology 731 Drugs of Abuse.

Research: Dr. Morrow's research is in delineating the basic neurobiology that underlies motivated behavior, and determining how variation in that neurobiology can lead to psychopathology. With his clinical training, he has learned that comorbidity is the rule rather than the exception in psychiatry, and that some of this comorbidity might be explained by pleomorphic effects of variation in basic motivational neurobiology. He developed a project in collaboration with Drs. Terry Robinson and Stephen Maren to ask whether vulnerability to addiction is related to vulnerability to post traumatic stress disorder (PTSD). Their findings suggest that a shared vulnerability factor predisposes some individuals to both addiction and PTSD. This ultimately led to an animal model of a common behavioral trait that may confer vulnerability to both PTSD and addiction, which became the foundation of his research. His research is funded through the National Institute on Drug Abuse, the National Institutes of Health and institutional grants. Dr. Morrow has published 20 peer-reviewed articles, and has been invited to present his research on 17 occasions regionally, nationally and internationally. Dr. Morrow has received several notable awards as a junior scientist, both at a national and institutional level, including the NIMH Career Development Institute for Psychiatry Award, the NARSAD Young Investigator Award, the NIH/NINDS Broadening the Representation of Academic Investigators in NeuroScience Awardee,

Stephanie Spiegel Research Award, Eisenberg Scholar Award, and the Taubman Emerging Scholar Award.

Recent and Significant Publications:

Fitzpatrick CJ, Jagannathan L, Lowenstein ED, Robinson TE, Becker JB, Morrow JD: Single prolonged stress decreases sign-tracking and cue-induced reinstatement of cocaine-seeking. *Behav Brain Res* 359: 799-806, 2019.

Fitzpatrick CJ, Morrow JD: Thalamic mast cell activity is associated with sign-tracking behavior in rats. *Brain Behav Immun* 65: 222-229, 2017.

Morrow JD, Flagel SB: Neuroscience of resilience and vulnerability for addiction medicine: From genes to behavior. *Prog Brain Res* 223: 3-18, 2016.

Fitzpatrick CJ, Creeden JF, Perrine SA, Morrow JD: Lesions of the ventral hippocampus attenuate the acquisition but not expression of sign-tracking behavior in rats. *Hippocampus* 26(11): 1424-1434, 2016.

Morrow JD, Saunders BT, Maren S, Robinson TE: Sign-tracking to an appetitive cue predicts incubation of conditioned fear in rats. *Behav Brain Res* 276: 59-66, 2015.

Service: Dr. Morrow has served as a founding co-chair of Psychiatry's Diversity, Equity, and Inclusion Committee. He serves on recruitment committees and interviews prospective students for the Medical School, Psychiatry Residency Program, and Neuroscience Graduate Program. He also served as the university's representative on the Executive Council for the Michigan Chapter of the Society for Neuroscience. On a national level, Dr. Morrow was the first junior faculty member to be elected to the Society of Biological Psychiatry's Executive Council, and has served on various task forces both within that organization and the American College of Neuropsychopharmacology. He is double boarded in general psychiatry and addiction medicine, and his clinical work focuses on serious mental illnesses related to substance use disorders. He is assigned to UMATS where he provides initial evaluations, pharmacotherapy, addiction-specific psychosocial therapy, and ongoing monitoring for patients with substance use disorders, particularly those with co-occurring mood and/or anxiety disorders.

External Reviewers:

Reviewer A: "I truly believe that Dr. Morrow's work is on par with his peers in this area of research...I can clearly state that he is a very solid scientist...I believe your institution should praise his efforts in minority outreach and service to the community...Dr. Morrow thus met if not surpassed expectations in this domain...It is my view, based on UM criteria for promotion, that Dr. Morrow clearly meets the requirements for promotion to the rank of Associate Professor with tenure...In summary, Dr. Morrow has distinguished himself during his time at the University of Michigan...I feel strongly that his accomplishments at UM should be rewarded."

<u>Reviewer B</u>: "This is a rare and important combination that I find impressive and fairly unique in the nation [psychiatry and addiction medicine]...Thus, he is poised to make major contributions as his career continues to progress...He has made several valuable contributions to our

understanding of the brain mechanisms involved in drug salience...He has clearly reached national and international audiences in his invited presentations of research...his contributions are substantial both locally and internationally...I am impressed with his grant success, which is building in momentum as well as independence from his earlier mentors...In summary, Dr. Morrow has successful navigated the gauntlet of academic psychiatry as a clinician and researcher...He has already made substantial and sufficient contributions, but his momentum seems to be building now, which is an excellent predictor of future success...I have no question that he would be readily promoted at my institution."

Reviewer C: "Dr. Morrow is an outstanding scientist who is passionate about understanding the mechanisms underlying neuropsychiatric, reward, and addiction-related disorders...His first- and coauthored manuscripts have been highly cited, and overall his work has been quite impactful...He is increasingly nationally known in these areas of focus [translational neuroscientist and psychiatrist], as is evidenced by his awards and fellowships, as well as his giving > 10 invited talks in recent years...Dr. Morrow is very active in his service roles both locally and nationally...Overall, Dr. Morrow is successfully funded for an Assistant Professor at this level, and I believe he is more than ready for Promotion to Associate Professor...Dr. Morrow is also a model citizen...He is an exemplary citizen in terms of local and national service, and clearly is a leader at multiple levels, from his areas of novel and impactful research to the teaching of neuroscience an outreach."

Reviewer D: "He has an exceptional record of achievement...His CV amply demonstrates his ability to carry out scientifically exciting and influential research...As a further sign of his influence, I actually discuss some of Dr. Morrow's work in my undergraduate neuroscience courses...I have been repeatedly impressed by his understanding of central issues in the neuroscience of goal-directed behaviour and emotional learning...I have found this work innovative...His contributions in this area have been widely noted, as evidenced by regular invited talks across the globe...I am impressed by the output given how work-intensive this type of behavioural research is...I also find Dr. Morrow's drive and passion for his work to be exceptional...In summary, I certainly evaluate Dr. Morrow's track record in research as superior, and well sufficient to fulfil this tenure criterion at my own university...He possesses the vision, drive, and intellect to support an outstanding scientific career."

Reviewer E: "I have been impressed by his academic knowledge and professionalism...I consider several of his papers to be important studies in our field, and I have read them with great interest...In summary, Dr. Morrow has developed into a nationally recognized independent investigator...The publication list is noteworthy, and it has a number of publications that are in the best journals in our field...Dr. Morrow's publication record has been excellent...In addition to this outstanding publication record, Dr. Morrow also has accumulated an excellent record in terms of service, teaching and mentoring...I can state unhesitatingly, and with great enthusiasm, that if given an opportunity I would hire Dr. Morrow in our department...He would be a tremendous addition to any department...In my opinion, his scholarly achievements and overall qualifications warrant enthusiastic support for granting of promotion and tenure."

Reviewer F: "Jonathan is a highly promising, rapidly rising clinician-scientist who has shown a strong commitment to a career in academic psychiatry...This work continues to be cited as the

first definitive study of interleukin-6 effects on sleep regulation in laboratory animals...I find that Jonathan brings a pleasing combination of sincerity, thoughtfulness, and intellectual vitality to his interactions with other scientists...Through his scientific efforts, he has shown an enthusiasm for productive and collaborative work...Jonathan has proven to be extremely driven, organized, and detail-oriented in his work...As a highly promising clinician-investigator with a strong interest in translational research in drug addiction and PTSD, he has a tremendous potential to contribute to the psychiatry and addiction fields...In summary, Jonathan is a highly successful young researcher in the psychiatry and addiction fields with outstanding academic reputation, and excellent track record of grant funding and service-related activities (see his CV)...He has made major scientific contributions in his studies on the role of individual differences in rat models of PTSD and addiction...I strongly recommend Jonathan for an Associate Professor with tenure."

Summary of Recommendation:

Dr. Morrow has developed a successful career as an academic psychiatrist, specializing in substance use disorders. He is highly regarded by his peers and is recognized for his expertise in clinical care, education, and research. He has garnered a national reputation as a clinician-scientist and has been a valuable leader at the University of Michigan. I am pleased, therefore, to recommend Jonathan D. Morrow, M.D., Ph.D. for promotion to associate professor of psychiatry, with tenure, Department of Psychiatry, Medical School.

Marschall S. Runge, M.D., Ph.D.

Executive Vice President for Medical Affairs

Dean, Medical School

May 2020