Approved by the Regents
May 21, 2020

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

Gregory J. Dick, associate professor of Earth and environmental sciences, with tenure, and associate professor of ecology and evolutionary biology, without tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of Earth and environmental sciences, with tenure, and professor of ecology and evolutionary biology, without tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2006	Scripps Institution of Oceanography, University of California, San Diego
M.A.	2002	Marine Biological Laboratory, Woods Hole, Massachusetts
B.A.	2000	University of Virginia

Professional Record:

2014 – present	Associate Professor, Department of Earth and Environmental Sciences, University of Michigan
2014 – present	Associate Professor, without tenure, Department of Ecology and Evolutionary Biology, University of Michigan
2011 – present	Faculty Affiliate, Program in the Biomedical Sciences, University of Michigan
2011 – 2014	Assistant Professor, Department of Ecology and Evolutionary Biology, University of Michigan
2009 – present	Faculty Affiliate, Center for Computational Medicine and Bioinformatics, University of Michigan
2008 – 2014	Assistant Professor, Department of Earth and Environmental Sciences, and Faculty Associate, Program in the Environment, University of Michigan
2007 – 2008	Post-doctoral Researcher, Department of Earth and Planetary Science, University of California, Berkeley

Summary of Evaluation:

Teaching – Professor Dick's teaching is excellent based on student evaluation scores. His diverse and innovative, interdisciplinary course offerings attract students from multiple departments. For the past four years, he has taught a field-based summer course at Camp Davis in Wyoming. He has contributed in meaningful ways to the professional development of a large number of postdoctoral fellows and graduate and undergraduate students. Since his last promotion, he has advised four postdoctoral scholars, advised or co-advised four Ph.D. students, and advised two Masters students. Six of his former graduate students hold tenure-track positions at tier-1 research institutions. He has also mentored twenty undergraduate students, three of whom worked in his lab under the Undergraduate Research Opportunity Program.

Research – The academic discipline of Earth and environmental science has undergone a revolution in the past several decades as researchers have begun to recognize the important role that microbes play in a wide range of environmental processes and in the evolution of the

atmosphere, oceans, freshwater resources, and terrestrial environments. Professor Dick has become one of the leading researchers, internationally, in this field known as geomicrobiology. He is best known for his research on the microbial communities that are associated with deep-sea hydrothermal vents, and how hydrothermal vents affect the microbiology and chemistry of the oceans. He applies state-of-the-art methods of genomics, proteomics, and transcript omics, developed largely in the biological and biomedical fields, to some of the most important modern research questions in the field. He regularly publishes in the most prestigious and high impact journals, and he has garnered an exemplary level of citations. His funding comes from a diversity of sources, including federal and private foundations, and his level of funding has been very high in comparison to his peers. We expect that Professor Dick will continue to contribute at a high level to the application of innovative geomicrobiological techniques to the advancement of knowledge in his field.

Recent and Significant Publications:

"The microbiomes of deep-sea hydrothermal vents: Distributed globally, shaped locally," *Nature Reviews Microbiology*, 17, 2019, pp. 271-83.

"Genome sequences of lower Great Lakes Microcystis sp. reveal strain-specific genes that are present and expressed in western Lake Erie blooms," *PLoS One*, 12, 2017, p. e0183859.

"Genomic and transcriptomic evidence for scavenging of diverse organic compounds by widespread deep-sea archaea," *Nature Communications*, 6, 2015, p. 8933.

"Sulfur oxidation genes in diverse deep-sea viruses," *Science*, 344, 2014, pp. 757-60.

"Genome sequences of lower Great Lakes Microcystis sp. reveal strain-specific genes that are present and expressed in western Lake Erie blooms," *PLoS One*, 12, 2017, p. e0183859.

Service – Professor Dick's service as the associate chair for curriculum and undergraduate studies in the past three years is commendable. As the associate chair, he improved the undergraduate curriculum and made significant efforts to attract undergraduate students to the department. Under his leadership, the number of undergraduate majors in the department increased by approximately 40% from 2016 to 2019. Professor Dick has also been very active in university service and has served in numerous roles in the last five years. He has served the scientific community in a number of ways: for example, he served on National Science Foundation review panels, and he has served in numerous editorial and advisory roles in leading journals since 2012.

External Reviewers:

Reviewer (A)

"I am extremely impressed with the quality, quantity and focus of Dr. Dick's work. I rank Dr. Dick very highly among his peer group; ….in the top 10%."

Reviewer (B)

"… Greg is a world-class geobiologist, biogeochemist and microbial ecologist. He is well versed in oceanography, biogeochemistry, and microbiology. His technical skills in all the latest methodological and computational approaches in the general area of 'microbial omics' are world class, and superb. There is absolutely no doubt that Professor Greg Dick is a remarkably broad-thinking, high quality, prolific and impactful scientist, who has garnered respect from all his geobiological and microbiological colleagues, for many good reasons."

Reviewer (C)
"Dr. Dick is an outstanding pioneer in the emerging field of 'geobiology,' and has garnered a well-deserved reputation for elucidating the microbial community structure based on gene sequencing in deep-sea hydrothermal vents. I would rank Dr. Dick in the upper 20% of geobiologists [at a similar stage in their careers] working broadly in the field of geobiology. Dr. Dick's academic record, service and teaching are all exceptional."

Reviewer (D)
"I have had nothing but respect and admiration for his work… His work has been consistently creative, thorough, and well cited. He is obviously highly engaged with his students as well as the public at large, and he seems like a great department and university citizen."

Reviewer (E)
"His outstanding accomplishments in teaching and service/leadership match his world class research, so he appears to be the total package. Most impressive to me is the breadth of his research efforts and the consistently high quality of his research and the journals he selects to publish in."

Reviewer (F)
"Dr. Dick is one of the very best of his generation in the field of molecular geobiology. He is multifaceted (can do both 'omics' and hard-core physiology/biochemistry/genetics): a terrific combination that will serve him well for his entire career."

Summary of Recommendation:
Professor Dick has become one of the top researchers in his field. He has made strong contributions to the teaching mission as an instructor and associate chair for curriculum and undergraduate studies. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Gregory J. Dick be promoted to the rank of professor of Earth and environmental sciences, with tenure, and professor of ecology and evolutionary biology, without 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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