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

Approved by the Regents May 20, 2010

Kenneth M. Cadigan, 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.	1989	Dartmouth College
B.A.	1983	Connecticut College

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	
1993 – 1998	Postdoctoral Fellow, Stanford University School of Medicine	
1989 – 1993	Postdoctoral Fellow, University of Basel	

Summary of Evaluations:

<u>Teaching</u> – Professor Cadigan has a strong record of teaching at both the undergraduate and graduate level. At the undergraduate level, he has served as a research mentor and classroom instructor. He has taught courses central to life sciences concentrators, which have large enrollments and are critical to the educational mission of the Department and the University. Since promotion, 13 undergraduates have carried out research projects under Professor Cadigan's supervision. At the graduate level, six students have carried out their thesis research under him and 28 have asked him to serve on their dissertation committees. He also developed and taught the model systems course required for all incoming graduate students. Student comments and evaluations demonstrate that he brings a high level of commitment, rigor, and excellence to these varied educational settings.

Research – Since promotion to tenure, Professor Cadigan has expanded and intensified his research productivity and profile. This includes 15 peer-reviewed research publications in highly respected and recognized journals as well as numerous invited reviews and book chapters. His work on the control of gene activity by the Wnt pathway is essential for understanding both normal development and the progression of cancer. The impact of Professor Cadigan's research is also reflected in the numerous research presentations he has been invited to give at prominent international scientific meetings as well as at other universities and institutes. He also has a strong record of research funding from sources such as the National Institutes of Health, the National Science Foundation, and the Cancer Center.

Recent and Significant Publications:

- "Drosophila ptip is essential for anterior/posterior patterning in development and interacts with the PcG and trxG pathways," with M. Fang, et al., *Development*, 136, 2009, pp. 1929-1938.
- "The microRNA miR-8 is a conserved negative regulator of Wnt signaling," with J. Kennell, et al., *Proceedings of the National. Academy of Science USA*, 105, 2008, pp. 15417-15422.
- "Activation of wingless targets requires bipartite recognition of DNA by TCF," with M. V. Chang, et al., *Current Biology*, 18, 2008, pp. 1877-1881.
- "CBP/p300 are bimodal regulators of Wnt signaling," with J. Li, et al., *The EMBO Journal*, 26, 2007, pp. 2284-2294.

Service – Since his promotion in 2004, Professor Cadigan's service has been heavily focused on the graduate program. He was in charge of the masters program (2003-2008). He was involved with recruiting doctoral candidates as the associate chair of Graduate Admissions (2005-2006) and as a member of the graduate admissions committee (2007). His interest in graduate students continued as a member of the Graduate Studies Committee (2997-2008). Since 2008, however, his focus has been at the undergraduate level, serving as associate chair of undergraduate studies. At the national level he served on review panels for the National Institutes of Health and the National Science Foundation.

External Reviews:

Reviewer (A)

"Cadigan is certainly among the best researchers in our field of research, and he gives excellent seminars and is an engaged discussant at conferences."

Reviewer (B)

"Ken has been very productive... I am impressed with his technical breadth and the way that he has focused on an important and interesting biological question. ... I expect that he will continue to be productive and original in the years ahead."

Reviewer (C)

"Dr. Cadigan is a very well respected member of the Wnt community as is evidenced for instance by the frequent invitations for commentaries, his many invited seminars, the organization of the Wnt workshops, etc. ...I would characterize Dr. Cadigan as a solid and often original scientist."

Reviewer (D)

"...Ken has established himself as a leading figure in the Wnt signaling field, particularly in transcriptional regulation by Wnt/beta-catenin signaling. He has been frequently invited to meetings when such topics were in the program. ...Ken's lab represents probably one of the top three or so in the world. His scholarly work has influence beyond fly development given the conserved nature of Wnt/beta-catenin signaling."

Reviewer (E)

"...he is not the type of scientist that simply goes for the low-hanging fruit, but is instead dedicated to solving an important biological problem, even if it is difficult."

Reviewer (F)

"...based on Ken's productivity, grant support and reputation, I have no doubt that he would be a strong candidate for promotion here..."

Reviewer (G)

"...Ken has a number of exciting ongoing projects. His productivity in the past few years has been excellent and he has published many important high quality papers. He is well known internationally..."

Reviewer (H)

"He is a very quick thinker, with a great critical scientific sense and a deep knowledge of the literature. People always flock to him for advice. ... Ken is making steady and important contributions and shows every sign of continuing to do so."

Summary of Recommendation:

Professor Cadigan has combined outstanding research, teaching, and service together in a way that advances scientific knowledge and educates students at all levels. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Kenneth M. Cadigan 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

May 2010