PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF PSYCHIATRY
COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS
DEPARTMENT OF PHILOSOPHY

<u>Sekhar C. Sripada, M.D., Ph.D.,</u> associate professor of psychiatry, with tenure, Department of Psychiatry, Medical School, and associate professor of philosophy, without tenure, Department of Philosophy, College of Literature, Science, and the Arts, is recommended for promotion to professor of psychiatry, with tenure, Department of Psychiatry, Medical School, and professor of philosophy, with tenure, Department of Philosophy, College of Literature, Science, and the Arts.

<u>Academic Record:</u>

Ph.D.	2006	Rutgers University
M.D.	1998	University of Texas, Houston
B.A.	1994	University of Texas, Austin

<u>Professional Record:</u>

2019 - present	Adjunct Associate Professor of Psychology, University of Michigan
2016 - present	Associate Professor of Psychiatry, University of Michigan
2016 - present	Associate Professor of Philosophy, University of Michigan
2009 - 2016	Assistant Professor of Psychiatry, University of Michigan
2009 - 2016	Assistant Professor of Philosophy, University of Michigan
2005 - 2006	Adjunct Assistant Professor of Philosophy, University of Michigan

<u>Summary of Evaluation:</u>

<u>Teaching:</u> Dr. Sripada's teaching activities include undergraduate and graduate student teaching, medical students, psychiatry resident and fellow teaching, undergraduate research, post-doctoral research fellows and faculty mentorship. His activities at the University of Michigan embrace an especially difficult, important and valuable challenge: communicating ideas and concepts across multiple academic disciplines. He has taught highly innovative interdisciplinary courses at both the undergraduate and graduate level including Cognitive Science 200, the gateway course for the undergraduate cognitive science major, which he helped design, and Free Will and Neuro-law, an interdisciplinary graduate seminar combining neuroscience, moral psychology, and legal theory. Dr. Sripada is very much engaged in graduate student education as noted by his service on 31 dissertation committees, as well as the diversity of departments represented: philosophy, multiple areas of psychology (clinical, developmental, biopsychology, cognition and cognitive neuroscience), neuroscience, statistics, bioinformatics, and electrical engineering/computer science. Due to his unique skillset which cuts across multiple empirical and theoretical disciplines, Dr. Sripada has the capability to bring distinctive outsider expertise to all these committees. He consistently receives good to excellent ratings on teaching evaluations.

<u>Research:</u> Dr. Sripada's research seeks to build cross-disciplinary understanding of executive functions (flexible, higher-level thinking) and self-control, bringing together theory and findings from psychiatry, cognitive neuroscience, and philosophy. He has helped advance new models that emphasize the role of distributed brain networks in individual-differences in executive functions, developed new quantitative methodologies for characterizing brain networks, applied these new

methods to investigate the neurodevelopmental roots of disorders of executive functions (e.g., ADHD), and traced the philosophical implications of these results for evolving understandings of moral agency and free will. Dr. Sripada has published 69 peer-reviewed articles in high-impact journals including: *Proceedings of the National Academy of Sciences*, the *Journal of Neuroscience*, *JAMA Psychiatry*, and *Molecular Psychiatry*. He and his research group have been continuously funded by the National Institute of Alcohol Abuse and Alcoholism, National Institute of Mental Health, the National Institute on Drug Abuse and foundation grants.

Recent and Significant Publications:
Weigard, Alexander, D. Angus Clark, and Chandra Sripada: Cognitive efficiency beats top-down control as a reliable individual difference dimension relevant to self-control. *Cognition*. (In Press) 2021.

Weigard, Alexander, and Chandra Sripada: Task-General Efficiency of Evidence Accumulation as a Computationally-Defined Neurocognitive Trait: Implications for Clinical Neuroscience. *Biological Psychiatry: Global Open Access*. (2021; online ahead of print).

Taxali, Aman, Mike Angstadt, Saige Rutherford, and Chandra Sripada: Boost in Test-Retest Reliability in Resting State FMRI with Predictive Modeling. *Cerebral Cortex* 31(6): 2822-2833, 2021. (In Press)

Sripada, Chandra, Saige Rutherford, Mike Angstadt, Wesley K Thompson, Monica Luciana, Alex Weigard, Luke Hyde, and Mary Heitzeg: Prediction of Neurocognition in Youth From Resting State FMRI. *Molecular Psychiatry* 25: 3413–3421. 2020

Sripada C, Angstadt M, Rutherford S, Kessler D, Kim Y, Yee M, Levina L: Basic Units of Inter-Individual Variation in Resting State Connectomes. *Scientific Reports* 9: 1900, 2019.

Service: Dr. Sripada has a leadership role in multiple initiatives which have benefited the University of Michigan academic community including co-founding and directing Michigan's Neuroimaging Methods Core, which maintains an analysis infrastructure that supports Department of Psychiatry Neuroimaging researchers as well several researchers in the Department of Psychology. In addition, he co-founded and co-directs the University of Michigan ABCD Workgroup. This group coordinates infrastructure for accessing, storing, organizing, preprocessing, and analyzing ABCD data for the Department of Psychiatry, and for investigators in other departments at University of Michigan. The ABCD Workgroup hosts a biweekly science meeting that brings together investigators across multiple departments and includes graduate students, post-doctoral researchers, faculty, and research assistants/analysts. A major initiative undertaken by the ABCD Workgroup was preprocessing and performing quality control on the first round of ABCD data (11,875 scans). This required organizing the activities of four fMRI analysts, executing advanced preprocessing routines on the Great Lakes high performance cluster, setting up a quality checking protocol, and managing a team of more than 15 research assistants who performed visual quality checking.

Nationally, Dr. Sripada has served on several NIH study sections and workgroups, including Child Psychopathology and Developmental Disabilities, computational psychiatry special emphasis panels and the multi-agency BRAINS Neuroethics Workgroup from 2015-2017. Dr. Sripada is an editorial review board member for *Frontiers of Behavioral Neuroscience*. Dr. Sripada provides

clinical care through periodic weekend rounding on the Adult Inpatient Psychiatry Unit and on-call back-up to the Psychiatric Emergency Service. In addition, he has made solid contributions to clinical care at the University of Michigan leveraging his expertise in ADHD, especially adult ADHD. In 2010, he founded and directed Michigan's first and only Adult ADHD Clinic.

External Reviewers:
Reviewer A: "In short, the quality of Dr. Sripada's work is outstanding. He has published highly significant contributions in top journals covering a number of topics…In a short time, these papers have already had a major impact on the field…This work is one of the first major studies to come out of the ABCD project, and represents both an innovative approach, with solid statistical power and validation, in addition to yielding seminal findings…Dr. Sripada is an outstanding scientist with just the right balance of technical and clinical skills…he has become a major leader in the field and he has an outstanding international reputation…I believe Dr. Sripada is clearly one of the best candidates I have seen in recent years."

Reviewer B: "Chandra has distinguished himself as a singular leader in the ABCD consortium…Chandra possesses all these traits and is universally respected throughout the consortium…I am well aware that Chandra is a very accomplished independent researcher…He has published studies that are very highly regarded in the field…Chandra's mix of clinical and scientific training and his clear expertise in sophisticated analytic approaches is absolutely ideal and makes him a very potent investigator…This makes him an excellent ambassador for the University of Michigan."

Reviewer C: "His record is excellent and speaks for itself…I'm tempted to say that his virtues have not (yet) been fully appreciated, as there are few people sufficiently expert in philosophy and cognitive (neuro)science to appreciate what he's been up to…As of this writing, he has nearly 7,500 citations…When it comes to publishing in both top scientific journals and top philosophy journals, Sripada might be the world champion…I and so many others hold Chandra Sripada in such high regard. He is a brilliant scientist and a brilliant philosopher who is all the more brilliant for being both at the same time…He has earned the rank of Full Professor at least twice over."

Reviewer D: "The philosophical work is consistently excellent…Sripada is probably the most influential writer to develop these ideas in an empirically informed way…The Sripada and Stich piece has been very widely cited here, and has really served to structure the discussion. I use it in my first year ethics course to give my undergraduates an excellent introduction to the topic…There is no one quite like him, combining both philosophical and medical work."
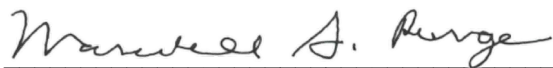
Reviewer E: "…I would say that his most important contribution to the field is his work on the 'deep self'…Sripada has a series of papers applying his theory to questions about intentional action (Sripada, 2010), addiction (Sripada, 2017), manipulation (Sripada, 2012), and so forth. These papers are truly extraordinary…Rather, Sripada deserves credit above all for inspiring the literature itself…Even those philosophers who disagree with his specific theory are working in a tradition that was basically kicked off by his influential papers…Sripada has real expertise in certain methodological tools that will not be familiar to most philosophers."

Reviewer F: "Most notable is his recent work linking structural correlation networks to general cognitive ability…These findings are significant because they begin to establish the functional brain patterns that underly important processes in adolescents…Dr. Sripada has developed neuroimaging tools that have increased the test-retest reliability, which is an important area for neuroimaging research…In a recent publication, Dr. Sripada showed that using a predictive approach the reliability

could be increased by a factor of 2-3. This is quite impressive and may have important implications in neuroimaging research."

Summary of Recommendation:
Dr. Sripada brings a distinctive and unique expertise in philosophy and evolutionary biology combined with neuroscience and clinical skills. His research has made important theoretical, substantive and methodological contributions and leveraged these results for the broader philosophical and humanistic aim of improved self-understanding. We are pleased to recommend Sekhar C. Sripada, M.D., Ph.D. for promotion to professor of psychiatry, with tenure, Department of Psychiatry, Medical School, and professor of philosophy, with tenure, Department of Philosophy, College of Literature, Science, and the Arts.

Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School

Anne Curzan, Dean
Geneva Smitherman Collegiate Professor of
English Language and Literature, Linguistics,
and Education
Arthur F. Thurnau Professor
College of Literature, Science, and the Arts

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