

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

Gregory J. Dick, assistant professor of earth and environmental sciences, and assistant professor of ecology and evolutionary biology, College of Literature, Science and the Arts, is recommended for promotion to 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.

Academic Degrees:

Ph.D.	2006	Scripps Institution of Oceanography, University of California, San Diego
B.A.	2000	University of Virginia

Professional Record:

2011 – present	Assistant Professor, Department of Ecology and Evolutionary Biology, and Faculty Affiliate, Program in the Biomedical Sciences, University of Michigan
2009 – present	Faculty Affiliate, Center for Computational Medicine and Bioinformatics
2008 – present	Assistant Professor, Department of Earth and Environmental Sciences, University of Michigan
2008 – present	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 is a highly successful and committed teacher across a range of course offerings. At the undergraduate level, he reaches students in the early stages of their careers with a course on the role of microorganisms in shaping the earth and its environment throughout history. He teaches a core course for majors on geobiology which examines the history of life and is becoming very popular. He also co-teaches an introduction to environmental sciences in the Rocky Mountains at the Camp Davis field station in Wyoming. In all of his course offerings he received a consistently high set of student evaluations. Professor Dick involves several of his undergraduate students in his research and at least one student is a co-author on a peer-reviewed publication. All three of his current Ph.D. students have co-authored papers with him.

Research – Professor Dick is a geo-microbiologist who is at the forefront of an emerging new field that uses cutting-edge DNA sequencing technology to study how various aquatic microbes operate on a planetary scale, providing new insights into their role in profoundly altering the evolution of the Earth's oceans and atmosphere, both in deep time and in the present. He is seen as highly interdisciplinary in terms of the tools that he uses (including genomic sequencing) and the first-order questions that he is addressing. Notable is that top researchers in the field seek to collaborate with Professor Dick, and many reviewers noted that he has been asked to serve on a relatively large number of review panels and editorial boards given his career stage. He has received significant funding from the National Institutes of Health, National Science Foundation, Woods Hole Oceanographic Institute, and Gordon and Betty Moore Foundation, among others.

Recent and Significant Publications:

- “Hydrothermal vent plume microbiology: Ecological and biogeographic linkages to seafloor and water column habitats,” with K. Anantharaman, et al., *Frontiers in Microbiology*, 4(124) 2013 (Doi: 10.3389/fmicb.2013.00124).
- “Evidence for hydrogen oxidation and metabolic plasticity in widespread deep-sea bacteria,” with K. Anantharaman, et al., *Proceedings of the National Academy of Sciences*, 110, 2013, pp. 330-335 (Doi: 10.1073/pnas.1215340110).
- “Genome-enabled transcriptomics reveals archaeal populations that drive nitrification in a deep-sea hydrothermal plume,” with B. J. Baker and R. A. Lesniewski, *The ISME Journal*, 6, 2012, pp. 2269-2279 (Doi: 10.1038/ismej.2012.64).
- “Cyanobacterial life at low O₂: Community genomics and function reveal metabolic versatility and extremely low diversity of a cyanobacterial mat,” with A. A. Voorhies, et al., *Geobiology*, 10, 2012, pp. 250-267 (Doi: 10.1111/j.1472-4669.2012.00322.x).

Service – Professor Dick has served on the graduate admissions, Turner student grant, and faculty search committees in Earth and Environmental Sciences. He is the faculty advisor to GeoClub, a student organization, and he organizes and teaches the summer Earth Camp for economically disadvantaged high school students from the greater Detroit region. He has also served on the graduate admissions and faculty search committees for the Department of Ecology and Evolutionary Biology. Nationally, he has served on National Aeronautics and Space Administration (NASA) and National Science Foundation (NSF) review panels, and is on the editorial board for *Geobiology*.

External Reviewers:

Reviewer (A)

“Dr. Gregory J. Dick is a pioneer and leader in a newly emerging field. Greg’s high scientific standards, creativity, enthusiasm for rigorous interdisciplinary science, and his ability to identify important questions...[are] very evident from his work and publication record. It is clear to me that he has the ‘right stuff’ to continue on in a brilliant scientific career.”

Reviewer (B)

“He is expanding intellectually in new directions that are increasingly interdisciplinary and important scientifically.”

Reviewer (C)

“...Dr. Gregory Dick is an impressive candidate who has already made impressive research discoveries and I have no reservations in recommending him for tenure.”

Reviewer (D)

“...Dr. Dick’s body of work, especially his outstanding publication record, grant activity, and leadership of his discipline, probably place him close to the top of his peer group... While many others are entering their second or third postdoctoral training position, Dick is off and running on an impressive career trajectory. In the strongest terms possible, I recommend that he be granted this well[-]earned promotion and academic tenure.”

Reviewer (E)

"Of the publication records I have reviewed over the past years for promotion to associate professor, this is unequivocally the strongest upwards trajectory I've seen. Importantly, each publication is well worth reading, and speaks to a growing impact on his field."

Reviewer (F)

"An indicator of where he stands in his field is the fact that it seems that everyone in the country wants to work with him: his collaborations are many and varied, and involve a host of excellent colleagues. He is clearly an up and coming researcher who is highly thought of."

Reviewer (G)

"...Greg is one of only a handful of people who are fluent in molecular biology...and geochemistry. He is both interdisciplinary *and* deep – and it is his depth that will sustain him over the long term. ... Not only is his research flourishing, but he also appears to be an admirable teacher and departmental citizen. I would be delighted to have him as a colleague...and think this tenure decision is an easy one. ... He is a gem."

Reviewer (H)

"Greg's work is original, important, well respected, [and] sufficiently prolific for his career stage, and of superb quality."

Summary of Recommendation:

Professor Dick is considered one of top geomicrobiology researchers of his generation. He is a highly evaluated teacher at all levels, both in the classroom and in the field. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Gregory J. Dick be promoted to the rank of 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.



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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