

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Ronald J. Buckanovich, M.D., Ph.D., assistant professor of internal medicine, Department of Internal Medicine, and assistant professor of obstetrics and gynecology, Department of Obstetrics and Gynecology, Medical School, is recommended for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of obstetrics and gynecology, without tenure, Department of Obstetrics and Gynecology, Medical School.

Academic Degrees:

M.D.	1998	Cornell University
Ph.D.	1996	Rockefeller University, New York, NY
B.S.	1990	Cornell University

Professional Record:

2006-present	Assistant Professor of Internal Medicine and Assistant Professor of Obstetrics and Gynecology, University of Michigan
2004-2006	Instructor of Medicine, Hematology/Oncology, Hospital of the University of Pennsylvania, Philadelphia, PA.

Summary of Evaluation:

Teaching: While the majority of Dr. Buckanovich's professional effort is devoted to research and clinical care, he works extremely hard to be an effective educator and mentor. The majority of his teaching occurs in the laboratory and in the clinics on a one-on-one basis. When Dr. Buckanovich is the service attending in the hospital, he performs regular formal teaching sessions and daily informal bedside instruction for medical residents. 80% of residents on his oncology consult service rank him in the top quintile of educators. Through his work as a mentor and faculty supervisor in the Undergraduate Research Opportunities Program, he has helped undergraduates define their future career goals. Dr. Buckanovich currently supervises two graduate students in the laboratory and acts as a mentor for a graduate student in the Department of Biomedical Engineering. He is a thesis committee member for four graduate students in both the departments of Cell and Molecular Biology and Biomedical Engineering. Dr. Buckanovich is an associate director of the Hematology/Oncology Fellowship Program and intensively advises Hematology/Oncology fellows. He also mentors junior faculty members and provides continuing education to community physicians and nurses.

Research: Dr. Buckanovich and the members of his laboratory perform "bench to bedside" research. In the past six years, his laboratory studies identifying novel anti-cancer therapies have resulted in two investigator-initiated clinical therapeutic trials at the University of Michigan. Dr. Buckanovich's research interests include: ovarian cancer stem cells, mesenchymal stem cells, tumor vascular niche, ovarian cancer therapeutics, and ovarian cancer clinical trials. He is the principal investigator on a NIH R01 grant and a NIH Director's Award: New Investigator Innovator grant. In addition, Dr. Buckanovich serves as the principal investigator of a UM Taubman Research Institute: Emerging Scholar Award grant and a MICHR Pilot Award grant. He is also the co-investigator of a grant from

the Department of Defense. In 2012, Dr. Buckanovich was inducted into the American Society for Clinical Investigation and received the Division of Hematology/Oncology – Research Excellence Award. He is an editorial advisor for *The Journal of Translational Research* and an ad hoc reviewer for eight other journals. Since his appointment as an assistant professor, Dr. Buckanovich has published 16 peer-reviewed articles, with 11 as first or senior author.

Recent and Significant Publications:

Buckanovich RJ, Facciabene A, Kim S, Benencia F, Sasaroli D, Balint K, Katsaros D, O'Brien-Jenkins A, Gimotty PA, Coukos G: Endothelin B receptor mediates the endothelial barrier to T cell homing to tumors and disables immune therapy. *Nat Med* 14:28-36, 2008.

Winer I, Wang S, Lee YE, Fan W, Gong Y, Burgos-Ojeda D, Spahlinger G, Kopelman R, Buckanovich RJ: F3-targeted cisplatin-hydrogel nanoparticles as an effective therapeutic that targets both murine and human ovarian tumor endothelial cells in vivo. *Cancer Res* 70:8674-8683, 2010.

McLean K, Gong Y, Choi Y, Deng N, Yang K, Bai S, Cabrera L, Keller E, McCauley L, Cho KR, Buckanovich RJ: Human ovarian carcinoma-associated mesenchymal stem cells regulate cancer stem cells and tumorigenesis via altered BMP production. *J Clin Invest*. 121:3206-3219, 2011.

Silva IA, Bai S, McLean K, Yang K, Griffith K, Thomas D, Ginestier C, Johnston C, Kueck A, Reynolds RK, Wicha MS, Buckanovich RJ: Aldehyde dehydrogenase in combination with CD133 defines angiogenic ovarian cancer stem cells that portend poor patient survival. *Cancer Res* 71:3991-4001, 2011.

Yang K, Mooney C, Spahlinger G, Schuetze S, Arias-Pulido H, Verschraegen C, Gimotty P, Buckanovich RJ: DR6 as a diagnostic and predictive biomarker in adult sarcoma. *PLOS One* 7:e36525, 2012.

Service: Dr. Buckanovich has a busy clinical practice, specializing in the treatment of ovarian and uterine cancers. In addition to his research and clinical responsibilities at the University of Michigan, he currently serves on the Hematology/Oncology Fellow Selection Committee, the Gynecologic-Oncology Fellow Selection Committee, the Fellowship Education Committee, and the Medical Scientist Training Program Career Advisory Committee. On the regional level, he is currently serving on the Michigan Cancer Consortium – Ovarian Cancer Guidance Committee and last year, Dr. Buckanovich served on the Cancer Education Committee for the American Society of Clinical Oncology.

External Reviewers:

Reviewer A: “But perhaps his biggest contributions to gynecologic oncologic [sic] are in his basic science research regarding ovarian cancer and ovarian cancer-associated mesenchymal stem cells. This exciting research has been important to understand the pathogenesis of ovarian cancer and has provided cues on novel treatment approaches, particularly as it relates to immune therapy.”

Reviewer B: “Dr. Buckanovich’s combination of exceptional innate intelligence, focused drive, intellectual curiosity, remarkable interpersonal skills, and kind demeanor make him an exceptional academic teacher, mentor and role model. I am certain that he will be an invaluable asset to future

postgraduate researchers, postdoctoral scholars and colleagues as well that will have the privilege to have him as a teacher, mentor or colleague.”

Reviewer C: “Dr. Buckanovich is one of the best examples I have encountered of a successful physician scientist. He is able to run a very productive laboratory, provide patient care, and direct clinical studies that test novel treatments for ovarian cancer.”

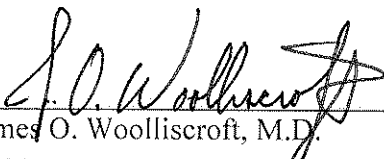
Reviewer D: “His involvement with internal committees at University of Michigan, his participation on various study sections, and his function as a reviewer for several oncology-focused journals demonstrate excellent level[s] of service commensurate with the expectations for promotion.”

Reviewer E: “...I have been closely following his research since 2008 when his outstanding work on the role of endothelial cells in immune therapy was published in *Nature Medicine*....Because of his outstanding research contributions, Dr. Buckanovich is highly regarded by his peers in the ovarian cancer research community.”

Reviewer F: “He is considered a thoughtful scientist and due to his expertise has been invited to many national and international seminars for presentations. He is well funded for his research through the NIH as well as the Department of Defense. He is amongst the highest tier of investigators amongst his peers with regard to research accomplishments.”

Summary of Recommendation:

Dr. Buckanovich truly represents all three missions of the University of Michigan Medical School and Health System – exemplifying the role of clinician, educator, and researcher. He has been a key contributor to the Hematology/Oncology program and will continue to advance the missions and goals of the institution. For these reasons, I recommend Ronald J. Buckanovich, M.D., Ph.D. for promotion to associate professor of internal medicine, with tenure, Department of Internal Medicine, and associate professor of obstetrics and gynecology, without tenure, Department of Obstetrics and Gynecology, Medical School.



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

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