Approved by the Regents
May 19, 2011

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Yanzhuang Wang, assistant professor of molecular, cellular, and developmental biology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1999	University of Heidelberg
M.S.	1990	Nankai University
B.S.	1987	Nankai University

Professional Record:

2005 – present	Assistant Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
2003 – 2005	Associate Research Scientist, Department of Cell Biology, Yale University
1999 – 2003	Postdoctoral Associate, Department of Cell Biology, Yale University

Summary of Evaluation:

Teaching – Professor Wang is an enthusiastic and approachable instructor who has done a fine job throughout his teaching career at Michigan. His primary responsibilities have been a large enrollment course on cell biology and two smaller upper-level courses on intracellular trafficking and cell biology and disease. Student evaluations for these courses have consistently been very good to excellent. Professor Wang has also devoted considerable effort to individual training in the research laboratory, having mentored 34 undergraduate students, three doctoral students, and three postdoctoral scholars.

Research – Professor Wang's research focuses on one of the most fundamental questions in biology: how mitotic cells disassemble and then re-assemble their molecular machinery during cell division. He has developed a unique multidisciplinary approach employing biochemistry, cell biology, electron microscopy, and more recently proteomics, combined with a novel *in vitro* reconstitution assay, to provide a mechanistic explanation for Golgi disassembly and re-assembly. His research is characterized by a series of carefully conducted experiments that have produced for the first time quantitative analyses of Golgi membrane stacking in mammalian cells. Professor Wang has obtained significant grant funding to support his research program and he publishes in high impact journals. He has been invited to speak at several major research conferences both in the US and abroad.

Recent and Significant Publications:

"GRASP55 and GRASP65 play complementary and essential roles in Golgi cisternal stacking," with Y. Xiang, *Journal of Cell Biology*, 188(2), 2010, pp. 237-251.

"Molecular mechanism of mitotic Golgi disassembly and reassembly revealed by a defined reconstitution assay," with D. Tang, et al., *The Journal of Biological Chemistry*, 283(10), 2008, pp. 6085-6094.

"Golgi cisternal unstacking stimulates COPI vesicle budding and protein transport," with J-H Wei, et al., *PLoS ONE*, 3, 2008, p. e1647.

"Active ADP-ribosylation factor-1 (ARF1) is required for mitotic Golgi fragmentation," with Y. Xiang, et al., *Journal of Biological Chemistry*, 282(30), 2007, pp. 21829-21837.

Service – Professor Wang served on the departmental Graduate Studies Committee (2006-2009) where he was a valued and conscientious member. He also traveled to China twice to interview potential graduate students. At the university level, he has become active in the Michigan Alzheimer's Disease Research Center, participating in their external review and serving on their Executive Committee (2008-present). At the national level, Professor Wang has reviewed manuscripts for many journals in his discipline and been an *ad hoc* reviewer of grant proposals from several funding agencies.

External Reviews:

Reviewer (A)

"Collectively, the body of work that he has carried out since independence is quite substantial and predicts a very productive future. Dr. Wang is a passionate, creative, highly committed scientist who will do whatever is needed to answer his questions. … His work is clean and elegant."

Reviewer (B)

"It is no exaggeration to say that Dr. Wang has taken up the mantle…in terms of using cell free systems to identify interesting phenomena in the Golgi apparatus and *trans* Golgi network (TGN), and then set out to discover the molecular basis for these phenomena. … There are probably fewer than 20 labs worldwide that are able to perform this sort of science at the level of proficiency that Want does. … He does superb work…"

Reviewer (C)

"His data have always been of high quality, and his recent *JCB [Journal of Cell Biology]* paper provides the best evidence to date that the two mammalian GRASPs play complementary roles in maintaining Golgi stacks. …I therefore rate Wang's 2010 *JCB* paper as one of the most significant articles to appear in this field during the past several years. …Wang is well positioned to establish a new area in the Golgi field."

Reviewer (D)

"I have been very impressed by Wang. He is an extremely capable investigator who has a broad interest in biology… …his work on the molecular machinery involved in the disassembly and reassembly of the Golgi complex in the context of cell division are very important contributions with great future potential. …I am convinced that Wang's achievements fully justify his promotion to the rank of associate professor..."

Reviewer (E)
"…Dr. Wang is an energetic investigator [of his generation], with good grant support and high impact publications, who promises to continue to be productive in his future career and would likely receive tenure at my institution. …I recommend him both for promotion and tenure."

Reviewer (F)
"Dr. Wang's research is of high quality and his career is on an upward trajectory. …I think very highly of his research program. … Dr. Wang's excellent funding record speaks to the fact that he is quite successful in his field. …[his] lab is one of the few in this country that can successfully carry out both the intensive biochemical experiments and the electron microscopic analysis required to study mitotic Golgi disassembly and reassembly. The recently published proteomic analysis…was a tour de force… Another example of Dr. Wang's creativity is the recognition that some Golgi structural proteins are mono-ubiquitinylated, a modification that appears to be regulated by the cell cycle. This discovery will no doubt turn out to be groundbreaking."

Reviewer (G)
"There is no question that Wang has succeeded in establishing a productive laboratory that has been producing high quality, quantitative analyses of Golgi stacking in mammalian cells."

Reviewer (H)
"…Wang has passed all the reasonable tests one would apply for a favorable tenure decision at a major research university."

Reviewer (I)
"…Wang is an effective and creative scientist who is willing to do the hard work needed to reach worthwhile goals. There is no doubt in my mind that he will continue to be effective, uncovering fundamental Golgi mechanisms and applying them to solving important biomedical problems."

Summary of Recommendation:
Professor Wang has established a national and international reputation and is a leader in his research field. He is an excellent teacher and mentor for students at all levels and he has provided valuable service within the university and at the national level. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Yanzhuang Wang be promoted to associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.

Terrence J. McDonald
Arthur F. Thurnau Professor,
Professor of History and Dean
College of Literature, Science, and the Arts

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