PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE
DEPARTMENT OF CELL AND DEVELOPMENTAL BIOLOGY

Yuan Zhu, Ph.D., assistant professor of internal medicine, Department of Internal Medicine, and assistant professor of cell and developmental biology, Department of Cell and Developmental Biology, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of cell and developmental biology, without tenure, Department of Cell and Developmental Biology, Medical School.

Academic Degrees:

Ph.D.	2000	University of Texas Southwestern Medical Center
B.S.	1991	Fudan University, Shanghai, P.R. China

Professional Record:

2003-present	Assistant Professor of Internal Medicine and Assistant Professor of Cell and Developmental Biology, University of Michigan
2002-2003	Instructor, Center for Developmental Biology, University of Texas Southwestern Medical Center at Dallas

Summary of Evaluation:

Teaching: Dr. Zhu has been involved in presenting formal lectures to a broad range of students at the University of Michigan, including first year medical students (2006-2009), second-year graduate students (2006-2009), and residents and clinical fellows (2005-2008). Additionally, Dr. Zhu has supervised and mentored various premedical and undergraduate students, fellows and graduate students in a laboratory setting. Dr. Zhu has participated in three preliminary exam committees as well as four thesis committees for graduate students. Dr. Zhu's overall score on student evaluations is 3.85 out of 5.

Research: Using genetically engineered mouse models, Dr. Zhu's research has focused on the study of molecular and cellular mechanisms underlying the initiation and progression of tumors in both the central nervous system and the peripheral nervous system. Dr. Zhu has generated 24 peer-reviewed publications in many of the most prestigious biomedical journals, 12 of which he is either first or last author. Dr. Zhu is a current American Cancer Society Research Scholar and holds an Investigator-Initiated Research Award through the Department of Defense Neurofibromatosis Research Program. Dr. Zhu has been highly funded since 2004 and is the principal investigator on three active and current grants (ACS, DOD and NIH) with an additional grant with the DOD pending decision. Dr. Zhu has been invited to speak at numerous lectures at

both the national and international levels and has served on major study sections since 2004 as well as grant review groups since 2005. Dr. Zhu holds active membership with the American Association for Cancer Research, the Society for Neuroscience, and the Chinese Biological Investigators Society.

Recent and Significant Publications:

Wang Y, Yang J, Zheng H, Tomasek GJ, Zhang P, McKeever PE, Lee EP and Zhu Y: Expression of mutant p53 proteins implicates a lineage relationship between neural stem cells and malignant glioma in a murine glioblastoma model. *Cancer Cell* 15:514-526, 2009.

Zheng H, Chang L, Patel N, Yang J, Lowe L, Burns DK and Zhu Y: Induction of abnormal proliferation by nonmyelinating Schwann cells triggers neurofibroma formation. *Cancer Cell* 13:117-128, 2008.

Romero MI, Lin L, Lush ME, Lei L, Parada LF and Zhu Y: Deletion of *Nf1* in neurons induces increased axon collateral branching after dorsal root injury. *Journal of Neuroscience* 27(8): 2124-2134, 2007.

Zhu Y, Harada T, Liu L, Lush ME, Guignard F, Harada C, Burns DK, Bajenaru ML, Gutmann DH and Parada LF: Inactivation of NF1 in CNS causes increased glial progenitor proliferation and optic glioma formation. *Development* 132 (24): 5577-5588, 2005.

Zhu Y, Guignard F, Zhao D, Liu L, Burns DK, Mason RP, Messing A and Parada LF: Early inactivation of p53 tumor suppressor gene cooperating with NF1 loss induces malignant astrocytoma. *Cancer Cell* 8 (2): 119-130, 2005.

Service: Dr. Zhu participates in the Cell and Developmental Biology Departmental Seminar Series as well as the Center for Organogenesis Seminar Series and sits on the Medical Advisory Board for Neurofibromatosis, Inc. He also actively participates in all recruiting efforts for the Departments of Internal Medicine as well as Cell and Developmental Biology.

External Review:

Reviewer A: "...[Dr. Zhu] is well positioned to continue making seminal discoveries on cancer and stem cells."

Reviewer B: "Yuan Zhu has produced a series of excellent papers on the role of Nf1 and p53 in neurofibromatosis and brain tumors...In recent years he has made first-rate contributions and published a number of high-impact papers on which he serves as senior author while he made significant contributions to other high-impact papers together with highly-regarded peers in the field."

Reviewer C: "Dr. Zhu is well known in the field of NF research as one of the most talented...scientists in his cohort...Dr. Zhu made the single most important finding regarding the

NF1 disease to date…Dr. Zhu has continued to produce novel and important findings related to the NF1 disease…Overall, he is clearly a leader in this field."

Reviewer D: "Dr. Zhu is an invited reviewer of numerous manuscripts for several journals and has been invited to review grants for the DOD and for an NCI SPORE grant. He has also been invited to give numerous lectures at national and international conferences. This is remarkable for someone so junior, and shows how respected and highly regarded he is by his colleagues and the leaders of the field."

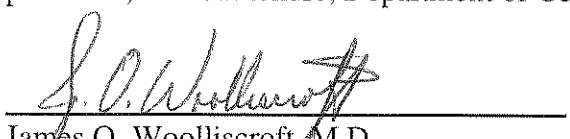
Reviewer E: "Dr. Zhu is clearly one of the leading investigators [of his cohort] that are promoting development of mouse models for human cancers. This work is important because it will yield preclinical models for testing of novel biological/chemotherapeutic agents…My professional opinion is that Dr. Zhu has been a consistent and productive researcher and I believe that as an independent investigator he has moved his laboratory in interesting and new directions …His funding track record has been excellent and I note that Dr. Zhu has been successful in obtaining extramural support from the American Cancer Society, Department of Defense and NIH (R01)."

Reviewer F: "I very much admire Dr. Zhu's work and regard him as one of the emerging stars in cancer cell biology…Dr. Zhu has clearly made the transition to scientific independence. He has his own research grants. He is publishing work that is entirely his own and the papers are emerging in top tier journals…He has been an invited speaker and/or session chair at numerous national and international symposia. He is a scientific reviewer for several of the more important journals in the field…"

Reviewer G: "Dr. Zhu appears to be a valued member of the scientific community at the University of Michigan and is addressing exciting and important questions about the fundamentals of stem cell regulation. His work holds great promise and is influencing future studies in this field."

Summary of Recommendation:

Dr. Zhu is a brilliant scientist who has already made significant, and highly original, contributions in the study of the molecular mechanisms underlying the initiation and progression of brain tumors, and is also dedicated to the instruction of University students at all levels. His significant impact in the scientific world has already been felt, and he is already considered a leading authority in the field. As such, I am pleased to recommend Yuan Zhu, Ph.D. for promotion to associate professor, with tenure, Department of Internal Medicine, and associate professor, without tenure, Department of Cell and Developmental Biology.



James O. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

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