

PROMOTION RECOMMENDATION  
University of Michigan-Flint  
College of Arts and Sciences  
Department of Biology

Joseph F. Sucic, associate professor of biology, with tenure, Department of Biology, College of Arts and Sciences, is recommended for promotion to professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

Academic Degrees:

Ph.D.	1992	Virginia Polytechnic Institute and State University, Blacksburg
M.S.	1988	Virginia Polytechnic Institute and State University, Blacksburg
B.A.	1984	Thiel College, Greenville, Pennsylvania

Professional Record:

2002 – Present	Associate Professor of Biology, with tenure, University of Michigan-Flint
1996 – 2002	Assistant Professor of Biology, University of Michigan-Flint
1992 – 1996	Post-doctoral Researcher, Department of Microbiology and Molecular Genetics and Markey Center for Molecular Genetics, University of Vermont
1985 – 1992	Undergraduate Researcher, Department of Biology, Virginia Polytechnic Institute and State University
1983 – 1984	Senior Researcher, Department of Biology, Thiel College

Summary of Evaluation:

Teaching – Professor Sucic is a gifted teacher who oversees a broad range of courses from the freshman to the graduate level. He has advised and mentored students. Since 2002 he has involved 35 students in undergraduate research projects, with over two dozen becoming co-authors. During the same period, he mentored six Master's thesis students. He is an excellent teacher who fully embraces the College's focus on teaching.

Research – To date, Professor Sucic has co-authored sixteen peer-reviewed articles in quality scientific journals. Since his initial promotion in 2002, he has two additional publications (in *Brain Research*), with an additional article in circulation, and a robust plan for additional research and publication.

Recent and Significant Publications:

*Peer-Reviewed Research Papers*

Eckwahl, M. J.,\* Lynd, J.,\* Hogg, J. R.,\* Shomali, L.,\* Lindborg, B.,\* Hockmann, K. M.,\* MacFadden, A.,\* Sucic, H. B. and Sucic, J. F. "Disulfide Bonds in the Catalytic Domain are Necessary for Furin Maturation and Trafficking." Submitted to the *Biochemical Journal*.  
Cornett, A.,\* Sucic, J. F., Hillsburg, D., Cyr, L., Johnson, C., Polanco, A., Figuereo, J., Cabine, K.,\* Russo, N.,\* Sturtevant, A. and Jarvinen, M. K. 2011. "Altered Glial Gene

- Expression, Density, and Architecture in the Visual Cortex Upon Retinal Degeneration." *Brain Research*, 1422:46-56.
- Jarvinen, M. K., Chinnaswamy, K.,\* Sturtevant, A., Hatley, N.\* and Sucic, J. F. 2010. "Effects of Age and Retinal Degeneration on the Expression of Proprotein Convertases in the Visual Cortex." *Brain Research*, 1317:1-12.
- Kang, T., Zhao, Y. G., Pei, D., Sucic, J. F. and Sang, Q. A. 2002. "Intracellular Activation of Human Adamalysin 19/Disintegrin and Metalloproteinase 19 by Furin Occurs Via One of the Two Consecutive Recognition Sites." *Journal of Biological Chemistry*, 277:25583-25591.
- Pinnix, I., Council, J. E., Roseberry, B., Onstead, L., Mallender, W., Sucic, J. F. and Sambamurti, K. 2001. "Convertases Other Than Furin Cleave  $\beta$ -Secretase to its Mature Form." *Federation of American Societies for Experimental Biology (FASEB) Journal*, 15:1810-1812.
- Sucic, J. F., Moehring, J. M., Inocencio, N. M., Luchini, J. W. and Moehring, T. J. 1999. "Endoprotease PACE4 is Calcium-dependent, Temperature Sensitive, and Can Partially Rescue the Phenotype of a Furin-deficient Cell Strain." *Biochemical Journal*, 339:639-647.
- Sucic, J. F., Spence, M. J. and Moehring, T. J. 1998. "Structural and Functional Analysis of the Protein Products Derived From Mutant *fur* Alleles in an Endoprotease-deficient Chinese Hamster Ovary Cell Strain." *Somatic Cell and Molecular Genetics*, 24:75-90.
- Inocencio, N. M., Sucic, J. F., Moehring, J. M., Spence, M. J. and Moehring, T. J. 1997. "Endoprotease Activities Other Than Furin and PACE4 With a Role in Processing of HIV-1 gp160 Glycoproteins in CHO-K1 Cells." *Journal of Biological Chemistry*, 272:1344-1348.
- Spence, M. J., Sucic, J. F., Foley, B. T. and Moehring, T. J. 1995. "Analysis of Mutations in Alleles of the *fur* Gene From an Endoprotease-deficient Chinese Hamster Ovary Cell Strain." *Somatic Cell and Molecular Genetics*, 21:1-18.
- Rogers, P. V., Sucic, J. F., Yin, Y. and Rutherford, C. L. 1994. "Analysis of Glycogen Phosphorylase Mutants in *Dictyostelium*: Evidence for Coordinated Regulation of the gp-1 and gp-2 Gene Products." *Differentiation*, 56:1-12.
- Sucic, J. F., Luo, S., Williamson, B. D., Yin, Y., Rogers, P. V. and Rutherford, C. L. 1993. "Developmental and Cyclic AMP-mediated Regulation of Glycogen Phosphorylase 1 in *Dictyostelium discoideum*." *J. Gen. Micro.*, 139:3043-3052.
- Sucic, J. F., Selmin, O. and Rutherford, C. L. 1993. "Regulation of the *Dictyostelium* Glycogen Phosphorylase 2 Gene by Cyclic AMP." *Developmental Genetics*, 14:313-322.
- Rutherford, C. L., Peery, R. B., Sucic, J. F., Yin, Y., Rogers, P. V., Luo, S. and Selmin, O. 1992. "Cloning, Structural Analysis, and Expression of the Glycogen Phosphorylase 2 Gene in *Dictyostelium*." *Journal of Biological Chemistry*, 267:2294-2302.
- Rogers, P. V., Luo, S., Sucic, J. F. and Rutherford, C. L. 1992. "Characterization and Cloning of Glycogen Phosphorylase 1 From *Dictyostelium discoideum*." *Biochimica et Biophysica Acta*, 1129:262-272.
- Brickey, D. A., Naranan, V., Sucic, J. F. and Rutherford, C. L. 1990. "The Regulation of the Two Forms of Glycogen Phosphorylase in *Dictyostelium discoideum* by cAMP and its Analogs." *Molecular and Cellular Biochemistry*, 97:17-33.
- Rutherford, C. L., Naranan, V., Brickey, D. A., Sucic, J. F., Rogers, P. V. and Selmin, O. 1988. "Glycogen Phosphorylase in *Dictyostelium discoideum*." *Developmental Genetics*, 9:469-481.

Naranan, V., Sucic, J. F., Brickey, D. A. and Rutherford, C. L. 1988. "The Relationship Between Two Forms of Glycogen Phosphorylase in *Dictyostelium discoideum*." *Differentiation*, 38:1-10.

*Manuscripts in Preparation:*

Lynd, J., Dudock, R. and Sucic, J. F. "A Cost-Effective, Safe, and Visually Interesting Enzyme Laboratory for Freshman Biology Students."

Sucic, J. F., Walker, N. M.,\* McGregor, N.,\* Stamper, E.,\* Brown, N.,\* Dasanayaka, M.,\* Chaudhari, S.,\* Lerche, E.,\* Mayrberger, J.\* and Myers, S. F. "Substrate Specificity in the Proprotein Convertases: A Role for Amino Acids Adjacent to the Consensus Cleavage Sequence in Proproteins."

\* Indicates University of Michigan-Flint undergraduate student.

Service – In addition to thoughtful attention and involvement in multiple Biology Department committees, Professor Sucic has served as program director of the Biology Masters since 2004. In this and other capacities he has demonstrated thoughtful and insightful leadership that has advanced the missions of his Department and the College.

External Reviewers:

Reviewer (A):

"The three papers that were included in the package are well done and investigate significant questions in molecular neurobiology. The pending paper on Furin processing is a solid mechanistic examination on a molecule of importance. The results are quite interesting in that only one of the disulfide bonds seems important for the initial processing to the Golgi apparatus."

Reviewer (B):

"'Altered glial gene expression, density and architecture in the visual cortex upon retinal degeneration' paper was outstanding. He used the most current molecular techniques, such as QRT-PCR, for analyzing gene expression. I believe it was a significant contribution to brain research."

Reviewer (C):

"I would regard his 2012 *Biochemical Journal* paper on furin to become his best publication."

Reviewer (D):

"The quality of all his publications is commendable, I also noticed that several students as well as colleagues from other institutions participated in his research. Quite a few of his graduate advisees who earned MS degrees have also succeeded in getting admitted into Medical [sic] and graduate schools."

Reviewer (E):

"... Dr. Sucic's scholarly activity is of high quality, has contributed to the field and shows promise for continued professional growth and productivity."

Reviewer (F):

"Both of Dr. Sucic's papers are largely descriptive and are a foundation for future mechanistic projects. I am not sure I consider either to be outstanding, though both are clearly solid contributions published in a highly reputable journal in his field. The peer review system is robust, and the publication of these articles in *Brain Research* speaks to their high quality."

Summary of Recommendation:

Based on excellent teaching and service and a re-invigorated research program that has been favorably assessed by external scholars, the College of Arts and Sciences Executive Committee and Dean enthusiastically recommend the promotion of Joseph F. Sucic to the rank of professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

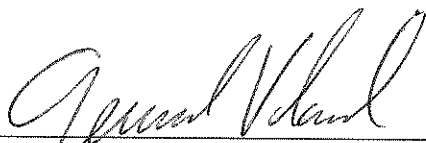
Recommended by:



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D. J. Trela, Dean  
College of Arts and Sciences

Recommendation endorsed by:



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Gerard Voland, Provost and  
Vice-Chancellor for Academic Affairs



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Ruth J. Person, Chancellor  
University of Michigan-Flint

May 2013