

BIOGRAPHICAL SKETCH

NAME: Gary R. Shapiro, MD

eRA COMMONS USER NAME (credential, e.g., agency login): GSHAPIR5

POSITION TITLE: Research Investigator, HealthPartners Institute, Medical Oncologist, Regions Hospital Cancer Center

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Michigan State University, East Lansing, MI	BS	1975	Biology
George Washington University, Washington DC	MD	1979	Medicine
Northwestern University, Chicago, IL	Residency	1979-82	Internal Medicine Residency
Northwestern University, Chicago, IL	Fellowship	1982-83	Hematology Fellowship
University of Minnesota, Minneapolis, MN	Fellowship	1983-85	Medical Oncology Fellowship
Hebrew University of Jerusalem, Israel		1986-87	Postdoctoral Research – Medical Ethics
Shalom Hartman Institute, Jerusalem, Israel		1986-87	Postdoctoral Research – Medical Ethics
MacLean Center for Clinical Medical Ethics, University of Chicago, Chicago, IL	Fellowship	1987-89	Medical Ethics Fellowship

A. Personal Statement

I am a medical oncologist with Regions Hospital Cancer Center and Westfields Hospital Specialty Clinic. As Medical Director for the Cancer Center of Western Wisconsin, I oversee cancer care at six hospital locations. I am also an investigator at HealthPartners Institute. Previously, I served as Chairman of the Department of Oncology at the Johns Hopkins Bayview Medical Center, Director of the Johns Hopkins Geriatric Oncology Program, and Associate Professor in the Department of Oncology at the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center. I have also held several leadership positions at Aurora Sinai Medical Center in Milwaukee, WI. My research has focused on geriatric oncology, rural cancer care, healthcare disparities, and medical ethics. I served as a co-principal investigator on a Demonstration Project, funded by the Centers for Medicare and Medicaid, examining cancer prevention and treatment among ethnic and racial minorities, and a co-investigator on a Department of Defense-funded project to examine biomarkers for prostate cancer. My previous research has included serving as co-investigator on two NCI-funded projects, “Communication of Symptoms and Distress Assessed over the Internet in Patients with Advanced Lung Cancer” and “Web-Based Support for Informal Caregivers in Cancer (CHESS).” I look forward to working with Dr. Pawloski on this project to be a liaison between the research team and the oncology team to implement the neutropenia clinical decision support tool at Regions Hospital Cancer Care Center.

1. Marshall JK, Mbah OM, Ford JG, Phelan-Emrick D, Ahmed S, Bone L, Wenzel J, **Shapiro GR**, Howerton M, Johnson L, Brown Q, Ewing A, Pollack CE. Effect of patient navigation on breast cancer screening among African American Medicare beneficiaries: a randomized controlled trial. *J Gen Intern Med.* 2016 Jan;31(1):68-76. PMID: PMC4700012.
2. Horne HN, Phelan-Emrick DF, Pollack CE, Markakis D, Wenzel J, Ahmed S, Garza MA, **Shapiro GR**, Bone LR, Johnson LB, Ford JG. Effect of patient navigation on colorectal cancer screening in a community-based randomized controlled trial of urban African American adults. *Cancer Causes Control.* 2015 Feb;26(2):239-46.
3. Tuchman SA, **Shapiro GR**, Ershler WB, Badros A, Cohen HJ, Dispenzieri A, Flores IQ, Kanapuru B, Jurivich D, Longo DL, Nourbakhsh A, Palumbo A, Walston J, Yates JW. Multiple myeloma in the very old:

an IASIA conference report. J Natl Cancer Inst. 2014 Apr 3;106(5). pii: dju067.

- Martinez KA, Pollack CE, Phelan DF, Markakis D, Bone L, **Shapiro GR**, Wenzel J, Howerton M, Johnson L, Garza MA, Ford JG. Gender differences in correlates of colorectal cancer screening among Black Medicare beneficiaries in Baltimore. Cancer Epidemiol Biomarkers Prev. 2013 Jun;22(6):1037-42. PMID: PMC3681887.

B. Positions and Honors

Positions and Employment

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| 1985-1986 | Instructor, Division of Medical Oncology, Department of Medicine, University of Minnesota, Minneapolis, MN |
| 1986 - 1987 | Visiting Lecturer, Hebrew University of Jerusalem, Jerusalem, Israel |
| 1989 - 1990 | Assistant Professor, Department of Neoplastic Disease, Mount Sinai School of Medicine, New York, NY |
| 1990 - 1993 | Clinical Assistant Professor, Division of Medical Oncology, Department of Medicine, University of Minnesota, Minneapolis, MN |
| 1990 – 1993 | Medical Oncology Private Practice, Oncological Consultants & Minneapolis Medical Specialists, Minneapolis, MN |
| 1993 – 2004 | Associate Professor & Head of Medical Oncology/Hematology, Department of Medicine, University of Wisconsin Medical School, Madison, WI |
| 1993 – 2004 | Medical Director of Oncology Programs & Vince Lombardi Cancer Clinic, Aurora Sinai Medical Center, Milwaukee, WI |
| 1996 – 2004 | Medical Director, Visiting Nurse Association Community Hospice, Aurora Health Care, Milwaukee, WI |
| 2002 – 2004 | Director, Center for Cancer and Aging, University of Wisconsin Milwaukee Clinical Campus, Aurora Sinai Medical Center, Milwaukee, WI |
| 2004 – 2010 | Chairman, Department of Oncology, Johns Hopkins Bayview Medical Center, Johns Hopkins University, Baltimore, MD |
| 2006 – 2011 | Faculty Member, Johns Hopkins Avon Foundation Breast Cancer Center, Johns Hopkins University, Baltimore, MD |
| 2007 – 2011 | Director, Johns Hopkins Geriatric Oncology Program, Johns Hopkins University, Baltimore, MD |
| 2010 – Pres | Director of Clinical Research, Institute for Advanced Studies in Aging & Geriatric Medicine, Washington, DC |
| 2011 – Pres | Medical Director, Cancer Center of Western Wisconsin, New Richmond, WI |
| 2011 – Pres | Staff Medical Oncologist, HealthPartners, Regions Hospital Cancer Center, St. Paul, MN |

Professional Memberships

American College of Physicians
American Society of Clinical Oncology
American Society of Hematology
Eastern Cooperative Oncology Group
International Society of Geriatric Oncology
Geriatric Oncology Consortium

C. Contribution to Science

- Oncology.** As a research investigator and practicing oncologist, I have more than 25 years of clinical, leadership and research experience, including my current role as Medical Director for the Cancer Center of Western Wisconsin. From 1993 to 2004, I was Chairman of the University of Wisconsin's Division of Hematology & Oncology in Milwaukee. Before coming to Wisconsin to take on my current role in 2011, I served as Chairman of the Department of Oncology at the Johns Hopkins Bayview Medical Center and was the founding director of the Johns Hopkins Sidney Kimmel Comprehensive Cancer Program in Geriatric Oncology, as well as Associate Professor in the Department of Oncology at the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center. My previous research has included serving as a Co-Investigator on two NIH-funded projects, "Communication of Symptoms and Distress Assessed over the Internet in Patients with Advanced Lung Cancer" and "Web-Based Support for Informal Caregivers in Cancer (CHESS; R01NR008260)."

- a. Bailey HH, Attia S, Love RR., Fass T, Chappell R, Tutsch K, Harris L, Jumonville A, Hansen R, **Shapiro GR**, Stewart JA. Phase II trial of daily oral perillyl alcohol (NSC 641066) in treatment-refractory metastatic breast cancer. *Cancer Chemother Pharmacol*. 2008 Jun;62(1):149-57.
- b. Ward S., Donovan H., Gunnarsdottir S., Serlin R., **Shapiro GR**, Hughes S. A randomized trial of a representational intervention to decrease cancer pain (RIDcancerPain). *Health Psychol*. 2008 Jan; 27:59-67. PMID: PMC2526464.
- c. Hoang T, Kim K, Jaslowski A, Koch P, Beatty P, McGovern J, Quisumbing M, **Shapiro G**, Witte R, Schiller JH. Phase II study of second-line gemcitabine in sensitive or refractory small cell lung cancer. *Lung Cancer*. 2003 Oct; 42(1):97-102.
- d. Wiernik PH, Li H, Weller E, Hochster HS, Horning SJ, Nazeer T, Gordon LI, Habermann TM, Minniti CJ Jr, **Shapiro GR**, Cassileth PA. Activity of topotecan 21-day infusion in patients with previously treated large cell lymphoma: long-term follow-up of an Eastern Cooperative Oncology Group study (E5493). *Leuk Lymphoma*. 2012 Jun;53(6):1137-42. PMID: PMC3568670.

2. Geriatric oncology. I am the Director of Clinical Research for the Institute for Advanced Studies in Aging (IASIA). Previously, I was the founding director of the Johns Hopkins Sidney Kimmel Comprehensive Cancer Program in Geriatric Oncology. I have been involved in numerous research projects and publications related to the care of older individuals with cancer and have developed tools and patient education materials specifically for geriatric cancer patients.

- a. Attia S, Traynor A, Merchant J, Hoang T, Ahuja H, Beatty PA, Hansen RM, Masters GA, Oettel KR, **Shapiro GR**, Larson MM, Larson ML, Schiller JH. Phase I/II study of vinorelbine and exisulind as first-line treatment of advanced non-small cell lung cancer in patients at least 70 years old: a Wisconsin oncology network study. *J Thorac Oncol*. 2008 Sep;3(9):1018-25. PMID: PMC2562273.
- b. Tuchman SA, **Shapiro GR**, Ershler WB, Badros A, Cohen HJ, Dispenzieri A, Flores IQ, Kanapuru B, Jurivich D, Longo DL, Nourbakhsh A, Palumbo A, Walston J, Yates JW. Multiple myeloma in the very old: an IASIA conference report. *J Natl Cancer Inst*. 2014 Apr 3;106(5). pii: dju067.

3. Cancer screening disparities. As a medical oncologist, I have extensive expertise in cancer screening in the clinical setting, and see firsthand the racial and economic disparities among patients when it comes to cancer screening. I was Co-PI on a demonstration project, funded by the Centers for Medicare and Medicaid, examining cancer prevention and treatment among ethnic and racial minorities, and a co-investigator on a Department of Defense-funded project to examine biomarkers for prostate cancer (R01CA149273). I have written several recent publications related to cancer screening disparities, including breast cancer and colorectal screening.

- a. Marshall JK, Mbah OM, Ford JG, Phelan-Emrick D, Ahmed S, Bone L, Wenzel J, **Shapiro GR**, Howerton M, Johnson L, Brown Q, Ewing A, Pollack CE. Effect of patient navigation on breast cancer screening among African American Medicare beneficiaries: a randomized controlled trial. *J Gen Intern Med*. 2016 Jan;31(1):68-76. PMID: PMC4700012.
- b. Horne HN, Phelan-Emrick DF, Pollack CE, Markakis D, Wenzel J, Ahmed S, Garza MA, **Shapiro GR**, Bone LR, Johnson LB, Ford JG. Effect of patient navigation on colorectal cancer screening in a community-based randomized controlled trial of urban African American adults. *Cancer Causes Control*. 2015 Feb;26(2):239-46.
- c. Martinez KA, Pollack CE, Phelan DF, Markakis D, Bone L, **Shapiro GR**, Wenzel J, Howerton M, Johnson L, Garza MA, Ford JG. Gender differences in correlates of colorectal cancer screening among Black Medicare beneficiaries in Baltimore. *Cancer Epidemiol Biomarkers Prev*. 2013 Jun;22(6):1037-42. PMID: PMC3681887.

4. Medical ethics. I completed postgraduate work in medical ethics at the University of Chicago, the Hebrew University of Jerusalem and the Shalom Hartman Institute, and have a strong interest in medical ethics, especially as it relates to oncology and end of life care. I take the preventive ethics approach to end of life care with my patients, and encourage other oncologists to do the same. I believe it is important to present options to oncology patients and their families early on in their treatment regimen. This approach allows patients to make informed and thoughtful end of life decisions in tandem with their oncologists; decisions that reflect their own goals and values.

- a. Dy SM, **Shapiro GR**. Beyond futility: good shared end-of-life decision-making takes ongoing discussions, realistic goals. *Oncology*. Epub 2008 July.

- b. **Shapiro GR.** Are There Limits To Oncology Care? (Futility). *Cancer Treat Res.* 2008;140:137-57.
- c. **Shapiro GR,** Gatter R. DNR and morphine drips: Not necessarily active euthanasia. *Proc Am Soc Clin Oncol* 14:529, 1995.

D. Research Support

Ongoing Research Support

Improving Risk Stratification for Colonoscopy Screening (Desai)

Source: NCI/R03CA171836

Role: Other Significant Contributor

04/01/2013-03/31/2017

Colorectal cancer is the second leading cause of cancer death in the United States, but several screening methods are available and effective in reducing this risk. Colonoscopy is the most common screening method, and many consider it the best; but it is also expensive, invasive, burdensome to the patient, and it carries some risk of harms. This study sets the stage for development of methods to predict which persons are most likely to benefit most from screening colonoscopy; and which persons are at lower risk, and may wish to choose a less invasive method or delay colonoscopy until older.

Completed Research Support (within the last 3 years)

A Retrospective Chart Review of Capecitabine Prescribing in Older Patients: Are Physicians Dose Adjusting for Age and Renal Function? (Shapiro)

Source: HealthPartners

Role: Principal Investigator

11/08/2012-08/01/2015

Capecitabine, an orally administered chemotherapy, has a wide range of applications, including first line and adjuvant treatment for colorectal, gastric, and refractory cases of metastatic breast cancer, but there is very little clinical information describing the prescribing patterns and the risk of adverse events in the elderly. In this pilot study, we conduct a comprehensive retrospective chart review of elderly patients (≥ 65) with breast, colorectal and other gastrointestinal cancers. In addition to describing capecitabine prescribing and adverse events in this patient population, we will determine whether prescribed dosages of capecitabine are properly adjusted according to age and estimated Glomerular Filtration Rate (GFR).

Small Integrin-Binding Glycophosphoproteins as Biomarkers for Prostate Cancer (Fedarko)

Source: US Department of Defense/R01CA149273

Role: Co-Investigator

06/08/2011-05/31/2014

Much research has focused on developing alternative blood-based biomarkers or improved variations on prostate-specific antigen measures. We have been studying three proteins from a gene family for Small Integrin Binding Ligand N-linked Glycoproteins (SIBLINGs), normally expressed mainly by bones and teeth. Studies of pathological prostate cancer specimens indicated that expression of two of these proteins is associated with tumor progression and poor prognosis, while the third protein associates with early stage disease. This research will determine whether SIBLING levels in blood (a) have high sensitivity (low false negative rate) and high specificity (low false positive rate) for prostate cancer detection, (b) can distinguish different forms of prostate health/disease, and (c) provide useful prognostic information on disease aggressiveness and the likelihood of progression.

Cancer Prevention & Treatment Demonstration for Ethnic and Racial Minorities (Ford & Shapiro)

Source: CMS/5036N

Role: Co-PI

The Cancer Prevention and Treatment Demonstration was a community-based participatory research randomized controlled trial evaluating patient navigation as a strategy to improve cancer screening among Black Medicare beneficiaries in Baltimore, Maryland. The cancer screening sites of interest were breast, cervix, colon/rectum, and prostate.