

PROMOTION RECOMMENDATION
The University of Michigan-Flint
College of Arts and Sciences
Department of Earth and Resource Science

Approved by the
Regents
May 21, 2015

Greg Rybarczyk, assistant professor of Earth and resource science, Department of Earth and Resource Science, College of Arts and Sciences, is recommended for promotion to associate professor of Earth and resource science, with tenure, Department of Earth and Resource Science, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2010	University of Wisconsin-Milwaukee
M.S.	2005	University of Wisconsin-Milwaukee
B.S.	1997	University of Wisconsin-Milwaukee

Professional Record:

2010-Present	Assistant Professor, University of Michigan-Flint
2009-2010	Lecturer, Carthage College, Kenosha, Wisconsin
2006-2010	Teaching Assistant and Lecturer, University of Wisconsin, Milwaukee

Summary of Evaluation:

Teaching – Professor Rybarczyk faced some initial challenges with constructive feedback from peers and students, he adopted a greater focus on class organization, as well as the delivery of his lessons. He committed himself to becoming a better teacher through active involvement in the Thompson Center for Learning and Teaching (TCLT); attending workshops; studying different teaching methods; using clicker technology to foster student involvement; consulting senior faculty; and doing whatever else it took to improve in this area. The results of these efforts are apparent throughout the student and peer evaluations which now identify Professor Rybarczyk as an effective and well regarded teacher. He is responsible for some of the most difficult upper level technology-related classes in preparing students to engage in real world workplace problems. Professor Rybarczyk’s course syllabi are coherent, well organized and professional. Through his effective teaching Professor Rybarczyk is now playing a very constructive role in developing the next generation of computer-literate geographers, planners, and environmental scientists. The extremely positive trajectory of his teaching is a powerful indicator of his intentional work to achieve excellence as a teacher. It is clear to the students and peer observers that Professor Rybarczyk has now reached his goal of teaching excellence.

Research – Professor Rybarczyk has accomplished a significant body of scholarship in his area of expertise with numerous publications in peer reviewed high quality journals. He is the first researcher to extend the application of Agent-Based Modeling techniques into the field of non-motorized transportation, (cf. “Simulating Bicycle Wayfinding Mechanisms in an Urban Environment” in the *Journal of Urban, Planning, and Transport Research*). Agent-Based Modeling is a computational method that enables a researcher to create, analyze, and experiment with models composed of agents that interact within an environment. These cutting edge applications of Geographic Information Systems (GIS) technology into public policy debate and planning offer an opportunity to integrate scholarship with implementation for the public benefit. He has also made a significant contribution to traveler cognition and urban studies with his paper entitled: “Examining the Impact of Urban

Morphology on Bicycle Mode Choice.” A consistent theme in Professor Rybarczyk’s scholarship is the ability to utilize his scholarly expertise to enhance the scientific accuracy and effectiveness of planning and implementation of important public policy initiatives.

Recent and Significant Scholarly Activity

- Rybarczyk, G., Maguffee, A.* Kruger, D. “The Impact of Public Health, Environmental Quality, and Neighborhood Character on Crime Rates,” *Cityscape: A Journal of Policy Development and Research*, (in press).
- Rybarczyk, G., and Gallagher, L.* (2014). “Measuring the Potential for Bicycling and Walking at a Metropolitan Commuter University,” *Journal of Transport Geography*, 39: pp. 1-10.
- Rybarczyk, G. (2014). “Simulating Bicycle Wayfinding Mechanisms in an Urban Environment,” *Journal of Urban, Planning and Transport Research*, 2(1): pp. 89-104.
- Rybarczyk, G. and Wu, C. (2014). “Examining the Impact of Urban Morphology on Bicycle Mode Choice,” *Environment and Planning B: Planning and Design*, 41(2): pp. 272-288.
- Rybarczyk, G. and Mohaprata, R. P. (2013). “Estimating Neighborhood Quality using Empirical Analysis and Geographic Information Systems,” *Journal of Urban and Regional Information Science Association*, 1: pp. 63-76.

Papers in Progress

- Morckel, V. C. and Rybarczyk, G. “Improving Downtown in a Shrinking City: A Case Study of Flint, Michigan,” *Community Development*, (under review as of June, 2014).
- Kodjebacheva, G., Kruger, D., Rybarczyk, G. and Cupal, S. “Racial/Ethnic and Gender Differences in the Association Between Depressive Symptoms and Higher Body Mass Index Among US Adults,” *Journal of Public Health*, (under review as of April, 2014).
- Rybarczyk, G. “Toward a Spatial Understanding of Active Transportation Modes Among a University Population,” *Transportation Research Part D*, (to be submitted November, 2014).
- Suzuki, R., Manche, C.,* Small, E. and Rybarczyk, G. “Development of a Multi-Modal Network for the Assessment of Access to Primary Health Care Providers Among Underserved Populations,” *Engineering Sustainability*, (invited paper due December, 2014).

(* Indicates undergraduate student collaborator.)

Other Publications

- Henthorn, T. and Rybarczyk, G. (2013). “Historical Resource Survey for the City of Grand Blanc, Michigan.”
- Morckel, V. and Rybarczyk, G. (2013). “Preliminary Results from UM-Flint’s Downtown Study.”
- Harris, A., Rybarczyk, G. and Lukasavitz, V. (2012). “Promoting Active Living Through the Implementation of an Educational Bicycle Skills Course at the University of Michigan-Flint,” *Michigan Bicyclist Magazine*, (November).

Research Conference Presentations

- Rybarczyk, G. “Examining the Revealed Accessibility of Ethnic Food Resources Using a Multivariate Spatial Modeling Approach and GIS.” Paper to be presented at the Annual Association of American Geographers Meeting, Washington, D.C., April 22-26, 2015.
- Banerjee, S. and Rybarczyk, G. “When is the Boat in Chicago More Fun Than the Bus in Boston? Mining Social Media to Assess the Impact of Travel Mode and Context on Commuter Emotions.” Co-presented at Direct/Interactive Marketing Research Summit, San Diego, California, October 25-26, 2014*

- Kodjebacheva, G., Parker, S. and Rybarczyk, G. "Physical Activity Patterns Among Children With Asthma: Results From the 2012 National Youth Fitness Survey." Co-presented at the American Public Health Association Conference, New Orleans, Louisiana, November 15-18, 2014.
- Rybarczyk, G. "Visualizing Neighborhood Development Through a Historical GIS Lens: A Pedagogical Approach." Paper presented at the Applied Geography Conference, Annapolis, Maryland, October 30, 2013.
- Rybarczyk, G. "Bicycling and Walking Renaissance at the University of Michigan-Flint?: Evidence from a Stated Preference Survey." Paper presented at the University of Michigan-Flint Faculty Research and Creative Activity Summit (FRACAS), October, 18, 2013.
- Rybarczyk, G. "Mapping Food Resources in Flint, Michigan." Paper presented at the Genesee County Health Department's 2013 Public Health Week Conference, Flint, Michigan, May 7, 2013.

Invited Talks/Panels

- 2014 – University of Kansas, Department of Geography and School of Business.
- 2014 – Transportation Research Board, National Academy of Sciences, Pedestrian and Bicycle University Education Subcommittee Meeting Panel Member Invitation.
- 2013 – University of Michigan-Flint, Thompson Center for Learning and Technology, Engaged Scholar Faculty Panel.

Service – The service contribution of Professor Rybarczyk has been excellent across the spectrum of department, college, university and community. Professor Rybarczyk has consistently participated in important departmental service obligations (scholarships), university wide committees (Library), and community related initiatives based on his area of expertise (GIS). Perhaps the most important accomplishment of Professor Rybarczyk is his 2013 establishment of the Geographic Information System Center (GISC) on the UM-Flint campus. The GISC offers the potential of UM-Flint to extend available expertise to the governmental and non-profit sectors in ways that were not possible only a few years ago. This is significant because, as state governmental resources diminish the capacity of local governments and non-profit organizations, UM-Flint can fill a large gap in substantive expertise needed for competent decisions.

External Reviewers:

Reviewer (A): "I find the quality of the work produced to be very good. What impresses me is that while the candidate has a focus on bicycle transportation, he is using it as a vehicle to explore other aspects, such as city planning, urban morphology, neighborhood quality evaluation etc... This is a quality of a seasoned researcher. I have carefully looked at how he has used the methods of Space Syntax in his research, and find that it was done in a careful and a well-reasoned manner."

Reviewer (B): "...Dr. Rybarczyk is one of scholars who lead research on innovative GIS-based multicriteria decision analysis in transportation geography... I would like to emphasize that some of the candidate's publications are in the very best journals in the area of applied spatial analysis."

Reviewer (C): "...I was impressed by the quality of Dr. Rybarczyk's publications... His publications and grant initiatives reflect the effectiveness of his research program in sustainability and the growing diversity of his collaborations. Notably, Dr. Rybarczyk is Co-PI on a \$4 million USDA grant to study food access... Dr. Rybarczyk has compiled a strong record of engaged scholarship... Dr. Rybarczyk's written work is clearly presented, well-conceived, effectively argued, and consistently applies methodologically sophisticated yet accessible science. He has made valuable contributions in the use

of discrete choice modeling and space syntax to construct models simulating individual perception at the intersection of environment and behavior.”

Reviewer (D): “...I am impressed with the methodological register. Prof. Rybarczyk has applied statistical approaches, including exploratory spatial data analysis and spatial modeling; multi-criteria decision support methods; digital cartography/GIS; and agent-based models... ...Prof. Rybarczyk is a well-rounded scholar with a research record commensurate to his teaching/service activities.”

Reviewer (E): “It is clear to me ... that he is well embedded in the research and policy community in the USA, and this does not surprise me based on the scale and significance of his work... I would place emphasis on data quality, the use of appropriate techniques, and the appropriateness of discussion of research findings. In this context, Dr[.] Rybarczyk performs extremely well.”

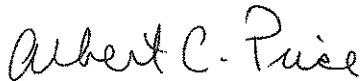
Reviewer (F): “Dr. Rybarczyk is an active and productive scholar... His contributions to urban and transportation geography has been increasingly recognized. For example, some of his research papers have been published in the leading journals in geography... In addition to his strong publication records, Dr. Rybarczyk has been able to secure four small grants as P.I and two major grants as Co-PI to support his research.”

Reviewer (G): “The strongest focus in Professor Rybarczyk’s recent research is transportation geography, particularly individuals’ bicycling choices and activities in urban environment. This is an important research field and has significant implications in public policy.”

Summary of Recommendation:

Professor Rybarczyk is an excellent teacher, significant scholar, and engaged university academic citizen. I fully concur with the Executive Committee of the College of Arts and Sciences and enthusiastically recommend that Greg Rybarczyk be promoted to associate professor of earth and resource science, with tenure, Department of Earth and Resource Science, College of Arts and Sciences.

Recommended by:



Albert C. Price, Interim Dean
College of Arts and Sciences

Recommendation endorsed by:



Barbara B. Dixon, Interim Provost and
Vice Chancellor for Academic Affairs



Susan E. Borrego, Chancellor
University of Michigan-Flint

May 2015