

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

Approved by the Regents
May 14, 2009

Amy Chang, associate professor of molecular, cellular, and developmental biology, without tenure, College of Literature, Science, and the Arts, is recommended for the granting of tenure to be held with her title of associate professor of molecular, cellular and developmental biology, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1986	Yale University
A.B.	1981	Harvard-Radcliffe College

Professional Record:

2003 – present	Associate Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
2001 – 2003	Associate Professor, Albert Einstein College of Medicine
1995 – 2001	Assistant Professor, Albert Einstein College of Medicine
1991 – 1994	Postdoctoral Fellow, Whitehead Institute for Biomedical Research
1987 – 1991	Postdoctoral Fellow and Associate Research Scientist, Yale University

Summary of Evaluation:

Teaching – Professor Chang is a dedicated and conscientious instructor who has made significant contributions to undergraduate and graduate education. She has participated in important curricular offerings in cell biology. In her laboratory she is a helpful and valued mentor of postdoctoral fellows and students, including an unusually large number of undergraduate researchers.

Research – Professor Chang’s research has focused on the fundamentally important problem of protein quality control, using a simple and experimentally tractable model system. Defects in protein quality control can lead to degenerative diseases in humans, making this a topic of medical interest. Together with her prior research accomplishments at Albert Einstein College, this work has established her as one of the major figures in her field. Since coming to Michigan, Professor Chang has produced six refereed research articles which have appeared in some of the best cell biology journals. Her research excellence is evident from her successful track record in garnering consistent external support. She has also been invited to present her work at external settings and to participate on federal grant review panels.

Recent and Significant Publications:

- “Heat shock response relieves ER stress,” with Y. Liu, *The European Molecular Biology Organization Journal*, 27 (2008) pp. 1049-1059.
- “Cytoplasmic Hsp70 promotes ubiquitination for ER-associated degradation of a misfolded mutant of the yeast plasma membrane ATPase, Pma1,” with S. Han and Y. Liu, *Journal of Biological Chemistry*, 282, 2007, pp. 26140-26149.
- “Quality control of a mutant plasma membrane ATPase: Ubiquitination prevents cell surface stability,” with Y. Liu, *Journal of Cell Science*, 119, 2006, pp. 360-369.

“Ubiquitin-mediated targeting of a mutant plasma membrane ATPase, Pma1-7, to the endosomal/vacuolar system in yeast,” with M. Pizzirusso, *Molecular Biology of the Cell*, 15, 2004, pp. 2401-2409.

Service – Professor Chang served a two-year term on the departmental Seminar Committee (2005-2006). During this period, the seminar program became a vibrant component of the intellectual life of the Department. She has also served on two faculty search committees. She is an active and positive participant in the professional life of the Department.

External Reviews:

Reviewer (A)

“This record of accomplishment indicates a high probability for a sustained and productive career. ...I would certainly place Dr. Chang in the top group of cell biologists studying quality control mechanisms. Furthermore, her combination of genetic and cell biological approaches on questions of membrane protein quality has provided truly unique insights.”

Reviewer (B)

“...Amy is one of the most original and rigorous scientists in our field. ...nobody has a system as well-defined and robust as Amy’s. ... She is a credit to your institution and, based on her future plans, I have no doubt that she will continue to be a leader in the area of quality control for years to come.”

Reviewer (C)

“From the clarity of her reviews, and the number of undergraduates on her vitae, it is clear that she also extends her critical and communication skills to the student body... Taken together, the breadth, creativity, importance of the scientific work, along with the scientific and academic service that is also part of the package makes Dr. Chang a winner...”

Reviewer (D)

“...Amy has been able to gain significant mechanistic insights into membrane protein trafficking, and degradation through thoughtful and careful use of yeast genetic techniques. ... Amy is very good at making connections with other observations in the literature to integrate into her own research. ...she has distinguished herself as a fine yeast molecular geneticist.”

Reviewer (E)

“...Dr. Chang is an outstanding and highly creative scientist... She has clearly established herself as one of the upcoming leaders in the field of protein quality control, and her current research indicates she will remain competitive in her field by demonstrating continued innovation and leadership.”

Reviewer (F)

“Amy would be granted tenure [at my institution], based upon her admirable record of publication and funding. ... I believe that you are lucky to have such an imaginative and talented colleague.”

Reviewer (G)

“...[Dr. Chang is] an outstanding candidate for tenure at any top-ranked research university. She is a wonderfully talented and productive cell biologist, and in my view the University of Michigan should lose no time in promoting her.”

Summary of Recommendation:

Professor Chang is a leading investigator who has made significant discoveries in an important area of cell biology. She is a dedicated teacher and mentor, and has participated in important service activities in the department. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Amy Chang be granted tenure to be held with her title of associate professor of molecular, cellular, and developmental biology in the 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

May 2009