Approved by the Regents
May 21, 2020

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

Timothy Y. James, 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.	2003	Duke University
B.S.	1996	University of Georgia

Professional Record:

2015 – present	Associate Professor and Associate Curator of Fungi, Department of Ecology and Evolutionary Biology, University of Michigan
2015 – present	Lewis E. Wehmeyer and Elaine Prince Wehmeyer Professor of Fungal Taxonomy, Department of Ecology and Evolutionary Biology, University of Michigan
2009 – 2015	Assistant Professor and Assistant Curator of Fungi, Department of Ecology and Evolutionary Biology, University of Michigan
2008 – 2009	Post-doctoral Researcher, Department of Biology, McMaster University
2006 – 2007	Post-doctoral researcher, Department of Evolutionary Biology, Uppsala University
2003 – 2006	Post-doctoral Researcher, Department of Biology, Duke University

Summary of Evaluation:

Teaching – Professor James is an award-winning instructor who teaches core undergraduate courses within the Program in Biology (Biology 173: *Introductory Biology Lab*, Biology 305: *Genetics*) as well as an advanced elective course open to graduate students and advanced undergraduate students (EEB 468: *Biology of Fungi*). In addition to lectures, EEB 468 and Biology 173 both have extensive, but distinct, laboratory components. The former is focused on fungal diversity; the latter is a new and highly innovative Authentic Research Connection version of the Biology 173 Introductory Biology lab course entitled "Experimental Evolution of Yeast." This involves a semester-long research project centered on studying the evolution in real time of cultured yeast strains. Outside of the classroom, Professor James is also an accomplished research mentor of undergraduate students, graduate students, and post-doctoral fellows.

Research – Professor James has established a vibrant and dynamic research program in mycology at Michigan that is successfully addressing fundamental questions in fungal evolution and biodiversity using genetic and genomic approaches. His work spans the entire fungal tree of life, ranging in temporal scales from the early branching fungi of the Proterozoic to contemporary multigenerational studies of species of broad interest including virulent chytrid pathogens of amphibians and domesticated strains of the pin mold *Rhizophus*. External reviewers agree that Professor James has an impressively comprehensive and impactful research record that has clearly established him as a national and international leader in the field of mycology.

Recent and Significant Publications:

"Fungarium specimens – a largely untapped source in global change biology and beyond," with C. Andrew, et al., *Philosophical Transactions of the Royal Society B*, Vol. 374, issue 1793, p. 20170392, 2019, DOI: https://doi.org/10.1098/rstb.2017.0392.

"Globally invasive genotypes of the amphibian chytrid outcompete an enzootic lineage in coinfections," with T. S Jenkinson, et al., *Proceedings of the Royal Society B*, Vol. 285, issue 1893, 2018, p. 20181894.

"Leveraging single-cell genomics to expand the fungal tree of life," with S. R. Ahrendt, et al., *Nature Microbiology*, 3, 2018, pp. 1417-1428.

"The genome of an intranuclear parasite, Para Microsporidium sac amoebae, unveils alternative adaptations to obligate intracellular parasitism," with C. A. Quandt, et al., *eLifeSciences*, 2017. DOI: 10.7554/eLife.29594.

Service – Professor James is engaged in extensive service at the departmental, university, and professional society levels. He has served on multiple important committees in his department, and his most outstanding service in recent years has been as director of the department's Frontiers Masters' Program. The goal of this bridging program is to act as a stepping-stone for students from a non-traditional background interested in obtaining a doctorate in ecology and evolutionary biology. Since assuming the leadership of Frontiers, Professor James has extensively revised the initial summer section and restructured other elements to enhance matriculation of the graduates. Professor James engages in important professional service not only through serving in editorial and reviewer roles, but also through his active involvement in the Mycological Society of America and through his influential outreach on the safe harvesting and consumption of regional wild mushrooms.

External Reviewers:

Reviewer (A)

"Tim presents four research themes (I. Fungal dark matter in the tree of life; II. Population genetics of *Batrachochytrium dendrobatidis*, III. Mitotic recombination and loss of heterozygosity in diploid fungi; and IV. Genomics of domestication in *Rhizopus*). Each of these themes represents a substantial body of work during his time at the University of Michigan. Further, each theme is seminal in its area and each presents an exciting plan for the future. … Even one of Tim's themes might be enough for a full academic career, with promotion. Collectively, the themes represent exceptional diversity in research and place Tim in an elevated position in his field."

Reviewer (B)

"This citation record would be outstanding in any field, but in the field of *Mycology* it likely places him in the top 1% of researchers in the world. … The breadth of Dr. James' work makes it difficult to select a proper peer group for comparison. Specifically I have trouble identifying anyone that touched the field as broadly and pervasively at this stage in their career."

Reviewer (C)

"There are many influential groups working on chytridian fungi, although his approach to

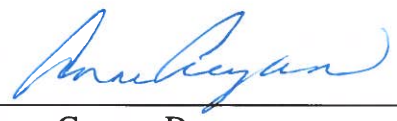
studying populations, and single-cell genomics is really cutting edge. The fact that most species of fungi cannot be cultivated, makes this highly exciting, especially as he is now able to study the early-diverging fungal lineages, helping to explore fungal diversity, and linking this to metabolic potential of these organisms."

Reviewer (D)
"His work with using the collection to assess changes in phenology due to climate change and to inform [the] North American Fungus Flora project are both examples of appropriate and contemporary uses of the data housed in such a collection. The recent addition of the orphaned Chytrid collections…is a terrific acquisition that will provide opportunities for new research while preserving irreplaceable research collections."

Reviewer (E)
"His record of accomplishment is excellent. He has published important papers on phylogenetics of chytrids in relation to other fungi, evolution and ecology of pathogenicity (particularly addressing societally important amphibian diseases), and various aspects of molecular evolution. He is a widely recognized expert on fungi…"

Reviewer (F)
"Using single cell genomic approaches he has demystified a number of the 'lower' fungi now known to be extremely diverse and ubiquitous. … I would estimate that Dr. James ranks among the best mycologists in the world…"

Summary of Recommendation:
Professor James' dynamic research program in mycology has continued to flourish with an ever-increasing scholarly impact. He is taking on the most important and interesting research questions in this field, including using single-cell genomics to reveal the fundamental structure of the fungal tree of life and reconstructing the evolution of pathogenicity in amphibian-killing chytrids. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Timothy Y. James 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

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