

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

Lyle A. Simmons, assistant professor of molecular, cellular, and developmental biology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2003	Michigan State University
B.S.	1996	Alma College

Professional Record:

2008 – present	Assistant Professor, Department of Molecular, Cellular, and Developmental Biology (MCDB), University of Michigan
2003 – 2008	Post-doctoral Fellow, Massachusetts Institute of Technology
2003	Research Fellow, Michigan State University

Summary of Evaluation:

Teaching – Professor Simmons is a highly successful teacher who is deeply committed to education. His classes have been very well-received and student evaluations resulted in nearly perfect Q2 scores. He has also provided a productive research training environment for undergraduate and graduate students, whose work has resulted in publications in the top journals in the field. Professor Simmons has mentored six doctoral students, one post-doctoral fellow, two Master's students, and eleven undergraduates. His students have won awards, including one undergraduate whose honors thesis won the 2012 inaugural Marshall Nirenberg Award in the Life Sciences from the Honors College and the 2012 winner of the Christine Psujek Memorial Award for the top honors thesis across all biology majors. He is deeply invested in graduate education, especially toward increasing diversity. He was a driving force in the establishment of the new MCDB thesis-based Pathways Masters' degree program, which is a bridge to Ph.D. programs for qualified albeit under-prepared students.

Research – Professor Simmons has established a vibrant research program that focuses on a fundamental biological problem: the repair of errors made in the genome during DNA replication. Since joining the faculty at Michigan, he has publishing fifteen papers – twelve of these are on work started in his own laboratory and his research group has published papers in the top journals in microbiology and cell/molecular biology. He has also been successful at obtaining external funding to support his research, including major grants from both the National Science Foundation and the National Institutes of Health. This is a notable accomplishment for an assistant professor. He has also formed collaborations with respected researchers in the Medical School and in the Department of Chemistry.

Recent and Significant Publications:

"The cost of rNTP/dNTP pool imbalance at the replication fork," with N. Yao, et al.,  
*Proceedings of the National Academy of Sciences USA*, 110(32), 2013, pp. 12942-12947.

- “DNA repair and genome maintenance in *Bacillus subtilis*,” with J. S. Lenhart, et al., *Microbiology and Molecular Biology Reviews*, 76(3), 2012, pp. 530-564.
- “Mismatch repair causes the dynamic release of an essential DNA polymerase from the replication fork,” with A. D. Klocko, et al., *Molecular Microbiology*, 82(3), 2011, pp. 648-663.
- “Mutations in the *Bacillus subtilis* clamp that separate its roles in DNA replication from mismatch repair,” with N. M. Dupes, et al., *Journal of Bacteriology*, 192(13), 2010, pp. 3452-3463.

Service – Professor Simmons has an outstanding record of service with a particular focus on increasing student diversity. He not only served as the departmental representative on Rackham Graduate School’s Faculty Allies for Diversity in Graduate Education, which deals specifically with issues of recruitment, admission, retention, and completion of under-represented graduate students, but was also a member of the Strategies Toward Excellent Practices (STEP) committee for improving the department’s graduate programs. Professor Simmons took the lead in developing the new thesis-based Master’s program in the department, which serves as a bridge to pursuing Ph.D. training for students who are under-represented in the field of biology and need additional training.

External Reviewers:

Reviewer (A)

“...he is intellectually rigorous, he gives good scientific presentations, he writes well, and he has been able to attract funding from federal agencies. I have no doubt that he will continue to be an important force in the replication/repair field for a long time. ... The trajectory is excellent.”

Reviewer (B)

“...I would rank Lyle’s work as exceptional... ...feel confident that Lyle will continue to flourish as a scientist and maintain the research momentum that he has built. ... most importantly, Lyle has been exceptionally productive in terms of the number of papers that he has published in top-tier journals as an assistant professor.”

Reviewer (C)

“...Lyle’s studies of this problem have been, in my opinion, the most definitive, thorough, and elegant investigations to date and represent significant progress in this area. ...I consider Lyle Simmons to be a very strong candidate for promotion to Associate Professor with tenure. He has excelled in all areas expected of a new faculty member including establishing a well funded and successful research program, teaching, and service. I am confident that his dossier would be favorably reviewed in my own Department...”

Reviewer (D)

“... The work from his lab is of the highest quality.”

Reviewer (E)

“...Dr. Simmons [sic] work stands out as among the very best, both for its quality and its significance... ... his productivity is clearly on the rise.”

Reviewer (F)

"It is with great pleasure that I recommend Dr. Lyle Simmons for promotion to the rank of associate professor with tenure. He has formed a productive, funded and exciting research program and has been active in teaching and service to the university and the scientific community. ...you are fortunate to have such an accomplished faculty member (in his cohort) in your department."

Reviewer (G)

"His grant situation is very strong and this shows that others agree with me that his work [is] solid and important."

Reviewer (H)

"I recently attended the Microbial Genome Maintenance Meeting in Oslo at which [Dr. Simmons] spoke. Not only did [he] give one of the most exciting talks at the meeting, but also I was also able to hear what people said about him. It is clear that [he] has emerged a force in this field at the international level."

Summary of Recommendation:

Professor Simmons research is internationally recognized. He has demonstrated an exceptional commitment to teaching and service. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Lyle A. Simmons be promoted to the rank of associate professor of molecular, cellular, and developmental biology, with tenure, College of Literature, Science, and the Arts.



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Susan A. Gelman  
Heinz Werner Distinguished University Professor,  
Professor of Psychology and Interim Dean,  
College of Literature, Science, and the Arts

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