

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

Cunning Duan, 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.	1991	University of Tokyo
M.S.	1988	Kochi University
B.S.	1982	Ocean University of China

Professional Record:

2006 – 2007	Associate Chair, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
2002 – present	Associate Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
2001 – 2002	Assistant Professor, Department of Molecular, Cellular, and Developmental Biology, University of Michigan
1996 – 2001	Assistant Professor, Department of Biology, University of Michigan
1995 – 1996	Research Associate, Center for Thrombosis and Haemostasis, University of North Carolina, Chapel Hill
1993 – 1995	Postdoctoral Fellow, Department of Medicine, University of North Carolina, Chapel Hill
1991 – 1993	Research Associate, School of Fisheries, University of Washington
1991	Research Fellow, Marine Biotechnology Institute, Japan

Summary of Evaluation:

Teaching – Professor Duan teaches a large enrollment undergraduate course viewed by pre-med students as instrumental and an upper level specialty course in molecular endocrinology that attracts over 50 undergraduate science concentrators. Students give him high rankings for his knowledge, enthusiasm, and friendliness in the classroom. He excels as a mentor for students in his research laboratory. In the last five years he has supervised or co-sponsored research projects for 38 undergraduate students and fourteen doctoral students.

Research – Professor Duan is widely recognized as an international leader in the field of endocrine control of growth. His scholarly contributions are viewed by his colleagues as unique in their creativity, scope and depth. Professor Duan's current research focuses on the regulatory functions of a series of IGF-I binding proteins, and this work has uncovered novel and unexpected roles for these proteins as mediators of cellular responses to environmental stress. His scholarly productivity has been high, with nineteen primary research publications, most in high profile journals, and six reviews or chapters since his promotion to tenure. He has published groundbreaking research in two different areas and he has been successful at obtaining extramural funding.

Recent and Significant Publications:

- “Insulin-like growth factor signaling regulates zebrafish embryo growth and development by promoting cell survival and cell cycle progression,” with P. Schlueter, et al., *Cell Death and Differentiation*, 14, 2007, pp. 1095-1105 (also Epub March 2, 2007; doi:10.1038/sj.cdd.4402109).
- “Several acidic amino acids in the N-domain of human insulin-like growth factor binding protein (IGFBP)-5 are important for its transactivation activity,” with Y. Zhao, et al., *Journal of Biological Chemistry*, 281, 2006, pp. 14184-14191.
- “Insulin-like growth factor binding protein-1 (IGFBP-1) mediates hypoxia-induced embryonic growth and developmental retardation,” with S. Kajimura and K. Aida, *Proceedings of the National Academy of Sciences USA*, 102, 2005, pp.1240-1245.
- “Evidence that IGF binding protein-5 functions as a ligand-independent transcriptional regulator in vascular smooth muscle cells,” with S. Li, et al., *CIR Research*, 94, 2004, pp. e46-54.

Service – Professor Duan has served on four departmental search committees and chaired one of those. He was associate chair for graduate admissions (2006-07), has been a member of committees for several interdisciplinary graduate training programs, and is serving on the departmental Executive Committee. He serves, or has served, on the editorial boards of four scientific journals and has been editor of *General and Comparative Endocrinology*. In addition, he served on the National Science Advisory Panel on Integrative Animal Biology (2006) and is on the organizing committees for two international meetings.

External Reviews:

Reviewer (A)

“His international recognition and reputation are growing rapidly and the high regard in which his work is already held is like to increase further.”

Reviewer (B)

“...he is an outstanding scientist, and enjoys the international reputation appropriate for this position. ... I can state without hesitation that he is the most innovative, out-of-the-box, and far reaching researcher working in his field today.”

Reviewer (C)

“He has published extensively in international peer-reviewed journals and has successfully generated continuous funding. ... Dr. Duan’s research, as elegantly summarized in his research statement, is very imaginative and creative, and encompasses growth regulation and development, using modern cell biological and molecular biological tools.”

Reviewer (D)

“Dr. Duan has been a pioneer... His observations are fundamental to an understanding of fish development, and more importantly, I believe they provide important insights into the development of more complex mammalian systems.”

Reviewer (E)

“Dr. Duan has been highly successful in establishing and implementing his own research program. He has excellent vision in identifying innovative research topics...”

Reviewer (F)

“He is an incredibly gifted scientist who combines exceptional analytical skills with an impressive work ethic. ... His presentations are informative, concise, and state-of-the-art. ... The study was truly novel, and the analysis was simply elegant.”

Reviewer (G)

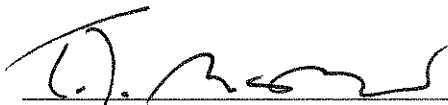
“The breadth and depth of the quality of Dr. Duan’s research are truly remarkable. ...he is considered a rising star with unlimited potential who has already achieved first-rate success.”

Reviewer (H)

“I would regard Dr. Duan’s research to be highly innovative, original and exciting. ...I would strongly support his promotion within the University of Michigan system as I would within our own university.”

Summary of Recommendation:

Professor Duan has established an international reputation for innovative work in his field. He has taught with distinction in the classroom and at the lab bench, and has performed important service for the Department. The Executive Committee of the College of Literature, Science and the Arts and I recommend that Associate Professor Cunming Duan be promoted to the rank of professor of molecular, cellular, and developmental biology, with tenure, 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

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