#### PROMOTION RECOMMENDATION

Approved by the Regents May 15, 2008

# The University of Michigan-Dearborn College of Arts, Sciences, and Letters Department of Natural Sciences

Marilee Benore Parsons, associate professor of biology and biochemistry, with tenure, Department of Natural Sciences, College of Arts, Sciences, and Letters, is recommended for promotion to professor of biology and biochemistry, with tenure, Department of Natural Sciences, College of Arts, Sciences, and Letters.

### Academic Degrees:

Ph.D.	1986	University of Delaware, Newark, Delaware
B.S.	1979	Thomas More College, Ft. Mitchell, Kentucky

### Professional Record:

1996 - present	Associate Professor of Biology and Biochemistry, Department of Natural
_	Sciences, University of Michigan-Dearborn
1989 - 96	Assistant Professor of Biology and Biochemistry, Department of Natural
	Sciences, University of Michigan-Dearborn
1986 - 89	Postdoctoral Research Fellow, CIBA Geigy Pharmaceutical Co., Summit,
	New Jersey
1988	Adjunct Assistant Professor, County College of Morris, New Jersey
1980 - 86	Research Assistant and Teaching Assistant, Department of Chemistry,
	University of Delaware, Newark, Delaware

### Summary of Evaluation:

Teaching: Professor Benore Parsons' teaching is rated as excellent. She is responsible for a variety of courses ranging from introductory laboratories for majors and non-majors to lecture/laboratory courses in molecular biology and biochemistry. She developed a new course that helped undergraduates learn about issues related to cultural diversity and another that focused on the biochemistry of receptors. The rapidly changing nature of the topics she teaches necessitates ongoing course development to introduce students to the most recent advances in knowledge in both lectures and laboratories. Her contributions to teaching include peer-reviewed publications related to pedagogy and curriculum, and are connected to her focus on improving undergraduate biochemical education for students everywhere. Professor Benore Parsons has mentored over 35 undergraduates in her research laboratory since her promotion and tenure. These students are co-authors on presentations at national meetings that they also attend. She has collaborated with textbook authors to produce concept maps and test banks to accompany several biochemistry textbooks.

Research: Professor Benore Parsons' research is rated as excellent. She has continued and expanded her research program studying riboflavin binding protein (RBP). Together with another colleague, she has begun exploring the role of RBP in transporting copper. She has developed expertise in biochemical education and is a recognized leader in the field. She has published significant articles valued by instructors of undergraduate biochemistry courses and

textbooks. Her paper on assessment is, according to an external reviewer, cited in proposals submitted to the National Science Foundation. She has successfully obtained both intra and extramural funding from NIH-AREA, Burroughs-Wellcome, campus grants and from Wiley. She has presented her work at conferences and has been an invited speaker. She has continued to develop new laboratory activities including a DNA fingerprinting exploration that introduces students to a research-style experience.

### Recent and Significant Publications:

- Smith SR, Pala I, Benore-Parsons M, "Riboflavin binding protein contains a type II copper binding site," *J Inorg Biochem*, 100:1730-1733 (2006).
- Benore-Parsons M, "A course designed for undergraduate biochemistry students to learn about cultural diversity issues," *Biochem and Mol Bio Ed*, 34:326-331 (2006).
- Caldwell B, Rohlman C, Benore-Parsons M, "Matrix analysis of biochemistry programs- An assessment tool," *Biochem and Mol Bio Ed*, 32:11-16 (2004).
- Benore-Parsons M, Sufka KJ, "Teaching receptor biochemistry: theory and application in an integrated approach," *Biochem and Mol Bio Ed*, 31:85-92 (2003).
- Benore-Parsons M, Ayoub M, "Presence of RNase causes aberrant DNA band shifts," *BioTechniques*, 23:128-131 (1997).

Service: Professor Benore Parsons' service is rated as excellent. She has been an active member of the campus community. She has served on numerous committees and is currently director of Women in Leadership and Learning (WILL), an important outreach effort and an outgrowth in her support of women, particularly of women in science. Her interests in improved biochemical education across the country are seen in her professional service for the American Society of Biochemistry and Molecular Biology as a committee member and as editor of Enzymatic, the publication for the Undergraduate Affiliate Network of ASBMB and her service on the editorial board of Biology and Molecular Biology Education. She has served as workshop presenter for Project Kaleidoscope meetings.

#### External Reviewers:

Reviewer A: "...it's fair to say that her research papers represent carefully planned and executed contributions in mainstream journals (*Biotechniques* and *J. Inorg. Chem.*)."

Reviewer B: "...she has also exhibited the ability to produce high-quality work on the scholarship of teaching, as evidence by her excellent contribution to *Biochemistry and Molecular Biology...*"

Reviewer C: "The observation reported in the paper is important because the phenomenon may influence DNA characterization and because it may interfere in the study of DNA protein interactions."

Reviewer D: "Since 2003, she has had 3 significant papers published in *Biochemistry and Molecular Biology Education (BAMBEd)* which is an important science education journal."

Reviewer E: "Her work has been critical in developing the undergraduate poster competition and the development of the ASBMB's Undergraduate Affiliate Network (UAN), a sort of national biochem and molecular biology club."

Reviewer F: "I am impressed with the well-balanced mixture of research articles and pedagogical writings. The publications in both categories are of outstanding quality."

Reviewer G: "I am also impressed by the number of students mentored by Marilee, and the variety of topics undertaken."

Reviewer H: "It is especially evident that she is dedicated to the ideal of incorporating the theory and practice of research into the classroom."

Reviewer I: "I also note with considerable pleasure her efforts to address diversity in the sciences. She is at the cutting edge in this endeavor."

## Summary of Recommendation:

Professor Benore Parsons has distinguished herself as a teacher-scholar capable of carefully planned and executed research on riboflavin binding protein and as a dedicated, innovative teacher. Her campus and professional service reflect her interests in improving education for undergraduates in biochemistry. We are very pleased to recommend, with the strong support of the College of Arts, Sciences, and Letters Executive Committee, Marilee Benore Parsons for promotion to professor of biology and biochemistry, with tenure, in the Department of Natural Sciences, College of Arts, Sciences, and Letters.

Kathryn Anderson-Levitt

Dean

College of Arts, Sciences, and Letters

Daniel Little Chancellor

University of Michigan-Dearborn

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