Approved by the Regents
May 16, 2013

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF RADIATION ONCOLOGY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCES

Mats E. D. Ljungman, Ph.D., associate professor of radiation oncology, with tenure, Department of Radiation Oncology, Medical School, and associate professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health, is recommended for promotion to professor of radiation oncology, with tenure, Department of Radiation Oncology, Medical School, and professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.

Academic Degrees:

Ph.D.	1990	Stockholm University
B.S.	1983	Murray State University, Murray, KY

Professional Record:

2001-present	Associate Professor of Radiation Oncology, University of Michigan,
2001-present	Associate Professor of Environmental Health Sciences, University of Michigan
1994-2001	Assistant Professor of Radiation Oncology, University of Michigan

Summary of Evaluation:

Teaching: Dr. Ljungman has been extensively involved in organizing and teaching courses at the University of Michigan. He has organized and taught the Radiation Biology course EHS583 and directing the DNA Damage Response Journal Club (Radiation Sciences Program). He has also participated in the teaching of "Introduction to Toxicology" (School of Public Health), "Cancer Biology" (Microbiology), "Radiobiology" for Radiation Oncology Residents (Radiation Oncology) and "Introduction to Radiobiology" for Radiology Residents (Radiology). In addition, he has mentored three post-doctoral fellows, 14 graduate students, three medical residents, nine undergraduate students as well as one high school student in his laboratory.

Research: Dr. Ljungman has published a total of 66 peer-reviewed articles, two book chapters and was the editor for a special issue of *Mutation Research*. He has been awarded 23 grants since getting tenure in 2001, four R01 grants (two as co-PI, two as principal investigator), two R21 grants (PI) and one SPORE grant (co-PI, GI-SPORE). Since 2001, he has given 45 invited extramural lectures and was a visiting professor for six months at the Karolinska Hospital in Stockholm, Sweden in 2003. He is on the editorial board of *Mutation Research*.

Recent and Significant Publications:

O'Hagan HM and Ljungman M: Efficient Nuclear Export of NES-containing Proteins Requires Ongoing Synthesis and Export of mRNAs. *Exp Cell Res* 297:548-559, 2004.

Ljungman M and Lane DP: Transcription-guarding the genome by sensing DNA damage *Nature Rev Cancer* 4:727-737, 2004.

Hanasoge S and Ljungman M: H2AX phosphorylation after UV-Irradiation is triggered by DNA repair intermediates and is mediated by the ATR kinase. *Carcinogenesis* 28:2298-2304, 2007.

Derheimer FA, O'Hagan HM, Krueger H, Hanasoge S, Paulsen MT, Ljungman M: RPA and ATR link transcriptional stress to p53. *Proc Natl Acad Sci USA* 104:12778-12783, 2007.

Wang L, Heidt DG, Lee CJ, Logsdon CD, Zhang L, Fearon ER, Ljungman M, Simeone DM: Oncogenic function of ATDC in pancreatic cancer through Wnt pathway activation and β-catenin stabilization. *Cancer Cell* 15:207, 2009.

Service: Dr. Ljungman has provided service to the Department of Radiation Oncology by serving as the chair for the Biology Division Director Search Committee and is currently serving on the GME Committee. He is providing service to the Medical School and the Cancer Center by co-chairing the Radiation Sciences Program and acting as the director of the Experimental Irradiation Core. Furthermore, he has served on the BMRC and on the Cellular and Molecular Biology Program Committees. Nationally, Dr. Ljungman has served on the Research Integrity and Ethics Committee, American Association for Cancer Research, served as a councilor for the Environmental Mutagen Society (EMS), chaired the Hollaender Outreach Committee at the EMS, served as the program chair (president-elect) for the 43rd Annual EMS meeting and will serve as president for EMS 2012-2013. He also organized and chaired the 11th Annual Midwest DNA Repair Symposium in Ann Arbor, 2009.

External Reviewers:

Reviewer A: "His recent collaboration with Dr. Simeone has identified a potential new target (ATDC) for cancer therapy, especially for the devastating disease of pancreatic cancer. This [seminal] advance may finally lead to improved treatment of this otherwise almost fatal disease."

Reviewer B: "Dr. Ljungman's qualifications to the rank of professor are extremely strong and I am utterly surprised he is not yet promoted to the professor level. At my institution Dr. Ljungman would have been promoted many years ago, so the appointment is long overdue in my opinion…I rate Dr. Ljungman extremely highly. He is an outstanding scientist and plays an important and significant role within the field of DNA damage response."

Reviewer C: "I cannot stress enough the contributions Dr. Ljungman has made in the elucidation of DNA repair processes, apoptosis and stress response, notably in transcription inhibition following genotoxic stress and impact on downstream signaling. His success in science is

documented in numerous excellent papers and he is an excellent colleague and teacher with the ability to convey his ideas and theories in a clear and compelling manner…"

Reviewer D: "These selected examples of Dr. Ljungman's scientific prowess testify to the excellence of his work….Dr. Ljungman's scientific productivity and success in matched by his professional service accomplishments."

Reviewer E: "His list of activities (as included in his CV) is indeed impressive and reflects his nature as [an] active and dynamic scientist, at the national and international level."

Reviewer F: "Dr. Ljungman strikes me as a deep thinker and an excellent scientist devoted to advancing knowledge in his field. No wonder he is sought as speaker in numerous meetings and as invited seminar speaker by many institutions. I was not surprised when Dr. Ljungman was elected President of the US Environmental Mutagen Society (EMS). This is of course an excellent indication of the high esteem in which he is held by the large group of EMS members."

Summary of Recommendation:

Dr. Ljungman is a prominent and productive scientist who has made significant contributions to the field of DNA damage response through the analysis of mRNA stability in affecting gene expression. He is recognized both nationally and internationally for his work in this area. We enthusiastically recommend Mats E. D. Ljungman, Ph.D. for promotion to professor of radiation oncology, with tenure, Department of Radiation Oncology, Medical School, and professor of environmental health sciences, without tenure, Department of Environmental Health Sciences, School of Public Health.

James O. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

Martin A. Philbert, Ph.D.
Dean
School of Public Health

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