

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

Kevin L. Tang, assistant professor of biology, Department of Biology, College of Arts and Sciences, is recommended for promotion to associate professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2002	University of Kansas, Lawrence
B.A.	1995	Cornell University, Ithaca, New York

Professional Record:

2011 – Present	Assistant Professor of Biology, University of Michigan-Flint
2005 – 2011	Post-doctoral Researcher, Saint Louis University, Missouri
2004 – 2005	Post-doctoral Instructor/Researcher, Loyola University, Chicago, Illinois
2002 – 2004	Lerner-Gray Postdoctoral Researcher, American Museum of Natural History, New York, New York

Summary of Evaluation:

Teaching – Professor Tang’s careful and meticulous preparation for his classes, and clear communication of expectations, are key components to enhancing student learning in his biology courses. By adhering to these principles, Professor Tang believes that students can focus on learning the underlying concepts and not “administrative details.” This is not to say that Professor Tang is inflexible; in fact as a teacher, he believes that it is his responsibility to listen to feedback and improve his courses both in preparation for the next offering and midstream in response to the prior knowledge, preparation, and expectations of specific cohorts of students. Regarding the application of his craft, Professor Tang has taught six different classes ranging from introductory “Biology: Its Human Implications I and II” to upper division “Genetics,” and graduate courses such as “Biology, Ecology, and Management of Fishes” and “Seminar.” Not only is his teaching portfolio diverse in terms of content, Professor Tang also demonstrates versatility in his pedagogy utilizing lectures, laboratory, discussions and combinations of the three. Finally, his collaborative research with students represents an integral component of Professor Tang’s teaching. Since his appointment as assistant professor of biology, Professor Tang has worked with seven students, many of whom have gone onto advanced study in a variety of medical fields and graduate studies. Professor Tang’s dedication to teaching is also demonstrated by his work with fellow faculty members in a Marian Wright Teaching Circle entitled “Reaching Across Disciplinary Boundaries: Collaboration in Teaching.” Both in his work with students and colleagues, Professor Tang’s passion for the acquisition and sharing of knowledge is manifest in his teaching where he conveys the interest, excitement, and wonder of his discipline.

Research – Professor Tang is an evolutionary biologist and zoologist who specializes in ichthyology. More specifically, Professor Tang’s research focuses on the phylogenetic systematics of fishes (their evolution and classification) by analyzing properties which are transmitted genetically from ancestor to descendant. Methodologically, Professor Tang utilizes modern molecular genetics techniques to sequence the DNA of fishes and to subsequently analyze those data to determine the evolutionary relationships between different fish groups. Currently, Professor Tang is pursuing two lines of research. The first resolves the phylogenetic relationships among major marine families that include Embiotocidae (surfperches), Ophidiidae (cusk-eels), and Pomacentridae (damsel-fishes and clownfishes). The second research initiative analyzes the phylogenetic relationships among the species of Cyprinidae (carps, minnows, and shiners). Arriving at the University of Michigan-Flint with 11 publications already to his credit, Professor Tang has published an additional five peer-reviewed papers (three as first author). Professor Tang has one paper currently under review and another paper in preparation for submission. While at the University of Michigan-Flint, Professor Tang has given 11 professional presentations – eight as oral presentations, four as first author, and two international. These presentations add to the 28 presentations under his belt prior to 2011. It is particularly noteworthy that his current project on the phylogenetic systematics of the Ophidiidae, or cusk-eel, is being conducted in collaboration with undergraduate research assistants, thereby integrating Professor Tang’s commitment to student learning and scholarly activity.

Recent and Significant Scholarly Activity:

Peer-Reviewed Journal Articles

- Tang, K. L., Agnew, M. K., Chen, W.-J., Hirt, M. V., Lumbantobing, D. N., Raley, M. E., Sado, T., Teoh, V.-H., Yang, L., Bart, H. L., Harris, P. M., He, S., Miya, M., Saitoh, K., Simons, A. M., Wood, R. M. and Mayden, R. L. (2013). “Limits and Phylogenetic Relationships of East Asian Fishes in the Subfamily Oxygastrinae (Teleostei: Cypriniformes: Cyprinidae).” *Zootaxa*, 3681: 101-135.
- Tang, K. L., Lumbantobing, D. N. and Mayden, R. L. (2013). “The Phylogenetic Placement of *Oxygaster* van Hasselt 1823 (Teleostei: Cypriniformes: Cyprinidae) and the Taxonomic Status of the Family-Group Name Oxygastrinae Bleeker 1860.” *Copeia*, 13-22.
- Tang, K. L. and Fielitz, C. (2013). “Phylogeny of Moray Eels (Anguilliformes: Muraenidae), With a Revised Classification of True Eels (Teleostei: Elopomorpha: Anguilliformes).” *Mitochondrial DNA*, 24: 55-66.
- Yang, L. M., Hirt, V., Sado, T., Arunachalam, M., Manickam, R., Tang, K. L., Simons, A. M., Wu, H.-H., Mayden, R. L. and Miya, M. (2012). “Phylogenetic Placements of the Barbin Genera *Discherodontus*, *Chagunius*, and *Hypselobarbus* in the Subfamily Cyprininae (Teleostei: Cypriniformes) and Their Relationships With Other Barbins.” *Zootaxa*, 3586: 26-40.
- Wainwright, P. C., Smith, W. L., Price, S. A., Tang, K. L., Sparks, J. S., Ferry, L. A., Kuhn, K. L. and Near, T. J. (2012). “The Evolution of Pharyngognathy: A Phylogenetic and Functional Appraisal of the Pharyngeal Jaw Key Innovation in Labroid Fishes and Beyond.” *Systematic Biology*, 61: 1001-1027.
- Tang, K. L., Agnew, M. K., Chen, W.-J., Hirt, M. V., Raley, M. E., Sado, T., Schneider, L. M., Yang, L., Bart, H. L., He, S., Liu, H., Miya, M., Saitoh, K., Simons, A. M., Wood, R. M. and Mayden, R. L. (2011). “Phylogeny of the Gudgeons (Teleostei: Cyprinidae: Gobioninae).” *Molecular Phylogenetics and Evolution*, 61: 103-124.

Conference Presentations

- Tang, K. L. (2016). "Systematics of Damselishes." American Society of Ichthyologists and Herpetologists, 95th Annual Meetings, New Orleans, Louisiana.
- Goetz, T., Cullimore, P. R., Walker, H. J. and Tang, K. L. (2015). "Molecular Phylogeny of the Surfperches." American Society of Ichthyologists and Herpetologists, 95th Annual Meetings, Reno, Nevada. (Poster)
- Ingersoll, S. and Tang, K. L. (2015). "Cusk-Eel Phylogeny Based on Molecular Data." American Society of Ichthyologists and Herpetologists, 95th Annual Meetings, Reno, Nevada. (Poster)
- Schroeder, H. S. and Tang, K. L. (2015). "Phylogeny of Rabbitfishes (Sigandae: Perciformes)." American Society of Ichthyologists and Herpetologists, 95th Annual Meetings, Reno, Nevada. (Poster)
- Farr, R., Siddiqui, A. and Tang, K. L. (2014). "Molecular Phylogeny of Cusk-Eels (Teleostei: Ophidiiformes: Ophidiidae)." American Society of Ichthyologists and Herpetologists, 94th Annual Meetings, Chattanooga, Tennessee.
- Schroeder, H. S. and Tang, K. L. (2014). "Phylogeny of Rabbitfishes (Teleostei: Perciformes: Sigandae)." American Society of Ichthyologists and Herpetologists, 94th Annual Meetings, Chattanooga, Tennessee.

Service – Since his arrival, Professor Tang has progressively expanded the scope and depth of his service to his department, college, university, profession, and community. At the departmental level, Professor Tang has been a member of the department's Budget Priorities Committee since 2012. Professor Tang currently serves on the college's Nominating Committee and has served one term on the Summer Interim Committee. Professor Tang has extended his service to his colleagues beyond his department by serving as an outside member for a faculty search committee in the Department of Philosophy. Professor Tang also has been an engaged member of the faculty through his regular attendance at both the college's and university's governing faculty meetings, participating in fall and winter commencement exercises (as well as the 2014 new student convocation), and recruitment events sponsored by the Office of Undergraduate Admissions. Professor Tang is a very active scholar in his professional community through his continued service on a wide variety of editorial boards. Since 2001, Professor Tang has served as a peer reviewer for 20 different academic journals – with titles ranging from the *American Museum Novitates*, to the *Journal of Fish Biology*, and *Zootaxa*. Professor Tang has also been selected as a review panelist for the National Science Foundation in 2012 and 2015. Finally, Professor Tang offers his expertise and insights to the public at large by being selected to appear on The Field Museum's fish biodiversity podcast "What the Fish?" (Episode 21 in 2012) and more recently as a contributor to the fish biodiversity podcast "The Fishmongers." In sum, Professor Tang has been successful in establishing himself as an active and visible member of the faculty within his department, college, university, profession, and community at large.

External Reviewers:

Reviewer (A): "These papers on cyprinid fishes and moray eels are important to my field of ichthyology. His paper in 2012 with Peter Wainwright as the first author on the mega-group pharyngognathy and published in *Systematic Biology* has been cited 90 times already. Kevin is seen as a very knowledgeable member of the ichthyology community and his work on molecular and morphological aspects of cyprinid fishes is outstanding."

Reviewer (B): “The quality of Dr. Tang’s published work is high. His work consistently utilizes high taxon sampling, a problem for systematists working on globally distributed groups as Dr. Tang does. He deftly employs the standard suite of analytic tools used by systematists in each of his papers.”

Reviewer (C): “I anticipate that Kevin will continue to make important contribution to fish systematics as tenured faculty at U-M-Flint. Indeed, his conference abstracts – reflecting ‘live’ projects for which the results are not yet published – indicate that we can expect further important contributions from Kevin in the future.”

Reviewer (D): “In my opinion, the most significant of Dr. Tang’s publications is the paper in *Systematic Biology* on the evolution of pharyngognathy in fishes (Wainwright et al. 2012). Dr. Tang brought to this collaborative research group his expertise in the phylogeny of damselfishes, a diverse group embedded with the larger lineage of fishes under study... Among the other four papers sent for evaluation, Tang and Fielitz (2013) is an admirable study on the outgroup- and ingroup-relationships of moray eels based on sequence data from two mitochondrial genes for 139 species. While this is not the final word on moray relationships, it sets the stage for additional work and will be the primary study on this group for several years to come.”

Reviewer (E): “Kevin works well as both the lead of small collaborations, as well as a member of large, international, and often unwieldy projects and paper, both as a collaborator and as a lead author. The journals that Kevin has published in are good, solid phylogenetic and taxonomic journals, and very well respected in the field of ichthyology... Most noteworthy is his service on two review panels for the National Science Foundation, which is a significant professional service activity, reflecting positively on him within the academic community.”

Reviewer (F): “His most highly-cited article (Wainwright et al. 2012), published in the top journal of the discipline (*Systematic Biology*) was cited 95 times (according to Google Scholar).”

Reviewer (G): “Through his research Kevin has made a series of solid contributions to the field of systematic ichthyology. His work has tended to focus on the larger more diverse and hence more problematic groups of fishes (‘Labroidei’ and Cypriniformes) and had shed light on the relationships in these groups and the evolution of characters that are thought to be at least partially responsible for the impressive radiations they are known for.”


Reviewer (H): “Dr. Tang has developed a national reputation for his work on molecular systematics of fishes. He is well known as an expert on pomacentrid fishes – damsel fishes and anemone fishes – and has contributed substantially to our understanding of cyprinid phylogenetics and taxonomy... The quality of Dr. Tang’s publications is high, each paper sets the stage for future work, helps resolve a significant taxonomic or phylogenetic puzzle, or contributes to our understanding of morphological diversity.”

Reviewer (I): “Dr. Tang’s research program addresses fundamental questions concerning the molecular systematics of fishes and the evolution of morphological, behavioral and ecological characteristics of major marine and freshwater fish. ...his papers have been published in top tier journals in the fields of taxonomy and systematics.”

Summary of Recommendation:


Professor Tang is an evolutionary biologist and zoologist whose focus is on the phylogenetic systematics of fishes. Through the use of modern molecular genetics techniques to sequence the DNA, Professor Tang is able to identify evolutionary relationships between different fish groups. His work has been published in top-tier journals and his research is particularly noteworthy for effectively calling into question the classical interpretation of how a key innovation among did not result from adaptive radiation in African rift-valley cichlid fishes, but in fact has evolved multiple times among unrelated fishes. Professor Tang is also a dedicated and effective teacher. Through his strict adherence to the principles of careful and meticulous preparation coupled with clear communication of expectations, he believes that students are thereby enabled to focus on learning. In addition to his work teaching lecture and laboratory based courses, Professor Tang is deeply committed to providing opportunities to his students to partner with him on his research. Finally, Professor Tang has assembled a solid record of service to his department, college, university and community. Most noteworthy (though by no means his only form of service) is his engagement with his professional community by serving as a peer reviewer for 20 different academic journals, as well as being selected twice as a review panelist for the National Science Foundation. In sum, Professor Tang has demonstrated the requisite excellence in teaching, scholarly achievement, and service to his community, department, and college worthy of promotion to associate professor, with tenure. With enthusiasm and great pride, I recommend that Kevin L. Tang be promoted to associate professor of biology, with tenure, Department of Biology, College of Arts and Sciences.

Recommended by:




Susan Gano-Phillips, Dean
College of Arts and Sciences

Recommendation endorsed by:



Douglas G. Knerr, Provost and
Vice Chancellor for Academic Affairs



Susan E. Borrego, Chancellor
University of Michigan-Flint

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