# Approved by the Regents May 21, 2015

# PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL UNIT FOR LABORATORY ANIMAL MEDICINE DEPARTMENT OF PATHOLOGY

John Erby Wilkinson, D.V.M., Ph.D., associate professor of comparative pathology, with tenure, Unit for Laboratory Animal Medicine, Medical School Administration, and associate professor of pathology, without tenure, Department of Pathology, Medical School, is recommended for promotion to professor of comparative pathology, with tenure, Unit for Laboratory Animal Medicine, Medical School Administration, and professor of pathology, without tenure, Department of Pathology, Medical School.

## Academic Degrees:

Ph.D.	1987	Cornell University
D.V.M.	1980	Cornell University
M.S.	1976	University of Tennessee
B.S.	1974	Duke University

#### Professional Record:

Associate Professor of Comparative Pathology, Unit	for
Laboratory Animal Medicine, University of Michigan	
Associate Professor of Pathology, University of Michigan	
Associate Professor of Pathology, University of Tennessee	
Assistant Professor of Pathology, University of Tennessee	
	Laboratory Animal Medicine, University of Michigan Associate Professor of Pathology, University of Michigan Associate Professor of Pathology, University of Tennessee

#### Summary of Evaluation:

<u>Teaching</u>: Dr. Wilkinson has been actively engaged in teaching in the Unit for Laboratory Animal Medicine's (ULAM) multi-course seminar series for veterinary residents in the postdoctoral laboratory animal medicine training program. He also participates actively in the pathology rounds that are given to all ULAM residents on Thursday mornings, sharing the leadership responsibility with three other faculty pathologists. Dr. Wilkinson has also given guest lectures to graduate students at the University of Michigan and veterinary pathology fellows at the Michigan State University College of Veterinary Medicine.

Research: Dr. Wilkinson is the epitome of the term "team scientist." He has collaborated with multiple investigators, both intramurally and extramurally, using his skills as a veterinary pathologist to provide important interpretations and insights into their animal-based research efforts. His work has resulted in 28 co-authored publications since he joined the UM faculty, and inclusion on 11 successful grant applications (four of which are active), with an additional four under consideration. Dr. Wilkinson's collaborative research efforts with Dr. Richard A. Miller in the UMMS Department of Pathology led to an interesting "award" in 2009 – their work was cited by the journal *Science* in support of one of the top ten breakthroughs in science for that

year. The paper was one of several that noted that the administration of rapamycin increased the lifespan of mice; the first time any drug was shown to lengthen a mammalian lifespan. With regard to national recognition, Dr. Wilkinson's most prominent role is his extensive collaboration with the Cold Spring Harbor Laboratory. He has also been active within the American College of Veterinary Pathology and serves on the editorial boards for the *Journal of Regenerative Medicine* and the *Cornell Veterinarian*.

## Recent and Significant Publications:

Harrison DE, Strong R, Sharp ZD, Nelson JF, Astle CM, Flurkey K, Nadon NL, Wilkinson JE, Frenkel K, Carter CS, Pahor M, Javors MA, Fernandez E, Miller RA: Rapamycin fed late in life extends lifespan in genetically heterogeneous mice. *Nature* 460:392-395, 2009.

Wilkinson JE, Burmeister L, Brooks SV, Chan CC, Friedline S, Harrison DE, Hejtmancik JF, Nadon N, Strong R, Wood LK, Woodward MA, Miller RA: Rapamycin slows aging in mice. *Aging Cell* 11:675-682, 2012.

Okada N, Lin C, Ribeiro MC, Biton A, Lai G, He X, Bu P, Voge Hl, Jablons DM, Keller A, Wilkinson JE, He B, Speed TP, He L: A positive feedback between p53 and miR-34 miRNAs mediates tumor suppression. *Genes Dev* 28:438-450, 2014.

Cho H, Herzka T, Zheng W, Qi J, Wilkinson JE, Bradner JE, Robinson BD, Castillo-Martin M, Cordon-Cardo C, Trotman LC: RapidCaP, a novel GEM model for metastatic prostate cancer analysis and therapy, reveals Myc as a driver of Pten –mutant metastasis. *Cancer Discovery* 4:318-333, 2014.

Jensen MA, Wilkinson JE, Krainer AR: Splicing factor SRSF6 regulates alternative splicing of tenascin C and promotes skin hyperplasia. *Nat Str Mol Biol* 21:189-197, 2014.

Service: Dr. Wilkinson performs clinical service to the Unit for Laboratory Animal Medicine in the role of a diagnostic pathologist. ULAM's role as the veterinary care entity for the university requires that animals receive post-mortem examination when the cause of death is unknown (i.e., not clearly related to the experimentation). This is important as it helps ULAM maintain animals free of infectious diseases, as well as identify unknown adverse consequences in the experiments to assist the scientists in the understanding of existing results and design of their future studies. Dr. Wilkinson held this responsibility in its entirety upon his arrival in 2001, and has shared it as other veterinary pathologists have been recruited to ULAM to assist with diagnostic pathologic services. Dr. Wilkinson also managed ULAM's Animal Diagnostic Laboratory and Pathology and Necropsy Services until they were combined in a coordinated restructuring in 2009 and a laboratory manager was hired. Dr. Wilkinson also serves on the editorial board for the Journal of Regenerative Medicine and the Cornell Veterinarian, and has been a peer-reviewer for other scientific journals, including Veterinary Pathology, American Journal of Pathology, Comparative Medicine, and the Journal of Gerontology: Biological Sciences.

#### External Reviewers:

Reviewer A: "His research is contemporary, relevant, and collaborative. Based on his funding record, it is obvious that Dr. Wilkinson has had a substantial, significant, and sustained supportive role in very important biomedical research."

Reviewer B: "His more recent work with Drs. Nadon, Miller et.al., regarding the effects of rapamycin on aging, has high scientific and translational impact, and resulted in international recognition. His 95 peer-reviewed publications indicate a diversity of interests and expertise; he is clearly a sought-after collaborator."

Reviewer C: "...I would state that Dr. John Wilkinson has an outstanding track-record for academic productivity, has made seminal advances in his chosen areas of expertise, and rank him amongst the top 10% of veterinary pathologists working in laboratory animal medicine, cancer and aging research."

Reviewer D: "Dr. Wilkinson is affiliated with unarguably one of the best laboratory animal training programs in the U.S., participates actively in the program providing critical pathology mentorship, and contributes to the success of trainees from a program that has enjoyed great accomplishment historically."

Reviewer E: "...he has carved out a reputation as an expert in rodent models of gaining, which is a valuable asset to the University of Michigan. This is particularly so since there are few comparative pathologists with this interest and defined skill set – something that the NIH is concerned with and is currently seeking to remedy."

#### Summary of Recommendation:

Dr. Wilkinson has made significant contributions to the research and scholarly missions of the Unit for Laboratory Animal Medicine, the Medical School, and the university through his collaborative efforts on a wide variety of animal research studies. I am pleased to recommend John Erby Wilkinson, D.V.M., Ph.D. for promotion to professor of comparative pathology, with tenure, Unit for Laboratory Animal Medicine, Medical School Administration, and professor of pathology, without tenure, Department of Pathology, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine