PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Approved by the Regents May 21, 2015

DEPARTMENT OF INTERNAL MEDICINE DEPARTMENT OF CELL AND DEVELOPMENTAL BIOLOGY

<u>Cheng-Yu Lee, Ph.D.</u>, assistant professor of internal medicine, Department of Internal Medicine, and assistant professor of cell and developmental biology, Department of Cell and Developmental Biology, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, associate professor of cell and developmental biology, without tenure, Department of Cell and Developmental Biology, Medical School [also being promoted to research associate professor in the Life Sciences Institute].

Academic Degrees:

Ph.D.

2002 University of Maryland

B.S.

1996 University of Maryland

Professional Record:

2006-present

Assistant Professor of Internal Medicine, University of Michigan

2006-present

Assistant Professor of Cell and Developmental Biology, University

of Michigan

2006-present

Research Assistant Professor, Life Sciences Institute, University of

Michigan

Summary of Evaluation:

<u>Teaching</u>: Dr. Lee is extremely engaged in teaching activities. He has served as an instructor of the basic science cell biology course (CDB 530) for the past eight years. He has extensive experience as a research mentor to undergraduate, graduate, doctoral, and post-doctoral students in his laboratory. He has participated as a faculty advisor on several dissertation committees and volunteers his time to organize a monthly *Drosophila* meeting where researchers across the institution meet to discuss their latest findings. He has also taught courses on stem cells and neurobiology of *Drosophila* at the well-known Cold Spring Harbor Laboratory which is a testament to his abilities as an educator and his knowledge of the field.

Research: Dr. Lee is an exceptional scientist. He uses the model system *Drosophila* to study the molecular mechanisms of neural stem cells and he has made unprecedented discoveries regarding the regulation of stem cells during brain development and tumorigenesis. Dr. Lee's success as a researcher is evidenced by his funding history, publication record, and established presence outside of the university. Currently, he is the principal investigator on two R01 grants, with a third in submission. He is the author of 16 peer-reviewed papers, three reviews, and two book-chapters; he is first or senior author on all but one of these publications. Dr. Lee has received national recognition for his scholarly achievements as he was the recipient of a Career

Award in the Biomedical Sciences from the Burroughs Wellcome Fund from 2006-2011, and a Distinguished Scholar Award from The Sontag Foundation in 2008. Dr. Lee is a gifted speaker and he is frequently invited to present his work at national and international meetings.

Recent and Significant Publications:

Weng M, Golden KL, Lee C-Y: Dfezl/Earmuff maintains the restricted developmental potential of intermediate neural progenitors in *Drosophila*. *Dev Cell* 18:36-42, 2010.

Xiao Q, Komori H, Lee C-Y: *klumpfuss* distinguishes stem cells from progenitor cells during asymmetric neuroblast division. *Development* 139:2670-2680, 2012.

Kuang C, Golden KL, Simon CR, Damrath J, Buttitta L, Gamble C, Lee C-Y: A novel Fizzy/Cdc20-dependent mechanism suppresses necrosis in neural stem cells. *Development* 141:1453-1464, 2014.

Janssens DH, Komori H, Chen K, Koe CT, Wang H, Lee C-Y: dFezf/Earmuff restricts progenitor cell potential by attenuating the competence to respond to self-renewal factors. *Development* 141:1036-1046, 2014.

Komori H, Xiao Q, McCartney BM, Lee C-Y: Brain tumor specifies intermediate progenitor cell identity by attenuating b-catenin/Armadillo activity. *Development* 141:51-62, 2014.

<u>Service</u>: Dr. Lee provides valuable service to various professional societies and organizations. He is a member of the Genetic Society of America and the Society of Developmental Biology. Internationally, he performs ad hoc study section reviews for the Wellcome Trust and Deutsche Forschungsgemeinschaft. He is also an active participant in peer-review service for many high-impact scholarly journals, including *Cell*, *Developmental Biology*, *Nature*, *and Science*.

External Reviewers:

Reviewer A: "Dr. Lee has established an outstanding research program and is one of the top 3-4 investigators worldwide studying *Drosophila* neural stem cells....All of his papers are distinguished by high-quality data, novel results, and scientific rigor....In part thanks to Dr. Lee's efforts, interest in *Drosophila* neural stem cell biology will remain high for the foreseeable future. There is every reason to expect that Dr. Lee will have a long and successful scientific career."

Reviewer B: "In terms of his scientific reputation and standing in the field, Cheng-Yu is reviewing for the major journals in the field...he is on study sections at the NIH and abroad and he is regularly invited at meetings, including Gordon Conferences and in departments. This indicates that he is highly respected and considered as a major player in the field."

Reviewer C: "Cheng-Yu's fruitful research on *Drosophila* neural stem cells promises to shed new light on the molecular mechanisms of vertebrate neurogenesis and potentially provide novel therapeutic targets for physiologically curing brain tumors."

Reviewer D: "Dr. Lee is a world leader in applying genetic and cell biological tools to study the regulation and function of neural stem cells and has had a major impact in this field in particular, and at the juncture between cell and developmental biology more generally."

<u>Reviewer E</u>: "Through the highly novel and significant advances made by Dr. Lee in the last five years, he has attained an outstanding international reputation and I would now consider him to be among the top three group leaders internationally in the field of neural stem cell biology in genetic model systems."

Reviewer F: "...I feel the work that Cheng-Yu and his lab have produced since he began at the University of Michigan represent a significant body of top-notch, cutting-edge science that make significant contributions to stem cell biology and neural development. Through this work, Cheng-Yu has established himself as a leader in these fields. In addition, for his future, Cheng-Yu and his lab appear to have developed significant momentum in their research."

Summary of Recommendation:

Dr. Lee is a talented scientist who demonstrates an outstanding commitment to academia. His contributions are of high importance, have led to significant advancements in understanding cancer biology, and have gained the attention and respect of his peers. He is a valued member of the institution and his technical skills, productivity, and expertise solidify his position as a researcher of the future. For these reasons, I strongly recommend Cheng-Yu Lee, Ph.D. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of cell and developmental biology, without tenure, Department of Cell and Developmental Biology, Medical School.

James O. Woolliscroft, MAD

Dean

Lyle C. Roll Professor of Medicine

May 2015