

PROMOTION RECOMMENDATION

Approved by the Regents

May 17, 2007

The University of Michigan School of Dentistry

Lynn A. Johnson, PhD, associate professor of dentistry, with tenure, School of Dentistry, is recommended for promotion to professor of dentistry, with tenure, School of Dentistry.

Academic Degrees:

PhD	1993	Morningside College, Sioux City, Iowa
MA	1979	University of Iowa
BA	1975	University of Iowa

Professional Record:

2002 – present	Director of Dental Informatics and Information Technology, University of Michigan, Ann Arbor, MI
2002 – present	Associate Professor, University of Michigan, Ann Arbor, MI
2000 – 2002	Director of Educational Methodology and Instructional Technology, University of Iowa College of Dentistry, Iowa City, IA
1995 – 2002	Director of Research and Development, Dental Interactive Simulations Corporation, Aurora, CO
1995 – 2000	Assistant Professor, University of Iowa College of Dentistry, Iowa City, IA
1987 – 1999	Coordinator, Instructional Technology and Research Program, University of Iowa College of Dentistry, Iowa City, IA
1995 – 1995	Assistant Research Scientist, University of Iowa College of Dentistry, Iowa City, IA
1994 – 1995	Adjunct Assistant Professor, University of Iowa College of Dentistry, Iowa City, IA
1987 – 1995	Instructional Developer, University of Iowa College of Dentistry, Iowa City, IA
1986 – 1987	Graduate Teaching Assistant, University of Iowa College of Dentistry, Iowa City, IA
1983 – 1986	Research Assistant, University of Iowa Weeg Computing Center, Iowa City, IA
1980 – 1983	Emotional Disabilities Instructor, Metro High School, Cedar Rapids School District, Cedar Rapids, IA
1977 – 1980	Multi-Categorical Disabilities Instructor, Linn-Mar High School, Linn-Mar School District, Marion, IA
1975 – 1977	Learning Disabilities Instructor, Chapin Middle School, Sheffield-Chapin School District, Sheffield, IA

Summary of Evaluation

Teaching: Dr. Johnson performs teaching in the didactic curriculum of the School of Dentistry and has also been instrumental in helping her department develop computer-based learning. She plays a leadership role in the development of electronic scholarship materials used in courses and offers faculty development workshops to assist faculty in utilizing the web to enhance teaching and to expand the boundaries of the classroom.

Since joining the University of Michigan, Dr. Johnson has had teaching responsibilities in several areas including: Scientific Reports and Theses for graduate dental students; Introduction to the Dental Profession; Dental Education for graduate students; Biochemistry-Problem based Learning for dental students; Scientific Communications for dental hygiene students; Experiential Learning I-Problem-based Learning and Information Searching; and Systemic Disease Manifestations.

A considerable amount of Dr. Johnson's time is devoted to our teaching programs. Dr. Johnson gets excellent ratings from students and overall is a talented, skillful individual dedicated to excellence in teaching in the graduate and undergraduate programs of the School of Dentistry. In addition to excellent ratings by students, peer evaluations of her contributions are also strong and point out that her contributions are vital but differ from traditional types of teaching. One example is her novel and creative work to develop podcasting of student lectures that brought acclaim to the school while it positively impacted student motivation and engaged them in new learning strategies. It has been extremely valuable for faculty members to have her direction in helping them to understand and appreciate the benefit of adding computer technology to broaden their classroom teaching activities. Dr. Johnson has proven to be an excellent educator with creative and 'cutting-edge' approaches to advance the teaching mission in the school. Perhaps more notably, her ability to use technology to move educational methodologies into the classrooms and into the hands of other educators places her as a 'teacher of teachers'.

Dr. Johnson excels as a mentor. Dr. Johnson has been a member on the thesis committees for four masters' students and four PhD students. She has also been a co-mentor for 14 predoctoral students. Dr. Johnson takes these commitments very seriously and demands quality performance from the students while making sure that students have a very positive experience.

Research: Dr. Johnson has an excellent, internationally recognized research program that focuses on enhancing capabilities of teaching through computer technology that expands the scope of education and moves forward the pedagogy of educational methodologies. This area of research is extremely timely in that the results of these studies are critical for developing strategies to expand the classroom to the world via web based teaching. Moreover, the information gained from these studies promises potential use in the medical field with hands-on training using technology.

Dr. Johnson has been very successful in obtaining outside funding and has been awarded 48 grants from internal and external sources. Currently, she has a prestigious award funded through the National Institutes of Health and the National Institutes of Dental and Craniofacial Research to develop and test novel approaches to genetics education via technology. She has also received support from university programs and professional organizations such as the ADEA/IADR and

from private industry. Her ability to obtain continued funding from external sources is an excellent indication of the respect she has gained from the computer informatics community.

Dr. Johnson currently has 31 peer reviewed publications either published or accepted for publication. She is first or senior author on more than 20 of these publications, indicating her direct contribution to the studies presented in these papers. The quality of her research is reflected in the peer reviewed journals in which she publishes. She has published in the top journals in her field including *Journal of Dental Education*, *EDUCAUSE Quarterly*, and *European Journal of Dental Education*. Her long-term research goal is to develop technological learning materials to enhance the study and teaching of oral medicine and lead the way to the advancement of education in the future. She has gained international recognition for her research as demonstrated by her invitations for presentations at other Universities and special meetings.

Recent and Significant Publications:

1. Brittain, S., Glowacki, T., Van Ittersum, J., **Johnson, L.A.** Podcasting Lectures: How Formative Evaluation Strategies Helped to Identify an Unanticipated Solution to a Learning Dilemma, *EDUCAUSE Quarterly*, 29(3): 24-31, 2006.
2. **Johnson, L.A.**, Finkelstein, M. From Novice to Expert: Can We Measure Clinicians' Approach to Differential Diagnosis? *Journal of Dental Education*, Summer 2006. Accepted for publication.
3. **Johnson, L.A.**, Grayden, S. Podcasting—An Emerging Form of Digital Documentation, *International Journal of Computerized Dentistry*, 9(3):205-218, 2006.
4. **Johnson, L.A.**, Schleyer, T. Developing High Quality Software, *Journal of Dental Education*, 67(11): 1209-1220, 2003. Abstracted in the *2005 Yearbook of Dentistry*, Mosby Publishers.
5. **Johnson, L.A.**, Thomas, G., Dow, S., Stanford, C. An Initial Evaluation of The Iowa Dental Surgical Simulator, *Journal of Dental Education*, 64(12): 847-853, 2000.

Service: Dr. Johnson has and continues to put a major effort into service for the school, as well as at the national level. She has served on several committees within the school and received excellent feedback on her insightful contributions to the goals of these committees. She has recently served as chair of the Appointment, Promotions and Tenure Committee (2005-2006) and has been a member of that committee since 2003; she is a member of the Faculty Grievance Panel (2005-present); Strategic Assessment Facilitating Committee (2005-present); and the Library Committee (2002-present). Other committees that she has been on include: the Search Committee for the Assistant Dean for Patient Services; Clinical Research Committee; and the Instructional Technology Grant Review Committee. As director of Dental Informatics and Technology, Dr. Johnson has been responsible for many administrative projects including: Electronic Patient Records (2002-present); School of Dentistry Web Site Redesign (2004-2005); Course evaluation software selection and implementation (2002-2003); and the axiUm clinical Implementation Pilot (2004-2006).

At the national level she has served on committees within the American Dental Education Association including: the Institutional Readiness for Electronic Curriculum Study (2001-2005); President's Information Technology Task Force (2002-2003); Council of Sections Information Technology Task Force (2000-2001). She was also a member of the American Association of Dental School committees including: the search committee for editor of the *Journal of Dental*

Education (2000); and the AADS Special Committee on Information Technology (1988-1994). In addition she served on the Founding Advisory Board for the Dental Interactive Simulations Corporation (1990-1992); and was a consultant for the Joint Committee on the Use of Human Subjects in Clinical Licensure Examination for the American Dental Education Association and the American Association of Dental Examiners (1994). These committees show her involvement both at the local level and at the national level.

Dr. Johnson has made significant contributions to the school and the dental community and has gained recognition as a gifted educational researcher, a leader in technologic advances in dental education, and a dedicated member of the academic community.

External Reviewers:

Reviewer (A)

“Dr. Johnson’s record demonstrates an acceptable level of published research, a good record of external funding and evidence of an independent research agenda as well as, a record of teaching and service.”

Reviewer (B)

“I would use the term “cutting edge and highly innovative” for her works. One of the articles that has already resulted in invited presentations is *Podcasting Lectures: How Formative Evaluation Strategies Helped to Identify an Unanticipated Solution to a Learning Dilemma*. A major mark of distinction is that this is the first manuscript from a dental school that has been published in this journal, again, placing Michigan in a leadership position because of Dr. Johnson’s role as “senior author” on the article.”

Reviewer (C)

“Her service, likewise, contributes to the profession internationally as well as to your institution. Her continued appointments to important national committees attest to her national and international reputation as an expert in information technology, and her contributions have had national and international impact.”

Reviewer (D)

“She is now a national leader in her field of dental informatics. She has made important contributions to the field by her research, participation in national dental informatics policy committees, and her contributions to the literature.”

Reviewer (E)

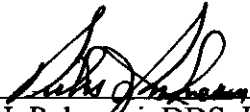
“Dr. Johnson’s publications are important precisely because it is an area where there are few good publications where research has been part of projects involving instructional technology.”

Reviewer (F)

“In my opinion Dr. Johnson is in the top five globally in her field and is a global leader in certain areas such as the use of Podcasting in dental education. Dr. Johnson’s *curriculum vitae* indicates that she has made very substantial contributions to dental education through her work on national and international committees, as a reviewer of papers and proposals for prestigious journals and organizations.”

Summary of Recommendation:

Dr. Johnson was appointed as an associate professor on the tenure track in the Department of Periodontics/Prevention/Geriatrics (now known as the Dept. of Periodontics and Oral Medicine) at the University of Michigan, School of Dentistry, in 2002. She was also given the responsibility of director of Dental Informatics and Information Technology. Dr. Johnson is a talented individual with a strong background in the area of computer technology and website management. She also has excellent skills in the area of organization and management. Dr. Johnson is committed to dental education, dental research, and the dental community. She has made impressive contributions in all areas expected for someone in an academic appointment; that is in teaching, research, and service. In addition to her own achievements, it is clear that Dr. Johnson is serious with regard to her contributions to the School's mission. It is with the support of the Appointments, Promotion and Tenure and Executive Committees of the School of Dentistry that Dr. Johnson is being recommended for promotion to professor of dentistry, with tenure, School of Dentistry.



Peter J. Polverini, DDS, DMSc
Dean, School of Dentistry

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