# PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF NEUROLOGY

Yu Wang, M.B.B.S., M.S., Ph.D., assistant professor of neurology, Department of Neurology, Medical School, is recommended for promotion to associate professor of neurology, with tenure, Department of Neurology, Medical School.

# **Academic Degrees:**

Ph.D.	2009	University of Connecticut
M.S.	2003	Central South University, Changsha, Hunan, China
M.B.B.S.	2000	Central South University, Changsha, Hunan China

# **Professional Record:**

2016 - present Assistant Professor of Neurology, University of Michigan 2015 - 2016 Clinical Lecturer of Neurology, University of Michigan

## **Summary of Evaluation:**

<u>Teaching:</u> Dr. Wang is actively involved in the teaching of undergraduate students, graduate students, medical students, residents and fellows in the clinical setting. His teaching consists of electroencephalogram (EEG) interpretation, seizure semiology analysis, epilepsy presurgical evaluation, brain mapping, and the management of status epilepticus. At the Veterans Affairs Ann Arbor Healthcare System (VAAAHS), he works with medical students and residents, reviewing and critiquing oral and written presentations and bedside instruction in neurological exams. In addition, he provides didactic teaching including Clinical Neuroscience and the Advanced Research Seminar Series. Dr. Wang is also involved in the mentorship of faculty members, undergraduate and graduate students, post-doctoral fellows and research scientists as part of his research laboratory. He is a member of a National Institutes of Health (NIH) T32 training grant and at the national level is a member of the American Epilepsy Society Junior Investigators Professional Development Committee.

Research: Dr. Wang's research centers on the study of epilepsy. He uses cutting-edge technologies in molecular genetics and stem cell biology, including CRISPR genome editing, transcriptomics, electrophysiology, and human iPSC-derived neurons, to provide conceptual insights broadly relevant to understanding neurodevelopmental disorders. Dr. Wang also uses integrative and translational approaches to gain a mechanistic understanding of focal cortical dysplasia at genetic, cellular, and circuit levels. He is currently the principal investigator on a National Institute of Neurological Disorders and Stroke (NINDS) R01 grant to study cortical development and pathogenesis and is a co-investigator on an NIH U54 grant entitled "Epilepsy Multiplatform Variant Prediction." His work has led to 23 peer-reviewed publications and two book chapters. He has presented numerous abstracts and is a contributing editor to *Epilepsy Currents* and is a journal reviewer for five publications including *Scientific Reports* and *Developmental Neuroscience*.

## Recent and Significant Publications:

- Yang T, Hu ST, Chang WC, Kao HY, Wang Y, "Perineuronal nets degradation and parvalbumin interneuron loss in a mouse model of DEPDC5-related epilepsy. *Dev Neurosci* (Accepted): 2022.
- Kao HY, Hu ST, Mihaylova T, Ziobro J, Ahn ES, Fine C, Brang D, Watson BO, Wang Y, "Defining the Latent Period of Epileptogenesis and Epileptogenic Zone in a Focal Cortical Dysplasia Type II (FCDII) Rat Model," *Epilepsia* 62(5):1268-1279, 2021.
- Hu S, Yang T, Wang Y, "Widespread labeling and genomic editing of the fetal central nervous system by *in utero* CRISPR AAV9-PHP.eB administration," *Development* 148(2): 2021.
- Hu S, Knowlton RC, Watson BO, Glanowska KM, Murphy GG, Parent JM, Wang Y, "Somatic *Depdc5* deletion recapitulates electroclinical features of human focal cortical dysplasia type IIA," *Ann Neurol* 84(1): 140-146, 2018.
- Wang Y, Ji T, Nelson AD, Glanowska K, Murphy GG, Jenkins PM, Parent JM, "Critical roles of αII spectrin in brain development and epileptic encephalopathy," *J Clin Invest* 128(2): 760-773, 2018.

<u>Service</u>: Dr. Wang has significant service at the institutional, regional, and national level. Institutionally, he is the co-director of the Basic Epilepsy Group Seminar Series in the Department of Neurology. He is also a member of both the NINDS Neuroscience Post-doctoral Training grant and NIH T32 Training Grant in Organogenesis, Center for Cell Plasticity and Organ Design committees. Regionally, Dr. Wang is a member of the Michigan Epilepsy Foundation Professional Advisory Board, in which he provides operational policy guidance and technical assistance. Nationally, he serves on the NIH CWOW U54 EpiMVP Steering Committee as well as the American Epilepsy Society Fellows Jr. Investigators Professional Development Committee.

### **External Reviewers:**

<u>Reviewer A</u>: "Dr. Wang is a clinician-investigator who is achieving at the highest levels and gaining prominence for his studies of epilepsy in the setting of malformations of cortical development. He is a rising start and most deserving of this promotion."

Reviewer B: "First and foremost, it's clear Dr. Wang demonstrates excellence in research. To date he has published 25 peer reviewed manuscripts since 2003. His level of external grant funding is extremely impressive, with NIH R01 funding and co-PI on a U54 center grant. This level of research is at least comparable and very likely exceeds others in his peer group working in the same field..."

<u>Reviewer C</u>: "Dr. Wang is highly productive. He is publishing quickly in reputed journals, such as Annals of Neurology and Journal of Clinical Investigation and Development. Dr. Wang has received NIH grants as a Principal Investigator and Co-investigator."

<u>Reviewer D</u>: "He stands out amongst his peer group in being trained by some of the best in the field, making rapid and impressive research progress with cutting edge techniques and ability to secure funding in a highly competitive environment. Additionally, his ability to maintain excellence in the clinic and laboratory set him apart from his peers."

<u>Reviewer E</u>: "Dr. Wang also is contributing at all levels with regard to service. He has served on national committees such as the Jr. Investigators Professional Development Committee for AES and also serves on the Michigan Epilepsy Foundation Professional Advisory Boards. He reviews manuscripts routinely for excellent journals including the Journal of Neuroscience and Cortex, has reviewed grants for different organizations and foundations, and is mentoring the next generation of clinical fellows and students. He is also actively engaged in teaching medical students, neurology residents in a number of classes."

# Summary of Recommendations:

Dr. Wang has distinguished himself as an exceptional researcher that is nationally recognized as a leader in the field of epilepsy. He continues to be highly productive with excellence in teaching, mentorship, as well as service. I am pleased to recommend Yu Wang, M.B.B.S., M.S., Ph.D. for promotion to associate professor of neurology, with tenure, Department of Neurology, Medical School.

Marschall S. Runge, MD, PhD

**Executive Vice President for Medical Affairs** 

Dean, Medical School

May 2023