

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

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

Academic Degrees:

| | | |
|-------|------|---------------------------------|
| Ph.D. | 1995 | University of Virginia |
| M.S. | 1990 | University of Nebraska, Lincoln |
| B.S. | 1984 | Nanjing University |

Professional Record:

| | |
|----------------|---|
| 2004 – present | Associate Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan |
| 2001 – 2004 | Assistant Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan |
| 1998 – 2001 | Assistant Professor, Department of Biology, University of Michigan |
| 1995 – 1998 | Research Associate, Salk Institute for Biological Science |

Summary of Evaluation:

Teaching – Professor Li's undergraduate teaching activities have included courses in plant physiology, molecular biology, and cell biology. He has offered the plant physiology course for many years. It represents a required course for plant biology concentrators and a valuable elective for students in other biological science concentrations. Students in this course have consistently given him high evaluation scores for his effectiveness and his enthusiasm. Professor Li has also demonstrated a strong commitment to undergraduate research training. He has mentored many undergraduates in his own laboratory and two of his recent manuscripts included undergraduate students as coauthors. He has been one of the leaders in a successful effort to establish an undergraduate research exchange program in biology and chemistry between Michigan and the Peking/Tsinghua Universities in China.

Research – Professor Li has continued a high-impact research program. He is internationally recognized as an authority on the steroid hormone brassinosteroid (BRs) in Arabidopsis. This hormone, present in many plant species, is essential for organ growth, responses to many environmental stresses, and for disease resistance. His discoveries are cited in many textbooks. Recently Professor Li has opened up a new avenue of investigation into a defective BR receptor which has led to four major publications. The external reviewers uniformly commented on the quality and impact of this work, specifically citing these papers. His funding has been continuous since his appointment to the tenure track in 1998 with current funding coming from the National Institutes of Health and the Department of Energy.

Recent and Significant Publications:

- “BIN2 functions redundantly with other GSK3-like kinases to regulate brassinosteroid signaling,” with Z. Yan, et al., *Plant Physiology*, 150, 2009, pp. 710-721.
- “A plant-specific calreticulin is a key retention factor for a defective brassinosteroid receptor in the endoplasmic reticulum,” with H. Jin, et al., *Proceedings of the National Academy of Sciences USA*, 106, 2009, pp. 13612-13617.
- “Mutations of an alpha-1,6 mannosyltransferase inhibit endoplasmic reticulum-associated degradation of defective brassinosteroid receptors in Arabidopsis,” with Z. Hong, et al., *Plant Cell*, 21, 2009, pp. 3792-3802.
- “Multiple mechanism-mediated retention of a defective brassinosteroid receptor in the endoplasmic reticulum,” with Z. Hong, et al., *Plant Cell*, 20, 2008, pp. 3418-3429.

Service – Professor Li has made significant contributions to service within the department and to his profession. He has served as the departmental associate chair for Graduate Admissions and on the Graduate Studies and Executive committees. He serves on the editorial boards of *Plant Cell Physiology*, *Molecular Plant*, and as an associate editor for *BMC Plant Biology*. He has also served as a reviewer for several other journals and granting agencies.

External Review:

Reviewer (A)

“He has made seminal contributions to both the initial characterization of the steroid receptor (BR1) and also, the mechanism by which the activated receptor triggers signaling. ... Through a suppressor screen he demonstrated that the mutant *bril-9* was defective... This is a wonderful example of the power of genetic screens to yield somewhat unexpected and important results...it provides an example of the valuable contribution that Jianming has made to the field.”

Reviewer (B)

“Jianming has been a leader in the field of steroid hormone signaling in plants... ..Li is not just a superb plant molecular biologist, his is a first-rate scientist. He is both fearless and tenacious in his approach. Jianming has very high standards, is very honest, and is an outstanding colleague.”

Reviewer (C)

“...Jianming has been consistently productive with a strong record of creative and insightful scholarship and excellent grant support. ... In my opinion, Jianming is one of the top five scientists working in BR signaling in the world. Jianming has published a number of very important papers and several of these would certainly be on a short list of significant articles in the BR field.”

Reviewer (D)

“Jianming’s research is on the cutting edge of plant cell and developmental biology and his stature in this field, since his groundbreaking work as a postdoc research in identifying a receptor for brassinosteroids, has been always in the top tier of all researchers world-wide. ...I have no doubt that he would be successful were he to seek a similar promotion at my institution.”

Reviewer (E)

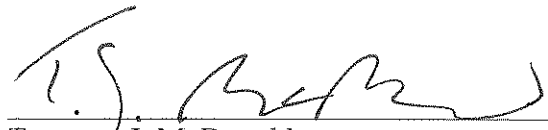
"...Dr. Li is an outstanding scientist, truly a leader of his generation of plant biologist[s]. ... The discoveries made by Dr. Li are clearly among the most important scientific finding in plant biology in the last 20 years."

Reviewer (F)

"...Jianming Li and his research group have made the biggest and most important contributions to the rapid advancement of this exciting field. ... Jianming has a great reputation in the field of plant biology. I consider him as the foremost authority in the world on BRs."

Summary of Recommendation:

Professor Li has a strong record of research, teaching, and service. In each area he has made important scientific contributions that are widely recognized at the national and international levels. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Jianming Li be promoted to 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

May 2011