

Graham Warren, MD, PhD

Associate Professor

Joint Appointment (Primary Appointment in Radiation Oncology)

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Education

2004 M.D., University of Kentucky

1999 Ph.D., University of Kentucky

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Research Interests:

We work to advance knowledge in 3 primary areas:

1. Understanding the effects of tobacco and tobacco related products on outcomes in cancer patients. We test the fundamental effects of tobacco related products on cancer cells with a primary emphasis on response to conventional cancer therapeutics such as chemotherapy and/or radiotherapy. We are evaluating modulation of nicotinic acetylcholine receptors and downstream signals leading to acute and chronic changes in tumor biology, microenvironment, and therapeutic response. We also work closely with cancer prevention and population scientists to understand the behavioral and societal effects of tobacco use in cancer patients. We have also evaluated practice patterns in oncologists and methods to increase awareness for tobacco use and tobacco cessation in cancer patients. Our work is leading to changes in treatment guidelines as well as the design and execution of clinical trials for cancer patients through coordinated efforts by the American Cancer Society (ACS), American Association for Cancer Research (AACR), American Society of Clinical Oncology (ASCO), the International Association for the Study of Lung Cancer (IASLC), and the National Cancer Institute (NCI).
2. Testing the effects of effect modifiers (sensitizers and protectors) for chemotherapy and/or radiotherapy in cancer cells and in normal tissues. Many of the cytotoxic effects of cancer treatment could be improved by increasing the therapeutic ratio of an agent (i.e. by increasing the effect on cancer as compared to a normal tissue). We work to identify mechanisms to increase therapeutic efficacy through evaluation of specific signal transduction pathways, tumor microenvironment, and immune response.
3. Improving methods to optimize data collection that can be used for automated decision making. Many cancer patients are asked non-standardized questions during their clinical evaluation. Increasing the use of fixed-variable response systems can improve the accuracy of identifying important behaviors and clinical variables that are

necessary to optimize clinical treatment strategies and improve clinical outcomes. We have pioneered this approach through the use of annotated evidence based assessments of tobacco use coupled with an automated referral to substantially increase access to tobacco cessation support in large cancer treatment populations. We continue to advance this approach for tobacco and are using similar approaches to develop a systematic approach to cancer patients treated with radiotherapy.

Recent Publications | [Additional Publications](#)

1. **Warren GW**, Marshall JR, Cummings KM, Zevon MA, Reed R, Hysert P, Mahoney MC, Hyland AJ, Nwogu C, Demmy T, Dexter E, Kelly M, O'Connor RJ, Houston T, Jenkins D, Germain P, Singh AK, Epstein J, Dobson-Amato K, Reid ME. Automated Tobacco Assessment and Cessation Support for Cancer Patients. In Press, Cancer
2. **Warren GW**, Marshall JR, Cummings KM, Toll BA, Gritz ER, Hutson A, Dibaj S, Herbst R, Mulshine JL, Hanna N, Dresler CA. Addressing tobacco use in cancer patients: A survey of American Society of Clinical Oncology (ASCO) members. In Press, J Oncol Pract
3. Yendamuri S, Huang M, Malhotra U, **Warren GW**, Bogner P, Nwogu C, Groman A, Demmy T. Prognostic implications of signet ring cell histology in esophageal adenocarcinoma – a SEER database analysis. Cancer 2013. May 29. doi: 10.1002/cncr.28099.
4. **Warren GW**, Marshall JR, Cummings KM, Toll B, Gritz ER, Hutson A, Dibaj S, Herbst R, Dresler C, on behalf of the IASLC Tobacco Control and Smoking Cessation Committee. Practice Patterns and Perceptions of Thoracic Oncology Providers on Tobacco Use and Cessation in Cancer Patients. J Thorac Oncol 8:543-8, 2013. doi: 10.1097/JTO.0b013e318288dc96
5. Morales N, Romano M, Cummings KM, Marshall JR, Hyland A, Hutson A, **Warren GW**. Accuracy of Self-Reported Tobacco Use in Newly Diagnosed Cancer Patients. Cancer Causes Control 24:1223-30, 2013. doi 10.1007/s10552-013-0202-4
6. Toll BA, Brandon T, Gritz ET, Land SR, **Warren GW**, Herbst RA. Assessing and Stopping Cancer Patients' Tobacco Use: An American Association for Cancer Research Policy Statement. Clin Cancer Res 9:1941-8, 2013. doi: 10.1158/1078-0432.CCR-13-0666
7. **Warren GW**, Singh AK. Nicotine and Lung Cancer. J Carcinogenesis 12:1-8, 2013. doi 10.4103/1477-3163.106680
8. **Warren GW**, Kasza K, Reid M, Cummings KM, Marshall JR. Smoking at Diagnosis and Survival in Cancer Patients Int J Cancer 132:401-10, 2013. doi: 10.1002/ijc.27617.
9. Peters EN, Torres E, Toll BA, Cummings KM, Gritz ER, Hyland A, Herbst R, Marshall JR, **Warren GW**. Tobacco Assessment in Actively Accruing Cooperative Group Clinical Trials. J Clin Oncol 30: 2869-75, 2012. doi/10.1200/JCO.2011.40.8815, 2012
10. **Warren GW**, Romano MA, Kudrimoti MR, Randall ME, McGarry RC, Singh AK, Rangnekar VM. Nicotinic Modulation of Therapeutic Response In Vitro and In Vivo. Int J Cancer. 131:2519-27, 2012. doi: 10.1002/ijc.27556
11. **Warren GW**, Arnold SM, Valentino JP, Gal TJ, Hyland AJ, Singh AK, Rangnekar VM, Cummings KM, Marshall JR, Kudrimoti MR. Accuracy of Self-Reported Tobacco Assessments in a Head and Neck Cancer Treatment Population. Radiother Oncol 103:45-8, 2012. doi: 10.1016/j.radonc.2011.11.003

Online References and Podcasts:

1. "Greater Attention Needed to Promote Tobacco Control Among Cancer Patients: Tobacco cessation treatment should be considered standard of care for patients with any type of cancer" in the ASCO News, June 2, 2013. (<http://chicago2013.asco.org/greater-attention-needed-promote-tobacco-control-among-cancer-patients>)

2. ASCO Expert Corner: "Stopping Tobacco Use After a Cancer Diagnosis" ASCO Cancer.net, October 3, 2012 (<http://www.cancer.net/all-about-cancer/cancernet-feature-articles/expert-information-asco/asco-expert-corner-stopping-tobacco-use-after-cancer-diagnosis>, Podcast: http://www.cancer.net/sites/cancer.net/files/stopping_smoking_dr_warren.mp3)

3. "Tobacco Use and Cancer Outcomes" in National Cancer Policy Forum Workshop: Reducing Tobacco-Related Cancer Incidence and Mortality. Institutes of Medicine or the National Academies, June 11-12, 2012. (<http://www.iom.edu/~media/Files/Activity%20Files/Disease/NCPF/2012-JUNE-11/5-B-Warren.pdf>)

4. "Tobacco Use Reduces Cancer Treatment Effectiveness: Research and Policy Considerations" 2012 AACR Annual Meeting, April 2012 (<http://webcast.aacr.org/console/player/17488?mediaType=slideVideo>)