

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

Stephen A. Smith, associate professor of ecology and evolutionary biology, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of ecology and evolutionary biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2008	Yale University
M.S.	2005	Yale University
B.A.	2003	Sarah Lawrence College

Professional Record:

2018–present	Associate Professor, Department of Ecology and Evolutionary Biology, University of Michigan
2012–2018	Assistant Professor, Department of Ecology and Evolutionary Biology, University of Michigan
2010–2011	iPlant Post-doctoral Researcher, Casey Dunn and Alexandros Stamatakis
2008–2010	NESCent Post-doctoral Fellow, Duke University

Summary of Evaluation:

Teaching: Professor Smith is deeply committed to teaching undergraduate students and regularly volunteers to teach core classes such as EEB390, an introductory evolution course required for many biology majors. He has also taught a popular non-majors course for undergraduates called Science, Reason, and Nonsense, and an upper-level Phylogenetic Methods and Theory course. He will soon teach a new course involving analysis of data collected by students in one of the introductory biology labs. His teaching style engages students and draws them into courses many were initially not excited to take. Professor Smith takes opportunities while teaching large undergraduate courses to advance diversity, equity, and inclusion. In his research laboratory, he has mentored eight doctoral students, served on an additional twenty-two graduate committees, supervised six undergraduate research experiences, and trained thirteen post-doctoral researchers, many of which now hold independent faculty positions.

Research: Professor Smith is a world-leader in the field of phylogenetics, which seeks to resolve ancestral relationships among plants and other organisms. He has a rare combination of technical expertise, conceptual understanding, and familiarity with natural history that allows him to make unique contributions to the field, differentiating his work from these subfields. He has a stellar publication record with more than 100 publications, many in prominent journals. These publications are exceptionally well cited: he is one of twenty-seven UM faculty identified by Web of Science as a Highly Cited Researcher in 2021. As an associate professor, Professor Smith's research has been funded by four grants from the National Science Foundation and internal awards. He is an active contributor to many international consortia and recognized as a scholar that simultaneously advances the field and is explicit about the limits to understanding in the field.

Recent and Significant Publications:

- Parins-Fukuchi, C., Stull, G. W., & Smith, S. A. (2021). Phylogenomic conflict coincides with rapid morphological innovation. *Proceedings of the National Academy of Sciences of the United States of America*, 118(19). <https://doi.org/10.1073/pnas.2023058118>
- Smith, S. A., Walker-Hale, N., Walker, J. F., & Brown, J. (2020). Phylogenetic conflicts, combinability, and deep phylogenomics in plants. *Systematic Biology*, 69(3), 579-592.
- Stull, G. W., Soltis, P., Soltis, D., Gitzendanner, M., & Smith, S. A. (2020). Nuclear phylogenomic analyses of asterids conflict with plastome trees and support novel relationships among major lineages. *American Journal of Botany*, 107(5), 790-805.
- Smith, S. A., Walker-Hale, N., & Walker, J. F. (2020). Intragenic conflict in phylogenomic data sets. *Molecular Biology and Evolution*, 37(11), 3380-3388.

Service: Professor Smith has served on key committees in EEB (Undergrad Affairs, Admissions, and Executive Committees) as well as committees supporting our EEB museums (Education, Advisory, and Digital Collections Committees). He has also served on three important LSA committees (Race and Ethnicity, Nominating, and Faculty IT Committees). At the department level, his most significant service contribution has been as the associate chair for undergraduate education, where he has refined the Program in Biology curriculum, identified barriers to participation in field courses and research museum experiences, and developed new courses to teach quantitative and computational methods.

External Reviewers:

Reviewer (A): "I have been most impressed with his work on gene and genomic conflicts and their evolutionary significance... [Professor Smith] and his collaborators have highlight[ed] major concrete examples, and are now providing new analytical approaches to such problems... But, what I find most impressive about [Professor Smith's] recent trajectory is his full-on engagement with the educational mission of the University."

Reviewer (B): "Dr. Smith has established a very impressive independent research program. By the numbers, he has published multiple high impact papers, and has had an excellent funding record. More generally, though, he is a highly regarded member of the phylogenetic biology community. One reason for this is that he consistently advances pressing questions of broad interest by innovating new methods and tools that are themselves of interest to a very broad community."

Reviewer (C): "Taken as a whole, this is an impressive body of work, intellectually coherent and published in first-tier journals. Dr. Smith's papers often raise significant new questions or present new methods that are of benefit to investigators in a wide range of different systems."

Reviewer (D): "[Professor Smith] is a leader in the development and application of phylogenetic methods. The enormous data sets that he works with are ones that most of us wish we had, but once we have them we look to Dr. Smith's work to learn how to analyze them. His work stands out for being fearless and honest. He grapples with issues that many systematists choose to avoid or ignore."

Reviewer (E): “Several of [his] papers are on the reading list for my...course, and I view Dr. Smith as one of the most creative and influential computational biologists involved in systematics and diversity science.”

Reviewer (F): “In terms of contributions to the field, we can note Stephen Smith’s continued effort to develop publicly available software, and his role as an associate editor at *Systematic Biology*, as well as a reviewer for diverse journals and grant agencies...Stephen Smith is deeply involved in the undergraduate affairs...[his dossier] demonstrates his commitment to improving undergraduate’s [sic] education, with a special attention to students from underserved and underrepresented backgrounds”

Summary of Recommendation:

Professor Smith has developed a vigorous and well-funded research program that develops phylogenetic methods, applies them to resolve the tree of life, and uses phylogenetic trees to understand trait evolution. He is a dedicated educator who has provided excellent educational experiences to our students and has helped shape curricular reform. He has also made significant service contributions, especially to our undergraduate biology program, and works to increase diversity, equity, and inclusion. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Stephen A. Smith be promoted to the rank of professor of ecology and evolutionary biology, with tenure, College of Literature, Science, and the Arts.



Anne Curzan, Dean  
Geneva Smitherman Collegiate Professor of  
English Language and Literature, Linguistics,  
and Education  
Arthur F. Thurnau Professor  
College of Literature, Science, and the Arts

May 2022