

NCI Fund Legislative Report

June 1, 2021 – November 30, 2021

Winthrop P. Rockefeller Cancer Institute

NCI Designation Overview

National Cancer Institute Designation is recognition by the National Cancer Institute (NCI) for exceptional cancer research.

In 1971, President Richard Nixon signed the landmark National Cancer Act authorizing a national cancer program with funding to establish 15 new cancer centers. These new cancer centers were charged with conducting clinical research, training and demonstration of advanced diagnostic and treatment methods for cancer. The ultimate goal was for these centers to be distributed geographically such that 75% of the

U.S. population would have access to care at one of these centers without requiring an overnight stay.

Today, the NCI cancer centers program has grown to include 71 cancer centers distributed throughout 36 states (**Figure 1**). These 71 centers represent the top 2% of cancer centers in the U.S.

Arkansas, Louisiana and Mississippi are the only cancer centers in the south that do not currently have an NCI Designated cancer center. The nearest NCI designated centers providing adult cancer care reside in Dallas, Oklahoma City, Kansas City, St. Louis and Nashville. These centers are all ~300+ miles (5+ hours drive) away from central Arkansas and not a feasible cancer care solution for most Arkansans.

Sylvester Cancer Center in Miami, FL was the most recent cancer center to become designated in 2019. Prior to that, the most recently designated cancer centers were Stephenson Cancer Center in Oklahoma City, OK in 2018, Markey Cancer Center in Lexington, KY in 2013 and the University of Kansas Cancer Center in Kansas City, KS in 2012.

The NCI cancer centers program continues to value the geographic distribution of its cancer centers and patient access to research driven cutting-edge care. The NCI recognizes that there is a great need and opportunity for Arkansas to have an NCI Designated cancer center, and it stands ready to support the Winthrop P. Rockefeller Cancer Institute on its journey toward NCI Designation.

Value of NCI Designation

NCI Designation is an enormous asset for any state that houses an NCI designated cancer center. Benefits include the following:

1. Direct monetary support from NCI will support cancer research that benefits Arkansans. While many cancer centers conduct research, the Winthrop P. Rockefeller Cancer Institute is the only academic institution in the U.S. focused on improving cancer outcomes in Arkansas. In fact, NCI requires its designated cancer centers to define their research portfolio based on what will make a difference in cancer prevention, awareness, treatment, survival and quality of life in the population they serve.
2. Indirect monetary gains include a projected \$70 million economic impact on the state of Arkansas annually. Further growth following NCI Designation is expected to increase that impact value. (Source: *Arkansas Center for Health Improvement, 2018*)

3. Becoming a member of the NCI Cancer Centers program will give Arkansas a seat at the table to drive national strategic planning for cancer research toward opportunities that will benefit Arkansas.
4. Arkansans will have access to clinical trials and new cancer treatments that are only available to cancer centers that are NCI designated.
 - Access to grant funding opportunities that are only available to NCI Designated cancer centers
 - Access to cutting edge clinical trials and investigative drugs that are only available to NCI Designated cancer centers
5. Cancer researchers at the Winthrop P. Rockefeller Cancer Institute will have access to cancer research grants that are only available to NCI designated cancer centers. This provides the opportunity to increase the amount of cancer research designed to benefit Arkansans by ~60%.
6. The opportunity to partner with an NCI Designated cancer center will attract biotechnology and pharmaceutical companies to Arkansas.

Process to Attain NCI Designation (Figure 2)

NCI Designation is attained through strategic recruitment of cancer researchers and establishment of a sophisticated cancer research infrastructure prescribed by the NCI in its p30 Cancer Center Support Grant (CCSG) (<https://grants.nih.gov/grants/guide/pa-files/PAR-20-043.html>).

Our estimated cost to attain NCI designation is \$200 million. This cost is in line with recent successful NCI Designation efforts. Oklahoma's Stephenson Cancer Center became the 70th NCI Designated cancer center on May 2, 2018, stating it took 12 years and \$400 million to become designated. Twenty-nine percent of the \$400 million came from the state, predominantly through a statewide tobacco tax, according to Stephenson Cancer Center Director, Robert Mannel, MD¹. The Sylvester Comprehensive Cancer Center in Miami, Florida reported that it spent \$250 million over five years to become the country's 71st NCI Designated cancer center on July 29, 2019. Sylvester's director, Stephen Nimer, MD, said that the state of Florida contributed a little over \$16 million per year during that time to support their efforts to become NCI Designated².

Cancer centers seeking NCI Designation undergo review by an External Advisory Board (EAB) to ensure that NCI's standards for a designated center are being met. These EAB meetings are critical to keep a cancer center on track for Designation and result in a formal report about the cancer center being filed with NCI. Once an EAB has determined that a cancer center is ready to apply for NCI Designation, the cancer center must meet with NCI and get their approval to apply for NCI Designation.

Once NCI approves a center to apply for NCI Designation, the center submits its CCSG to NCI according to the timeline set by NCI. Preparation of a CCSG generally takes two years and is often begun well before NCI approves a center to apply for Designation. Following submission of the grant, the cancer center will host a site visit from NCI and leaders from other cancer centers to review the cancer center.

¹The Cancer Letter May 2, 2018 Vol.44 No.18 https://cancerletter.com/conversation-with-the-cancer-letter/20180504_3/

²The Cancer Letter July 29, 2019 Vol.45 No.31 https://cancerletter.com/the-cancer-letter/20190729_1/

Both the written grant and site visit comprise the scores that determine if an NCI cancer center becomes designated.

After NCI Designation is attained, it must be renewed every five years with the submission of another CCSG and hosting of a site visit. This ensures that the standards set forth by NCI for a designated cancer center continue to be upheld.

Expected Timeline

The Winthrop P. Rockefeller Cancer Institute is targeting submission of its CCSG application as soon as possible. There are several critical factors affect this timeline: 1) how quickly strategic cancer research recruitments can be made (well on our way), 2.) achieving approximately 300 patient accruals on clinical trial (NCI requirement), 3.) establishing a state-wide community outreach and engagement effort including cancer research relevant to the state of Arkansas and 4) ultimately a timeline set by NCI for submitting the CCSG application.

Impact of COVID-19

Over the last 6 months COVID-19 has continued to impact our state and the delivery of healthcare to our citizens. With the onset of new variants, UAMS has continued to alter many processes and services to provide the safest environment possible for all of our patients. UAMS is still screening patients and employees upon entry. We continue to limit the number of visitors allowed for patient safety. Our surgery activity has resumed normal volumes compared to this time period in previous years. Our medical oncology clinics have continued to see an increase in volumes for the period of June through November of 2021 and have achieved higher levels compared to the same period in 2020. For Medical Oncology/Myeloma, the clinic volumes equated to 110% of the volume from the same period in 2020. From June through November of 2021, our infusion room visits were up 2% compared to volumes from the same period in 2020. Overall, the volumes for all clinics were up 13% compared to the same period in 2020.

In October of 2020, we opened our brand-new infusion area on the 6th floor, including a 10-bed Phase I unit. This unit gives us the ability to conduct Phase I drug trials, which previously was not available in the state, and patients had to be referred out-of-state for these trials. Our second infusion room was moved to the 4th floor in January 2021. Also, we completed and opened a brand new, state of the art breast imaging center on the third floor in March 2021. Our Stem Cell Transplantation Program continues to be a Center of Excellence. The transplant floor was renovated to provide state of the transplant care. We are the only facility in the state of Arkansas to provide CAR-T therapy, which is a specialized state of the art therapy for patients with lymphomas and leukemias.

Laboratory research has continued unaffected throughout the COVID-19 pandemic at UAMS. Clinical research has resumed in full capacity. Our new investigator recruitment has also been robust despite the limitations due to COVID. While our initial screening and interview process shifted to the virtual environment, the majority of final candidates who appeared likely for recruitment have been able to come on campus for visits. We have signed 3 new research faculty since the last 6-month report (**Table 1**). We also have 7 offers currently in-process. We have shifted to targeted recruitment to fill specific gaps in our scientific portfolio. As all institutions are dealing with these challenges, we have not lost any candidates as a result of COVID-19, and we have been very pleased with our success in recruitments.

Figure 1. NCI Designated Cancer Centers. There are currently 71 NCI Designated cancer centers across 36 states and the District of Columbia. The 36 states with one or more NCI Designated cancer centers are depicted in shading below:

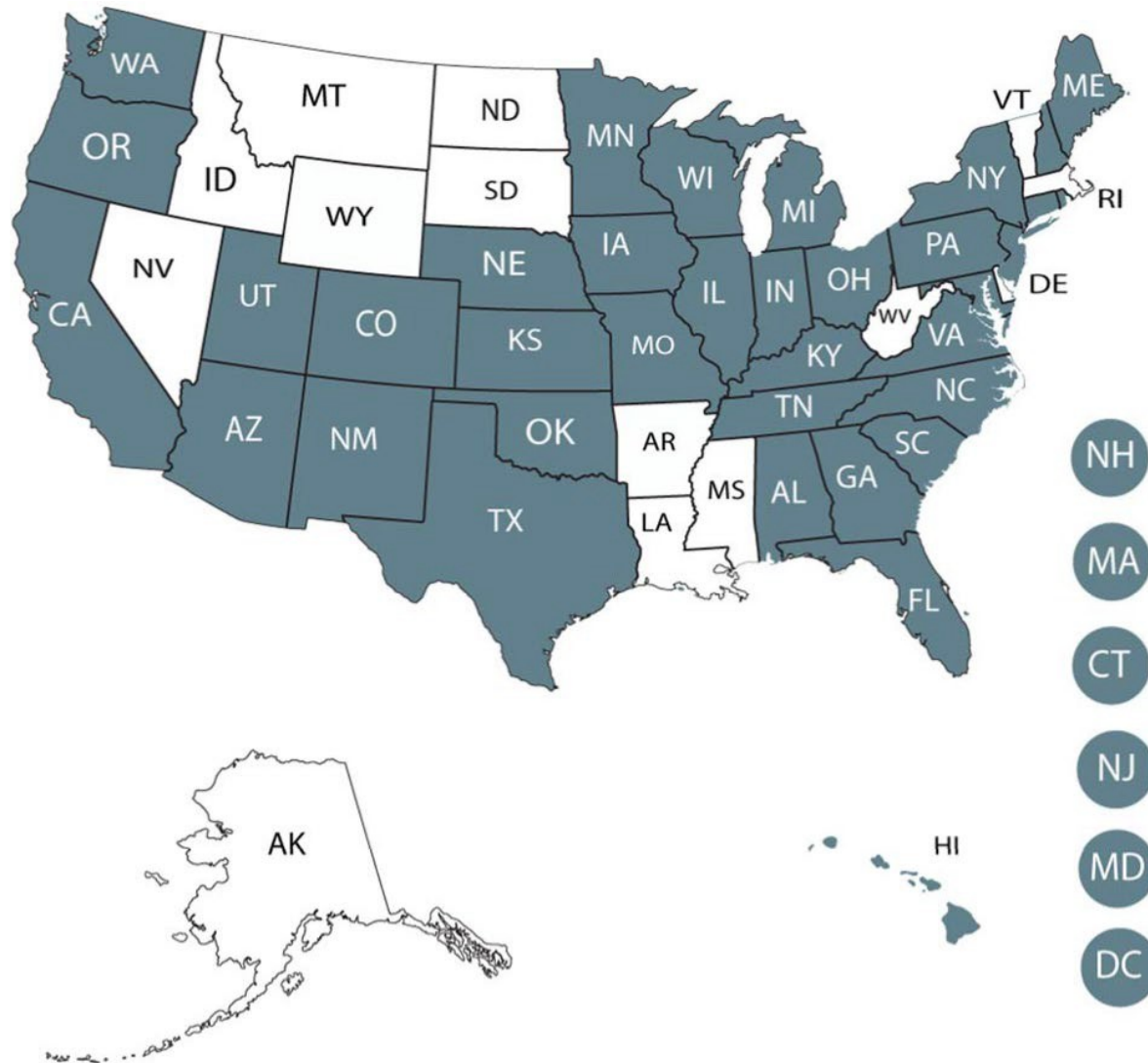
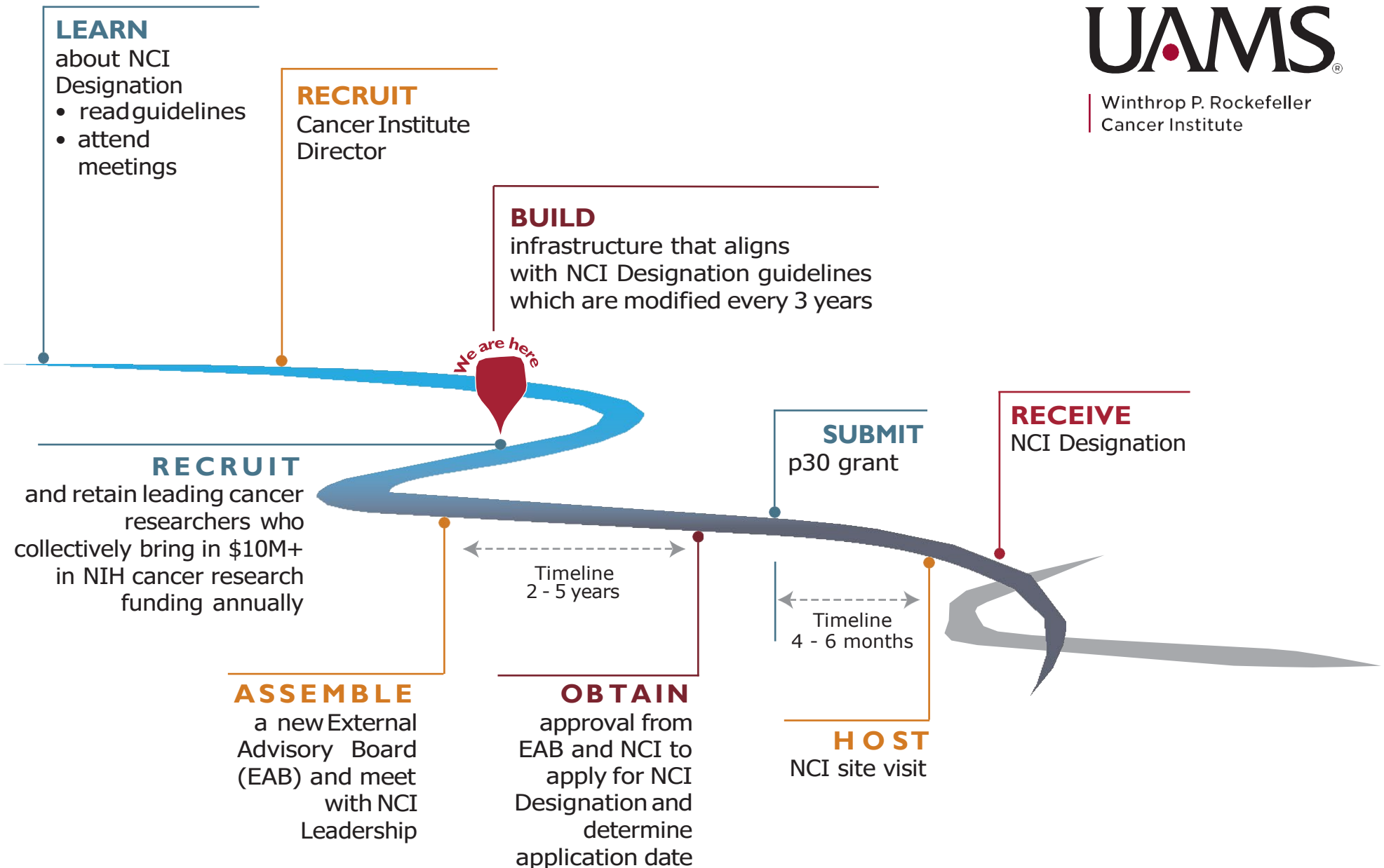


Figure 2. Roadmap to NCI Designation



State Funds - NCI Designation

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total
Division	FY20 (Actual Expense)	FY21 (Actual Expense)	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Actual Expense	1,929,339	4,801,455								6,730,794
Encumbered Expense (current confirmed commitments)			26,755,911	18,687,850	7,859,834	6,732,206	5,039,213	2,173,436	0	67,248,451
Encumbered Expense Expected (Out Years)				9,367,405	13,167,405	15,767,405	15,767,405	15,767,405	5,200,000	75,037,025
Total Expense Plus Encumbered Expenses										149,016,270
Total Revenue Received To Trust Fund To Date										48,833,409

Expense Breakdown - Senate Bill 151 - Trust Fund For NCI Designation

		Semiannual Report July 1, 2022					
Program Account Description	Fund Center Account	Salary	Fringe	M&O	Total Expense	Grand Total Expense	Notes
Atiq, Omar, MD (COM Internal Medicine-Medical Oncology)	3012857	0.00	0.00	0.00	0.00	33,609.89	Support of head & neck clinical trial
Cancer Service Line Support	3012859	0.00	0.00	0.00	0.00	8,840.17	Clinical research effort for Jibran Ahmed, MD
Hauer-Jensen, Martin, MD, PhD (COP - Radiation Health)	3012860	0.00	0.00	0.00	0.00	5,658.71	Bridge funding for resubmission of COBRE grant
Cancer Institute Administration	3012861	0.00	0.00	0.00	0.00	1,754,305.78	Staff salaries, equipment, supplies, etc.
Cancer Institute Basic Research	3012862	0.00	0.00	0.00	0.00	5,200.00	For WPRCI Research Retreat
Cancer Clinical Trials Research Administration (CCTRA)	3012863	0.00	0.00	0.00	0.00	167,705.87	Cancer Clinical Trials
Lewis, Gary, MD (COM - Radiation Oncology)	3012865	0.00	0.00	0.00	0.00	40,562.82	Recruitment package support
Leung, Ricky, PhD (COM Pharmacology Toxicology)	3012866	0.00	0.00	0.00	0.00	78,551.54	Recruitment package support
Birrer, Michael, MD, (Cancer Institute)	3012954	0.00	0.00	0.00	0.00	60,410.95	Recruitment package support
Manzano, Mark, PhD (COM Microbiology & Immunology)	3012957	0.00	0.00	0.00	0.00	3,567.10	Recruitment package support
Zhan, Frank MD, PhD (COM Internal Medicine - Medical Oncology)	3012958	0.00	0.00	0.00	0.00	82,838.12	Recruitment package support
Cancer Institute Bioinformatics Core Support	3012975	0.00	0.00	0.00	0.00	15,283.17	Supplement to Core for expense in excess of operating revenue
Belido, Teresita, PhD (COM Physiology and Biophysics)	3012983	0.00	0.00	0.00	0.00	117,532.14	Recruitment package support
Stephens, Kimberly, MD (COM Peds Care)	3012984	0.00	0.00	0.00	0.00	21,795.83	Recruitment package support
Su, Joseph, MD (CPH Epidemiology)	3012985	0.00	0.00	0.00	0.00	41,816.65	Recruitment package support
Cancer Institute Genomics Core Support	3012986	0.00	0.00	0.00	0.00	757,299.80	Supplement to Core for expense in excess of operating revenue
Cancer Institute Health Disparities - Ronda Henry-Tillman, MD	3012989	0.00	0.00	0.00	0.00	56,090.20	Retention package support
Core Voucher Program	3012996	0.00	0.00	0.00	0.00	111,156.66	Cancer core use vouchers for CI members
Cancer Pilot Program	3012997	0.00	0.00	0.00	0.00	-12,201.09	Support for 4 cancer pilot projects at \$100K each, credit represents balance not yet spent
Amick, Benjamin III, PhD (CPH Epidemiology)	3013016	0.00	0.00	0.00	0.00	35,344.67	Recruitment package support
Cornett, Larry (AR INBRE grant support)	3013041	0.00	0.00	0.00	0.00	85,901.11	Program support
Ryan, Katie, PhD (COM Biochemistry)	3013042	0.00	0.00	0.00	0.00	98,194.13	Recruitment package support
Chiang, Rung-Chin, MD, (CPH Environmental & Occup Health)	3013043	0.00	0.00	0.00	0.00	31,650.69	Recruitment package support
Jones, Dina (CPH HBHE Center for Tobacco Study)	3013044	0.00	0.00	0.00	0.00	14,379.45	Recruitment package support

Program Account Description	Fund Center Account	Salary	Fringe	M&O	Total Expense	Grand Total Expense	Notes
Cancer Institute Community Outreach	3013048	0.00	0.00	0.00	0.00	361,800.03	Support for Associate Director for Community Outreach and Engagement
Cancer Institute CCSG Administration	3013049	0.00	0.00	0.00	0.00	25,644.98	Recruit ads
Wolfe, Adam	3013054	0.00	0.00	0.00	0.00	49,261.99	Recruitment package support
Delgado-Calle, Jesus, MD, (COM Physiology & Biophysics)	3013083	0.00	0.00	0.00	0.00	3,395.04	Recruitment package support
DFA Charges - Workers Comp	3013087	0.00	0.00	0.00	0.00	7,576.39	Charges administered by DFA
Radiation Core	3013097	0.00	0.00	0.00	0.00	13,590.00	Purchase of x-ray cabinet
Tricot, Guido, MD (COM Myeloma Center)	3013104	0.00	0.00	0.00	0.00	9,995.58	Recruitment package support
Recruitment Costs	3013114	0.00	0.00	0.00	0.00	4,724.00	Advertising costs, travel, interview meals, etc.
Shaughnessy Jr., John (COM Myeloma Center)	3013122	0.00	0.00	0.00	0.00	35,901.54	Recruitment package support
Dr. Karbassi Breast Vaccine Support	3013127	0.00	0.00	0.00	0.00	49,944.45	Support of clinical trial for a breast cancer vaccine
Roy Choudhury, Samrat, PhD (COM Pediatrics)	3013173	0.00	0.00	0.00	0.00	23,953.60	Recruitment package support
Yeh, Ed (COM Internal Medicine)	3013195	0.00	0.00	0.00	0.00	7,254.28	Recruitment package support
Nagalo, Marius (COM Pathology)	3013199	0.00	0.00	0.00	0.00	82,841.32	Recruitment package support
Miah, Syem (COM Biochemistry)	3013205	0.00	0.00	0.00	0.00	111,112.48	Recruitment package support
Seeds of Science Pilot Program	3013206	0.00	0.00	0.00	0.00	-1,033.76	Support 4 Pilot Projects at \$50K each
Park, Mark (COPH Epidemiology)	3013210	0.00	0.00	0.00	0.00	55,830.06	Recruitment package support
Enemark, Eric (COM-Biochemistry)	3013242	0.00	0.00	0.00	0.00	62,157.48	Recruitment package support
Chang, Ming (COM Pharmacology and Toxicology)	3013243	0.00	0.00	0.00	0.00	14,538.75	Recruitment package support
Brochausen, Mathias (DBMI)	3013256	0.00	0.00	0.00	0.00	60,194.49	Recruitment package support
Tackett, Alan (COM Biochemistry)	3013269	0.00	0.00	0.00	0.00	73,619.78	Research support
Leung, Justin (COM Radiation Oncology)	3013270	0.00	0.00	0.00	0.00	40,453.14	Recruitment package support
Addicott, Meredith (COM PRI)	3013271	0.00	0.00	0.00	0.00	9,855.13	Recruitment package support
Qun, Z (COM Pathology)	3013272	0.00	0.00	0.00	0.00	39,427.61	Recruitment package support
Byrd, Alicia (COM Biochemistry)	3013273	0.00	0.00	0.00	0.00	32,854.58	Recruitment package support
Xia, Fen (COM Radiation Oncology)	3013274	0.00	0.00	0.00	0.00	43,660.14	Recruitment package support

Program Account Description	Fund Center Account	Salary	Fringe	M&O	Total Expense	Grand Total Expense	Notes
Proteomics Core (COM Biochemistry)	3013275	0.00	0.00	0.00	0.00	5,939.09	Proteomics Core support
Lu, Williams (COM Pathology)	3013283	0.00	0.00	0.00	0.00	84,159.59	Recruitment package support
Hsu, Ping-Ching (COPH EOH)	3013285	0.00	0.00	0.00	0.00	7,594.55	Recruitment package support
WPRCI Diversity	3013309	0.00	0.00	0.00	0.00	23,721.36	Support for Associate Director for Diversity, Equity, and Inclusion
Johann, Don (DBMI)	3013347	0.00	0.00	0.00	0.00	125,604.02	Research support
Chambers, Tim (COM Biochemistry)	3013360	0.00	0.00	0.00	0.00	14,726.24	Project Collaboration Support
Rahman, Mohammad (COM Biochemistry)	3013363	0.00	0.00	0.00	0.00	68,250.81	Recruitment package support
Racine-Miousse, Isabella (COM Biochemistry)	3013385	0.00	0.00	0.00	0.00	22,498.22	Recruitment package support
Ewing, Laura TL1	3013475	0.00	0.00	0.00	0.00	94,937.00	TL1 Award
KL2-Lu, Williams (COM Pathology)	3013476	0.00	0.00	0.00	0.00	120,000.00	KL2-Award
CTRM Scholars (TRI)	3013477	0.00	0.00	0.00	0.00	49,495.21	Translational Research support
Koss, Brian (COM Biochemistry)	3013478	0.00	0.00	0.00	0.00	92,246.00	Recruitment package support
Tobacco Cessation	3013622	0.00	0.00	0.00	0.00	1,529.71	Tobacco cessation program support
Total Expense		0.00	0.00	0.00		5,544,749.24	

Winthrop P. Rockefeller Cancer Institute
Senate Bill 151
Trust Fund - Pursuit of a National Cancer Institute Designation
FY2021 Semiannual Report Due January 1, 2022

Trust Fund Reporting Period (06/1/2021 - 11/30/2021)

Beginning Balance (6/1/2021)	\$17,073,640.75
Total Transfers In	\$26,015,581.15
Special Revenue: Cigarette Paper Tax	\$848,931.54
**Processing Charges by DF&A on Special Revenue	(\$26,316.87)
Net Revenue Received	<u>\$43,911,836.57</u>
Expense:	
**Workers Comp Charged direct by DF&A	(\$7,576.39)
Expense Draws Posted For Period (6/01/2021 - 11/30/2021)	(\$5,304,243.71)
Ending Balance (11/30/2021)	<u>\$38,600,016.47</u>
Expense Draws For November Not Yet Posted to AASIS	(\$232,929.14)
Adjusted Ending Balance	<u>\$38,367,087.33</u>

**Department of Finance and Administration adjustments

Definition:

Recruitment package support: monies assigned to a specific recruited researcher

Translational research support: any expenditures related to translating laboratory science into clinical management not associated with a specific recruitment

Research Support: all other research expenditures beside translational

Progress Toward Achieving NCI Designation June 1, 2021 – November 30, 2021

Detailed Progress:

1. **Large scale recruitment of cancer researchers continues:** In January and February, 2020, an omnibus ad seeking multiple cancer researchers was placed in four top scientific journals and their accompanying online sites (see previous reports). From this effort, thirty-six top candidates have been interviewed via Zoom, and twenty-six candidates have had on-campus interviews. **Table 1** shows three successful recruitments from this reporting period. Their CVs are provided in **Appendix A**. The sum total of these efforts to date is 25 diverse candidates across academic rank and home departments; we have seven offer letters in-process. We are extremely excited about all of these recruits and believe they will contribute significantly to our research portfolio.
2. **Strategic recruitment of cancer researchers across UAMS:** The Cancer Institute works with departments across the UAMS campus to recruit faculty of interest to the departments. When departments discover a candidate they would like to pursue who is engaged in cancer research, the Cancer Institute becomes engaged in that process. This allows Cancer Institute research priorities to be considered in all relevant recruitments across campus.
3. **Targeted recruitment of cancer researchers:** In October 2020, Cancer Institute Director, Michael Birrer, MD, PhD personally reached out to recent NCI K99 award recipients. We are still in the process of finishing in-person interviews for these candidates, and we are hopeful to have at least two offers drafted from this particular effort. In March 2021, the Cancer Institute drafted and placed targeted advertisements for myeloma researchers in high impact journals; we are also working on approvals for targeted recruitment efforts related to Community-Engaged Cancer Researchers and Cancer Epidemiologists. We hope to have these advertisements active on high impact scientific job boards in the next couple of months, and we expect a robust applicant response.
4. **Increased Research Funding:** Our recruitment of active researchers has brought in additional cancer research funding. Our fifteen signed recruits are bringing an impressive \$5.4 million of active external peer-reviewed funding; this number does not include all of the recruits' planned grant submissions once arriving on campus. In addition, our current researchers continue to submit multiple grants to cancer-related funding sources such as NCI, ACS, and DoD. Our researchers were awarded \$13.9 million in new peer-reviewed cancer related funding (total) during the current reporting period of June 1, 2021 – November 30, 2021. As of November 30, 2021, our cancer researchers held \$18.9 million in peer-reviewed cancer related annual project direct cost grant funding.
5. **Philanthropic Fundraising:** We continue to actively pursue philanthropic support for the Cancer Institute over this legislative cycle. Through multiple efforts including individual appeals, fund raising events and broader marketing, we have successfully collaborated with the new Vice Chancellor of Institutional advancement John Erck to raise substantial monies. We have secured gifts and pledges totaling \$15 million to date, the halfway point to our \$30M goal. These donations address the pledged matching funds from the Cancer Institute according to the agreed upon legislative monies.
6. **Strategic Recruitment of Oncology Clinical Faculty and Staff:** We have hired three new medical

oncologists to join our impressive clinical team who will be starting on or before July 1, 2022: Shi-Ming Tu, MD specializes in genitourinary oncology; Cesar Gentile Sanchez, MD specializes in bone and marrow transplant; and Sunny Singh, MD specializes in solid tumor oncology. Additionally, we have hired two myeloma hospitalists (Trilok Shrivastava, MD and Jaskirat Sethi, MD), two palliative care physicians (Natalie Brooke Peeples, MD and Emily Newsome, MD), and Head and Neck Surgery Fellow (Matthew Solverson, MD) to serve in the Head and Neck Oncology Clinic. Their CVs are presented in **Appendix B**. We continue to utilize medical search firms and our own advertisements to recruit top medical oncologists from around the country.

7. **Community Outreach and Engagement:** In August of 2021, the Winthrop P. Rockefeller Cancer Institute embarked on its journey for the benefit of patient care by launching the Community Outreach and Engagement (COE) arm of its highly touted ongoing cancer work. Providing cutting edge cancer care for all Arkansans regardless of where they reside is essential. The COE arm launched a patient navigation program with nine highly motivated persons assigned to cover all regions of Arkansas (**Figure 3**). Their focus is to improve the cancer coordination care for patient and families. In our pursuit to reach all Arkansans, especially those in the rural areas, the patient navigators serve to eliminate barriers to timely diagnosis and treatment through cancer education, establishing opportunities for preventative screenings, and securing relationships with patients and families for the coordination of cancer services. Currently, our navigators have spent nearly 900 hours in training to provide navigation services. With over 800 hours of navigation services provided to date, they have established community relationships through education, building relationships and providing patient support. With many community connections coming in 2022 and beyond, the uniqueness of our patient navigation program will continue to grow and thrive.
8. **Diversity, Equity, and Inclusion (DEI):** Process, criteria, and metric development are underway to enhance participation of women, minorities, and individuals from groups nationally under-represented in the research workforce and center leadership. Infrastructure is being established to support research opportunities for junior, early- and mid-career researchers. Dr. Analiz Rodriguez, an underrepresented minority neurosurgeon and cancer institute researcher, was recently selected for the Bristol Myers Squibb /National Medical Fellowships/American Association for Cancer Research Diversity in Clinical Trials Career Development Program. A DEI program administrator has also been selected to work with the DEI Associate Director to achieve the criteria set forth by CCSG.
9. **New Cancer Institute Senior Leadership:** We are excited to have recently announced two new Cancer Institute leaders that will help develop the infrastructure for the programs required for our NCI Designation application.
 - a. Gwendolyn Bryant-Smith, MD, Associate Professor in the College of Medicine, Department of Radiology, was appointed as Associate Director of Diversity, Equity, and Inclusion. She will play a role in enhancing participation of women, minorities, and individuals from groups nationally under-represented in the research workforce and center leadership.
 - b. Amy Jo Jenkins, MS, former Cancer Institute Director of Clinical Trials, was appointed as Associate Director of Administration. Jenkins will lead all administrative support efforts for the Winthrop P. Rockefeller Cancer Institute and will continue oversight of the Clinical Trials Office.
10. **Cancer Research Grant Activity:** **Table 3** summarizes grant activity occurring June 1, 2021 – November 30, 2021.

Figure 3. UAMS Cancer Navigators

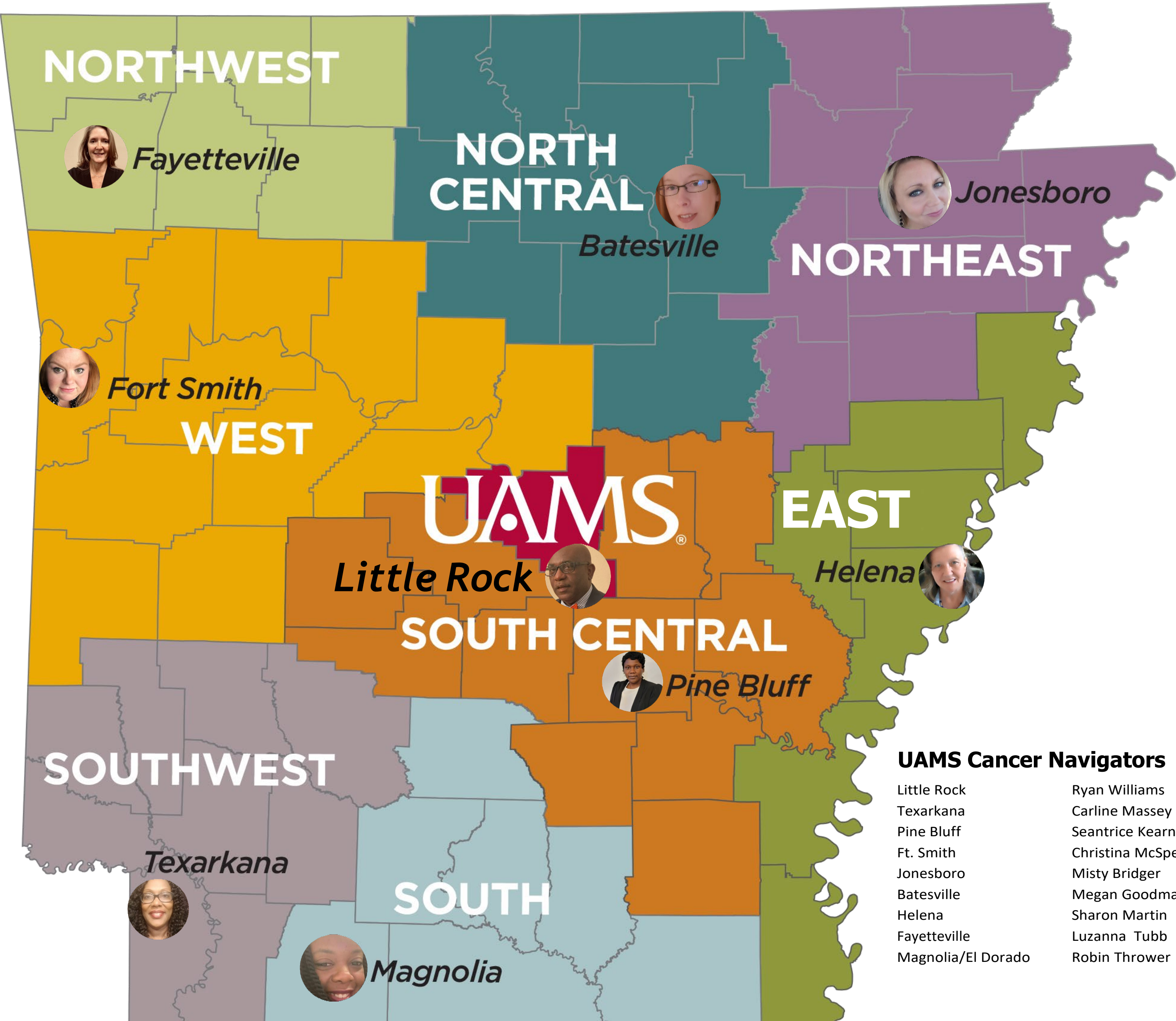


Table 1. Cancer Research Recruitments June 30, 2021 – November 30, 2021

Candidate	Current/Previous Institution	Recruited Rank	Recruitment Status	Recruitment Home Department	Research Interest	Peer-Reviewed Cancer Research Funding at Time of Legislative Reporting	CI investment*
Julienne Carstens, PhD	Mayo Clinic	Assistant Professor	starte date TBD	Pathology	Pancreatic Cancer	None	\$1,800,000 over 5 years
Brian Koss, PhD	UAMS	Assistant Professor	Started September 1, 2021	Biochemistry and Molecular Biology	Immunotherapy	NIH Early Independence Director's Award - \$1,900,000	\$1,250,000 total CI investment for start up resources over 5 years (\$250,000 per year FY22 - FY26)
Mario Schootman, PhD	SSM Health, St. Louis	Professor	starte date TBD	College of Public Health	How neighborhood dynamics impact rates of cancer.	None	\$1,500,000 over 5 years

*Cancer Institute investment represents the total commitment made by the Winthrop P. Rockefeller Cancer Institute to support the cancer research candidate and generally represents a three to five year period. This support is to pay for operating expenses including lab equipment, personnel salary and fringe, supplies, services, and other relative cancer research costs.

Table 2. Clinical Oncology Recruitments June 1, 2021 – November 30, 2021

Incoming	Anticipated Start Date	Clinic	Subspecialty	Previous Organization
Shi-Ming Tu, MD	3/1/2022	Medical Oncology	Genitourinary Oncology	Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX
Cesar Gentile Sanchez, MD	7/1/2022	Medical Oncology	Bone & Marrow Transplant	Blood and Marrow Transplantation/Cellular Therapy Fellowship, Stanford University, Stanford, CA
Sunny Singh, MD	7/1/2022	Medical Oncology	Solid Tumor Oncology	Fellowship in Hematology/Oncology at the University of Arkansas for Medical Sciences, Little Rock, AR
Trilok Shrivastava, MD	7/1/2022	Inpatient	Hospitalist (Myeloma)	IM Resident at John H. Stroger Jr. Hospital of Cook County,
Jaskirat Sethi, MD	8/1/2021	Inpatient	Hospitalist (Myeloma)	IM Residency at the University of Mississippi Medical Center,
Pouya Sabouri, PhD	10/18/2021	Radiation Oncology	Medical/Proton Physics	Proton Physicist, Miami Cancer Institute, Miami, FL
Natalie Brooke Peeples, MD	9/7/2022	Palliative Care	Palliative Medicine	Assistant Professor, Division of Palliative Medicine, Emory University School of Medicine, Atlanta, GA
Emily Newsome, MD	7/1/2022	Palliative Care	Palliative Medicine	Fellowship in Hospice and Palliative Care at the University of Arkansas for Medical Sciences, Little Rock, AR
Matthew Solverson, MD	7/1/2022	Head & Neck Oncology	Head & Neck Surgery Fellow	Surgical Residency at the University of Nebraska Medical Center, Omaha, NE

Table 3. Cancer Research Grant Activity				
	External Peer-Reviewed New Grants Awarded (#)	Awarded External Peer-Reviewed New Grant Funding (Project Period Total Costs)	External Peer-Reviewed New Grants Submitted (#)	Proposed Peer-Reviewed Grant Funding Submitted (Project Period Total Costs)
June 1, 2021 – Nov 30, 2021	15	\$13,993,040	73	\$134,423,571

APPENDIX A

*Curricula vitae of
cancer research
recruits*

2255 Braeswood Park Dr. #334
Houston, TX 77030
(318) 512-0560

Julienne.L.Carstens@gmail.com

0000-0001-9914-0430

Julienne L. Carstens, Ph.D.

Current as of April 18, 2021

Education and Academic Training

Postdoctoral Fellow	2013 – 2020
Raghu Kalluri, M.D., Ph.D. Department of Cancer Biology-Metastasis Research Center MD Anderson Cancer Center, Houston, TX Investigating the role of the tumor microenvironment in the progression of pancreatic ductal adenocarcinoma (PDAC) using genetically engineered mouse models and novel quantitative spatial image analysis	
Ph.D. in Cell and Molecular Biology	2008 – 2013
Graduate Student David M. Spencer, Ph. D. and David Rowley Ph. D. laboratories Baylor College of Medicine, Houston, TX FGFR1, WNT, TGF- β , and SOX9 Collaborate in the Intricate Progression of Prostate Cancer	
B.S. in Cellular and Molecular Biology, Minor in Chemistry	2005 – 2007
Louisiana Tech University, Ruston, LA Undergraduate Research Molecular Genetics of CCR4-NOT in <i>S. cerevisiae</i> Yeast-Two-Hybrid of <i>A. castellanii</i> metacaspase binding partners	Mark Swanson, Ph. D Wendy Tryzna, Ph. D.

Awards and Honors

• The Harold C. and Mary L. Daily Endowment Fund	2017, 2019
• Lehmann Outstanding Graduate Student Award	2014
• Poster Winner- Pre-Clinical models of Oncology National Symposium	2013
• Dean's Award for Extramural Funding; Baylor College of Medicine	2011
• Keystone Symposium Travel Award	2011
• <i>Initiative for Maximizing Student Diversity Program</i>	2008-2013
• Suma Cum Laude (4.0)	2007
• Louisiana Tech Outstanding Student Scholarship	2003-2007
• Tuition Opportunity Program for Students (TOPS) Scholarship	2003-2007

Grants

• NCI Transition Career Development Award to Promote Diversity (K22 Par18-366)	<i>Recommended for funding</i>
• DOD Predoctoral Training Fellowship (W81XWH-11-1-0325)	2011 – 2013
• Applied and Natural Sciences Undergraduate Mini-Grant	2007

Presentations

• American Association of Cancer Research Pancreatic Cancer– <i>Invited Speaker</i>	2019
• 8 th International EMT Conference – <i>Invited Speaker</i>	2017
• Prostate Cancer Foundation Journal Club Webinar – <i>Invited Speaker</i>	2014, 2016

- Graduate School of Biomedical Sciences Commencement –*Invited Speaker* – 2014
- Pre-Clinical models of Oncology symposium – *Poster and winner* – 2013
- NCI Prostate Cancer Pathology and Mouse Models Meeting –*Invited Speaker* 2012
- American Association of Cancer Research Annual Meeting – *Poster* 2012
- Stem Cells, Cancer and Metastasis (C4) Keystone Symposium – *Poster* 2011

Reviewer Activities

Reviewer under mentor supervision 2013 – 2020

Journal Submissions

- | | | |
|-------------------------------------|------------------------|-----------------------|
| • Cell | • BioMed Central | • Gut |
| • Nature Medicine | • Cancer | • EMBO |
| • Nature Communications | • Bladder Cancer | • Modern Pathology |
| • Nature Cell Biology | • Advocacy Network | • Molecular Cancer |
| • Cancer Research | • Blood Cancer Journal | • Therapeutics |
| • PNAS | • Cancers | • Molecular Pathology |
| • Journal of Clinical Investigation | • Cell Reports | |
| | • Developmental Cell | |

Funding Submissions

- | | |
|---------------------------------|-----------------------------|
| • NIH (R01, R21, P01) | • Swiss Cancer League Grant |
| • Komen Postdoctoral Fellowship | • Voelcker Fund |

Invited Independent Journal Reviewer

- | | |
|--|-----------|
| • Biochemical Journal | 2017 |
| • PLOS-One | 2018-2019 |
| • Journal of Cancer Metastasis and Treatment | 2020 |

Service and Administrative Appointments/Responsibilities

Session Moderator 2013, 2017, 2019

- Co-chair round table workshop “Writing a Successful Fellowship Application”
- NIH/NCI/MDACC: Systems of Biology Metastasis Workshop
- Second Annual Pancreatic Cancer Symposium

Committees 2010 – 2011, 2015

- Planning committee for the 6th Annual NCI 2015 Tumor Microenvironment (TMEN) Junior Investigator Meeting
- Student Representative CMB Steering Committee

Mentoring, Training, and Teaching

Direct One-on-One Mentoring/Training 2011 – 2020

Principle laboratory mentor/supervisor in the execution of various skills from maintaining mouse colonies, histology and microscopy core functions, data presentation and speaking and writing skills.

- | | |
|-------------------------------------|-------------------------|
| • (5) technicians | • (7) graduate students |
| • (4) undergraduate summer students | • (2) junior postdocs |
| • (5) rotating graduate students | |

Teaching Assistant (TA)

- | | |
|--|------------|
| • Foundations of Biomedical Research: Cell Biology | 2015, 2016 |
|--|------------|

- Directors Course for Grant Writing

2010 – 2011

Publications

<https://www.ncbi.nlm.nih.gov/myncbi/16kv3wAqsvrkf/bibliography/public/>

1. **Carstens JL**, Yang S, Correa de Sampaio P, Zheng X, Barua S, McAndrews KM, Rao A, Burks JK, Rhim AD, Kalluri R. Stabilized Epithelial Phenotype of Cancer Cells in Primary Tumors Leads to Increased Colonization of Liver Metastasis in Pancreatic Cancer. **Cell Rep.** **2021** Apr 13;35(2):108990. doi: 10.1016/j.celrep.2021.108990 PMID: 33852841.
2. **Carstens JL**, Correa de Sampaio P, Barua S, Wang H, Burks JK, Rao A, LeBleu VS, Kalluri R. Abstract PR08: Intratumoral T-cell distribution in murine and patient pancreatic cancer correlates with tissue heterogeneity and survival. **Cancer Res** December 15 **2019** (79) (24 Supplement) PR08; DOI: 10.1158/1538-7445.PANCA19-PR08.
3. Chen Y, LeBleu VS, **Carstens JL**, Sugimoto H, Zheng X, Malasi S, Saur D, Kalluri R. Dual reporter genetic mouse models of pancreatic cancer identify an epithelial-to-mesenchymal transition-independent metastasis program. **EMBO Mol Med.** **2018** Oct;10(10). PMID: 30120146
4. Eikesdal HP, Becker LM, Teng Y, Kizu A, **Carstens JL**, Kanasaki K, Sugimoto H, LeBleu VS, Kalluri R. BMP7 Signaling in *TGFBR2*-Deficient Stromal Cells Provokes Epithelial Carcinogenesis. **Mol Cancer Res.** **2018** Oct;16(10):1568-1578. PMID: 29934328
5. Megjhani M, Correa de Sampaio P*, **Leigh Carstens J***, Kalluri R, Roysam B. Morphologically Constrained Spectral Unmixing by Dictionary Learning for Multiplex Fluorescence Microscopy **Bioinformatics.** **2017** Jul 15;33(14):2182-2190. PMID: 28334208 **co-second author*
6. **Carstens JL***, Correa de Sampaio P*, Yang D, Barua S, Wang H, Rao A, Allison JP, LeBleu VS, Kalluri R. Spatial computation of intratumoral T cells correlates with survival of patients with pancreatic cancer. **Nat Commun.** **2017** Apr 27;8:15095. PMID: 28447602 **co-first author*
7. Tampe B, Steinle U, Tampe D, **Carstens JL**, Korsten P, Zeisberg EM, Müller GA, Kalluri R, Zeisberg M. Low-dose hydralazine prevents fibrosis in a murine model of acute kidney injury-to- chronic kidney disease progression. **Kidney Int.** **2017** Jan;91(1):157-176. PMID: 27692563
8. Zheng X*, **Carstens JL***, Kim J, Scheible M, Kaye J, Sugimoto H, Wu CC, LeBleu VS, Kalluri R. Epithelial-to-mesenchymal transition is dispensable for metastasis but induces chemoresistance in pancreatic cancer. **Nature.** **2015** Nov 26;527(7579):525-30. PMID: 2656002 **co-first author*
9. Lovisa S, LeBleu VS, Tampe B, Sugimoto H, Vадnagara K, **Carstens JL**, Wu CC, Hagos Y, Burekhardt BC, Pentcheva-Hoang T, Nischal H, Allison JP, Zeisberg M, Kalluri R. Epithelial-to- mesenchymal transition induces cell cycle arrest and parenchymal damage in renal fibrosis. **Nat Med.** **2015** Aug 3. PMID: 26236991
10. Özdemir BC, Pentcheva-Hoang T, **Carstens JL**, Zheng X, Wu CC, Simpson TR, Laklai H, Sugimoto H, Kahlert C, Novitskiy SV, De Jesus-Acosta A, Sharma P, Heidari P, Mahmood U, Chin L, Moses HL, Weaver VM, Maitra A, Allison JP, LeBleu VS, Kalluri R. Fibrosis Depletion Combined with Checkpoint Blockade Immunotherapy Suppresses Pancreas Cancer and Improves Survival. **Cancer Cell.** **2014** Jun 16;25(6):719-34. PMID: 24856586
11. **Carstens JL**, Lovisa S, Kalluri R. Microenvironment-dependent cues trigger miRNA-regulated feedback loop to facilitate the EMT/MET switch. **J Clin Invest.** **2014** Apr;124(4):1458-60. PMID: 24642461
12. **Carstens JL**, Shahi P, Van Tsang S, Smith B, Creighton CJ, Zhang Y, Seamans A, Seethammagari M, Vedula I, Levitt JM, Ittmann MM, Rowley DR, Spencer DM. FGFR1-Wnt-TGF- β signaling in prostate cancer models reveals distinct differences and similarities between mouse and human reactive stroma. **Cancer Res.** **2014** Jan 15;74(2):609-20. PMID: 24305876
13. Shahi P, Park D, Pond AC, Seethammagari M, Chiou SH, Cho K, **Carstens JL**, Decker WK, McCrea PD, Ittmann MM, Rosen JM, Spencer DM. Activation of Wnt signaling by chemically induced dimerization of LRP5 disrupts cellular homeostasis. **PLoS One.** **2012**;7(1):e30814. PMID: 22303459

RESEARCH INTERESTS

My current research interests are focused on understanding the fundamental mechanisms T cells utilize to adapt to environmental stress. My laboratory is currently developing and applying cutting-edge proteomic approaches to elucidate how proteome turnover dynamics influence the ability of a T cell to persist in solid tumors. To translate these findings, my laboratory seeks to establish new immune monitoring methodologies and to engineer CAR T-cell therapies with superior persistence in the heterogeneous solid tumor environment.

EDUCATION

2020	PhD in Biochemistry and Molecular Biology, Field of cancer immunology University of Arkansas for Medical Sciences, Little rock AR. Mentor: Alan J. Tackett, PhD
2008	BA Biochemistry and Molecular Biology, Hendrix College, AR

RESEARCH EXPERIENCE

2021-current	<u>Assistant Professor</u> , Department of Biochemistry and Molecular Biology, Secondary Appointment in the Department of Microbiology and Immunology, University of Arkansas for Med. Sciences, Little Rock AR.
2020-2021	<u>Post-Doctoral Fellow</u> , IDeA National Resource for Quantitative Proteomics Department of Biochemistry, University of Arkansas for Med. Sciences, Little Rock AR.
2016-2020	<u>Graduate Assistant</u> , Laboratory of Alan Tackett, PhD. Department of Biochemistry, University of Arkansas for Med. Sciences, Little Rock AR.
2015-2016	<u>Research Associate</u> , Laboratory of Sarah Johnson, PhD. Myeloma Center, University of Arkansas for Medical Sciences, Little Rock AR.
2011-2015	<u>Sr. Research Technician</u> , Laboratory of Joseph Opferman, PhD. Department of Biochemistry, St. Jude Children's Research Hospital, Memphis TN.
2008-2011	<u>Research Technician</u> , Laboratory of Joseph Opferman, PhD. Department of Biochemistry, St. Jude Children's Research Hospital, Memphis TN.

GRANTS

2021-2026	NIH Directors Early Independence Award. Discovering T cell proteome turnover dynamics to overcome the solid tumor microenvironment (DP5OD031863). \$1,883,059 Role: PI
2019-2020	NIH/NCI F31 predoctoral fellowship. Epigenetic regulation of metabolic stress pathways in melanoma infiltrating lymphocytes (F31CA232464). 7 th percentile. \$124,851 Role: PI
2019	Department of Defense Horizon Award. Epigenetic regulation of metabolic stress pathways in melanoma infiltrating lymphocytes. <i>Recommended for funding as alternate.</i>
2017-2018	Systems Pharmacology and Toxicology Graduate Fellowship, a T32 program; University of Arkansas for Medical Sciences.

HONORS and AWARDS

2021	NIH Directors Early Independence Awardee
2020	Sanofi Scholar-in-Training Award. American Association for Cancer Research (AACR) San Diego, CA
2020	Keystone Symposia Scholarship. Emerging Cellular Therapies: Cancer and Beyond. Banff, AB Canada
2019	Cancer Institute Member Spotlight. University of Arkansas for Medical Sciences, Little Rock AR.
2019	Graduate School Outstanding Achievement Award. University of Arkansas for Medical Sciences, Little Rock AR.
2018	Immuno-Oncology Innovation Award, Miltenyi Biotec. Fully paid travel to AACR 2018 and \$2500 for research.

PUBLICATIONS

1. **Koss, B.**, Shields, B. D., Taylor, E. M., Storey, A. J., Byrum, S. D., Gies, A. J., ... Tackett, A. J. (2020). Epigenetic control of Cdkn2a. Arf protects tumor-infiltrating lymphocytes from metabolic exhaustion. *Cancer Research*, 80(21), 4707–4719.
2. Trentzsch, M.; Nyamugenda, E.; Miles, T. K.; Griffin, H.; Russell, S.; **Koss, B.**; Cooney, K. A.; Phelan, K. D.; Tackett A. J., Iyer, S.; Boysen, G.; Baldini, G. Delivery of phosphatidylethanolamine blunts stress in hepatoma cells exposed to elevated palmitate by targeting the endoplasmic reticulum. *Cell Death Discovery* 6:8 (2020).
3. Taylor, E.; **Koss, B.**; Davis L. E.; Tackett, A. J. Histone Modifications as Biomarkers for Immunotherapy. *Methods in Molecular Biology* 2055:213-228 (2019).
4. Chiang, T.; **Koss, B.**; Su, L. J.; Washam, C. L.; Byrum, S. D.; Storey, A.; Tackett, A. J. Effect of sulforaphane and 5-aza-2'-deoxycytidine on melanoma cell growth. *Medicines* 6, 71 (2019).
5. Lee, T.; Christov, P. P.; Shaw, S.; Tarr, J. C.; Zhao, B.; Veerasamy, N.; Jeon, K. O.; Mills, J. J.; Bian, Z.; Sensintaffar, J. L.; **et. al.** Discovery of Potent Myeloid Cell Leukemia-1 (Mcl-1) Inhibitors That Demonstrate in Vivo Activity in Mouse Xenograft Models of Human Cancer. *Journal of medicinal chemistry* 62, 3971–3988 (2019).
6. Shields, B. D.; **Koss, B.**; Taylor, E. M.; Storey, A. J.; West, K. L.; Byrum, S. D.; Mackintosh, S. G.; Edmondson, R.; Mahmoud, F.; Shalin, S. C.; Tackett, A. J. Loss of E-Cadherin Inhibits CD103 Antitumor Activity and Reduces Checkpoint Blockade Responsiveness in Melanoma. *Cancer Research* 79, 1113–1123 (2019).
7. Ren, Z.; Ahn, J. H.; Liu, H.; Tsai, Y.-H.; Bhanu, N. V; **Koss, B.**; Allison, D. F.; Ma, A.; Storey, A. J.; Wang, P. PHF19 promotes multiple myeloma tumorigenicity through PRC2 activation. *Blood* blood-2019000578 (2019).
8. Shields, B. D.; Mahmoud, F.; Taylor, E. M.; Byrum, S. D.; Sengupta, D.; **Koss, B.**; Baldini, G.; Ransom, S.; Cline, K.; Mackintosh, S. G. Indicators of responsiveness to immune checkpoint inhibitors. *Scientific Reports* 7, 807 (2017).
9. Lee, T.; Bian, Z.; Zhao, B.; Hogdal, L. J.; Sensintaffar, J. L.; Goodwin, C. M.; Belmar, J.; Shaw, S.; Tarr, J. C.; Veerasamy, N.; Matulis, S. M.; **Koss, B.**; Fischer, M. A.; Arnold, A. L.; Camper, D. V.; Browning, C. F.; Rossanese, O. W.; Budhraj, A.; Opferman, J.; Boise, L. H.; Savona, M. R.; Letai, A.; Olejniczak, E. T.; Fesik, S. W. Discovery and biological characterization of potent myeloid cell leukemia-1 inhibitors. *FEBS Letters* 591, 240–251 (2017).
10. **Koss, B.**; Ryan, J.; Budhraj, A.; Szarama, K.; Yang, X.; Bathina, M.; Cardone, M. H.; Nikolovska-Coleska, Z.; Letai, A.; Opferman, J. T. Defining specificity and on-target activity of BH3-mimetics using engineered B-ALL cell lines. *Oncotarget* 7, (2016).
11. Haverkamp, J. M.; Smith, A. M.; Weinlich, R.; Dillon, C. P.; Qualls, J. E.; Neale, G.; **Koss, B.**; Kim, Y.; Bronte, V.; Herold, M. J.; Green, D. R.; Opferman, J. T.; Murray, P. J. Myeloid-derived suppressor activity is mediated by monocytic lineages maintained by continuous inhibition of extrinsic and intrinsic death pathways. *Immunity* 41, 947–959 (2014).
12. **Koss, B.**; Morrison, J.; Perciavalle, R. M.; Singh, H.; Rehg, J. E.; Williams, R. T.; Opferman, J. T. Requirement for antiapoptotic MCL-1 in the survival of BCR-ABL B-lineage acute lymphoblastic leukemia. *Blood* 122, 1587–1598 (2013).

13. Tripathi, P.; **Koss, B.**; Opferman, J. T.; Hildeman, D. A. Mcl-1 antagonizes Bax/Bak to promote effector CD4(+) and CD8(+) T-cell responses. *Cell death and differentiation* 20, 998–1007 (2013).
14. Wang, X.; Bathina, M.; Lynch, J.; **Koss, B.**; Calabrese, C.; Frase, S.; Schuetz, J. D.; Rehg, J. E.; Opferman, J. T. Deletion of MCL-1 causes lethal cardiac failure and mitochondrial dysfunction. *Genes and Development* 27, 1351–1364 (2013).
15. Cohen, N. A.; Stewart, M. L.; Gavathiotis, E.; Tepper, J. L.; Bruekner, S. R.; **Koss, B.**; Opferman, J. T.; Walensky, L. D. A competitive stapled peptide screen identifies a selective small molecule that overcomes MCL-1-dependent leukemia cell survival. *Chemistry and Biology* 19, 1175–1186 (2012).
16. Perciavalle, R. M.; Stewart, D. P.; **Koss, B.**; Lynch, J.; Milasta, S.; Bathina, M.; Temirov, J.; Cleland, M. M.; Pelletier, S.; Schuetz, J. D.; Youle, R. J.; Green, D. R.; Opferman, J. T. Anti-apoptotic MCL-1 localizes to the mitochondrial matrix and couples mitochondrial fusion to respiration. *Nature Cell Biology* 14, 575–583 (2012).
17. Stewart, D. P.; **Koss, B.**; Bathina, M.; Perciavalle, R. M.; Bisanz, K.; Opferman, J. T. Ubiquitin-independent degradation of antiapoptotic MCL-1. *Molecular and cellular biology* 30, 3099–3110 (2010).

Complete List of Published Work:

<https://www.ncbi.nlm.nih.gov/myncbi/1pihpGBTQJQh/bibliography/public/>

ORAL PRESENTATIONS

1. Agilent global webinar. 2021 “Mechanisms of metabolic and epigenetic coordination in tumor-infiltrating lymphocyte exhaustion”
2. AIMRC Annual Symposium. University of Arkansas Fayetteville. 2021 “Mechanisms of metabolic and epigenetic coordination in tumor-infiltrating lymphocyte exhaustion”
3. Keystone Symposia: Emerging Cellular Therapies: Cancer and Beyond, Banff, AB Canada. 2020. “Epigenetic Control of Tumor-Infiltrating Lymphocyte Metabolic-Exhaustion”
4. Systems Pharmacology and Toxicology Symposia. University of Arkansas for Medical Sciences, Little Rock, AR. 2018-2019. “EZH2 protects melanoma-infiltrating lymphocytes from metabolic-stress induced dysfunction”

POSTER PRESENTATIONS

1. Keystone Symposia: Emerging Cellular Therapies: Cancer and Beyond, Banff, AB Canada. 2020. “Epigenetic Control of Tumor-Infiltrating Lymphocyte Metabolic-Exhaustion”
2. Showcase of Medical Discoveries: Cancer Research, University of Arkansas for Medical Sciences, Little Rock, AR. 2019. “EZH2 protects tumor-infiltrating lymphocytes from metabolic-stress induced cell death and exhaustion”
3. Cancer Institute Retreat. Heifer International, Little Rock, AR. 2019. “EZH2 protects tumor-infiltrating lymphocytes from metabolic-exhaustion”
4. Student research day, University of Arkansas for Medical Sciences Little Rock, AR. 2018-19. “EZH2 protects tumor-infiltrating lymphocytes from metabolic-exhaustion”
5. Cold Spring Harbor: Cell Death, Cold Spring Harbor, NY. 2013. “Defining specificity and on-target activity of BH3-mimetics using engineered B-ALL cell lines”

TEACHING/MENTORING ACTIVITIES

Graduate Students

2021-current Jacob Edmondson, MD/PhD Student. “Defining the role of ATF6 in immune recognition of metastatic melanoma”

Medical students

Summer 2021 Alyson McKinnon, 2nd Year Medical student. “Metabolic control of MHC Class I Antigen Presentation”

Teaching

2017-2018 Graduate Education Committee. Department of Biochemistry and Molecular Biology. University of Arkansas for Med. Sciences.

2018-2020 Consulted for Methods in Biomed and Trans Sciences course: Flow cytometry. Department of Biochemistry and Molecular Biology. University of Arkansas for Med.

MEDIA APPEARANCE /OTHER ACTIVITIES

2020 Interviewed by Hilary Hunt. Feature on the University of Arkansas for Medical Sciences graduate school and cancer research. *KARK 4*. Televised. Little Rock, AR.

2015-2018 Alumni Board of Governors. Hendrix College, Conway, AR.

CURRICULUM VITAE – Mario Schootman

Date: August 2021

1. Personal information:

- a. S: Male
- b. POB: Amsterdam, The Netherlands

2. Citizenship: The Netherlands (permanent residency in USA)

3. Address and telephone numbers:

- a. Office: Department of Clinical Analytics and Insights
Center for Clinical Excellence
SSM Health
10101 Woodfield Lane
St. Louis, MO 63132
Phone: (314) 989-6365

4. Present position:

Senior System Director (2018-present)
Department of Clinical Analytics and Insights
Center for Clinical Excellence
SSM Health, St. Louis, Missouri

Responsibilities:

- Develop long and short-term business strategies and operational plans related to analytics.
- Foster effective relationships with c-suite executives, hospitals, academic programs, medical and patient care staff, and with external agencies and stakeholders.
- Build clinical data and analytics infrastructure using Power BI and MS Azure, including data governance, storage, and modeling.
- Develop and support best practices in analytics, including predictive models, evaluation of effectiveness of improvements, and variation reduction in clinical processes.
- Partner with and equip clinical and operational decision makers with predictive, descriptive and prescriptive analytical insights.
- Partner with medical informatics to design high quality workflows for data science.
- Manages multiple projects of varying scope and complexity.

Kaiser Permanente Colorado – affiliate

5. Education:

- a. M.S. Health Science, Vrije Universiteit Faculty of Human Movement Sciences, The Netherlands 1990
- b. Ph.D. Epidemiology, The University of Iowa, Iowa City, Iowa 1993

6. Academic Positions/Employment:

Iowa Department of Public Health (1993-1999)

1993 – 1999	Chronic Disease and Injury Epidemiologist, Iowa Department of Public Health, Des Moines, Iowa
1994 – 1999	Iowa State Chronic Disease Epidemiologist, Des Moines, Iowa

University of Iowa (adjunct 1995-2017)

1995 – 2008	Adjunct Assistant Professor, College of Public Health, Department of Epidemiology, University of Iowa
2008 – 2017	Adjunct Associate Professor, College of Public Health, Department of Epidemiology, University of Iowa

Washington University in St. Louis (1999-2013)

Aug. 1999 – Dec. 2000	Instructor of Medicine, Division of Health Behavior Research, Department of Internal Medicine, Washington University School of Medicine
Jan. 2001 – June 2007	Assistant Professor of Medicine, Division of Health Behavior Research, Department of Medicine, Washington University School of Medicine
Aug. 2005 – June 2007	Interim Chief, Division of Health Behavior Research, Department of Medicine, Washington University School of Medicine
Aug. 2005 – Oct. 2006	Interim Co-Program leader, Prevention and Control Program, Alvin J. Siteman Cancer Center at Washington University and Barnes-Jewish Hospital
Aug. 2005 – Oct. 2006	Interim Associate Director for Prevention and Control of the Alvin J. Siteman Cancer Center at Washington University and Barnes-Jewish Hospital
Nov. 2006 – July 2011	Co-Program leader, Prevention and Control Program, Alvin J. Siteman Cancer Center at Washington University and Barnes-Jewish Hospital
July 2007 – July 2012	Associate Professor of Epidemiology and Medicine, Department of Medicine, Washington University School of Medicine
Aug. 2005 – Sept 2013	Director, Graduate Program in Applied Health Behavior Research (formerly Health Care Services)
July 2007 – Sept 2013	Chief, Division of Health Behavior Research, Department of Medicine, Washington University School of Medicine
July 2012 – Sept 2013	Professor of Medicine, Department of Medicine, Washington University School of Medicine

Saint Louis University (2013-2018)

Sept 2013 – Aug 2018	Professor of Epidemiology, Health Services Research, and of Medicine. College for Public Health and Social Justice. Saint Louis University.
Sept 2013 – Aug 2018	James R. Kimmey endowed chair in Public Health. College for Public Health and Social Justice. Saint Louis University.
July 2014 – Dec 2017	Associate Dean for Research, College for Public Health and Social Justice, Saint Louis University, St. Louis, Missouri.
July 2014 – June 2017	Co-director, doctoral program, College for Public Health and Social Justice, Saint Louis University, St. Louis, Missouri.
July 2017 – Aug 2018	Director, doctoral program, College for Public Health and Social Justice, Saint Louis University, St. Louis, Missouri.

Missouri Department of Health and Senior Services (2001-2018)

Jan. 2001 – 2018	Consulting epidemiologist, Missouri Department of Health and Senior Services.
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7. University and Hospital Appointments and Committees:

1. Advisory Committee for the Mammography Van Outreach Project, Barnes-Jewish Hospital, 2001 - 2002.
2. Information Systems Advisory Task Force, Alvin J. Siteman Cancer Center, 2002.
3. Disparities Elimination Advisory Committee, Alvin J. Siteman Cancer Center, 2004 - 2005.
4. Disparities Elimination Steering Committee, Alvin J. Siteman Cancer Center, 2005 - 2010.
5. Multidisciplinary Advisory Committee, Scholar Selection Committee, KL2 Multidisciplinary Clinical Research Career Development Program, Washington University, 2005 - present.
6. Barnes-Jewish Hospital Cancer Committee, 2005 - 2006.
7. Admissions Committee, Mentored Training Program in Clinical Investigation, 2006 - 2013.
8. Siteman Cancer Center Membership Committee, Washington University, 2008 - 2011.
9. Grant reviewer, Washington University Institute of Clinical and Translational Sciences, 2008 - 2013.
10. Member, Advisory Committee, Center for Administrative Data Research, Washington University Institute of Clinical and Translational Sciences, 2010 – present.
11. Member, dean search committee, College for Public Health and Social Justice, Saint Louis University, 2015
12. Member, Vice President for Research search committee, Saint Louis University, 2016
13. Chair, search committee for Chair Department of Health Management and Policy, Saint Louis University, 2016.
14. Member, Just in Time funding Committee, Washington University Institute of Clinical and Translational Sciences, 2017 – 2018

8. Medical Licensure and Board Certification:

Not applicable

9. Military Service:

Not applicable

10. Honors and Awards:

Research in Action Award, Program for the Elimination of Cancer Disparities, Siteman Cancer Center, St Louis, 2005.

Nominated as one of three finalists and the only PhD for mentor of the year award in Washington University School of Medicine, 2009.

11. Editorial Responsibilities:

Editorial Board Member

1. BMC Cancer, 2012 - 2015
2. Editorial Board Member, BioMed Research International, 2013 – 2016
3. The Open Breast Cancer Journal, 2009 - 2016
4. Editorial Board Member, Scientific World Journal, 2011 - 2015
5. Editorial Board Member, J Primary Care and Community Health, 2011 – present
6. Editorial Board Member, Health Psychology, 2016 - present

Special issue editor

J Primary Care and Community Health, Managerial Epidemiology special issue, 2012.

Geospatial approaches to cancer control and population sciences. Cancer Epidemiol, Biomarker & Prev, April 2017

Ad-hoc reviewer since 2000

American Journal of Epidemiology
American Journal of Preventive Medicine
American Journal of Public Health
Annals of Behavioral Medicine
Annals of Epidemiology
Archives of Internal Medicine
Archives of Physical Medicine and Rehabilitation
BMC Public Health
BMC Cancer
Clinical Epidemiology
Croatian Medical Journal
Epidemiology
Health Education and Research
International Journal of Health Geographics
Journal of the American Medical Association
Journal of Clinical Oncology
Journal of Epidemiology and Community Health

Journal of Healthcare for the Poor and Underserved
 Journal of the National Cancer Institute
 Journal of Neuro-Oncology
 Journal of Primary Care and Community Health
 Journal of Rural Health
 Journal of Trauma
 Journal of Women's Health
 Medical Care
 Medicine & Science in Sports and Exercise
 Obesity
 Preventing Chronic Disease
 Psychoneuroendocrinology
 QJM: An International Journal of Medicine

12. Professional Societies and Organizations:

American Public Health Association
 Society for Epidemiological Research
 American Society for Preventive Oncology
 Society for Behavioral Medicine
 American College of Epidemiology, fellow

13. Major Invited Professorship and Lectureships:

Schootman M. The intersection between spatial, multilevel, and epidemiological models. Department of Statistics, University of Missouri, September 24, 2004.

Schootman M. Examples of GIS in epidemiology. Washington University GIS Symposium. St. Louis, MO. November 16, 2006.

Schootman M. Discussant. The sixth Annual Guze Symposium on Alcoholism. Alcohol and Tobacco Dependence: from Bench to Bedside. Washington University, St. Louis, Missouri. March 2, 2006.

Washington University. Barnes-Jewish Hospital Ethics Committee. Disparities in Cancer: The St. Louis Experience and Beyond. April 27, 2010.

The role of neighborhood conditions in health and disease. Saint Louis University School of Public Health, Saint Louis, December 11, 2012.

Neighborhoods and cancer. University of Texas Southwestern Medical Center. Dallas, TX. March 7, 2013.

Washington University School of Medicine, Psychiatry and Public Health Series. New perspectives in psychiatry: The role of geospatial technology. Nov 13, 2013.

The role of neighborhood in cancer. Why it matters where you live. Grand rounds. Department of Pathology. Saint Louis University School of Medicine. Nov 25, 2013.

New perspectives on measuring geographic context. National Cancer Institute. Understudied populations in cancer epidemiologic research: Implications on future needs. September 8-9, 2015.

Reducing geographic disparities: Can local breast cancer data identify where to target screening? North American Association of Central Cancer Registries. St. Louis, MO. June 15, 2016

Emerging technologies to measure neighborhood conditions in cancer research. Conference on Geospatial Approaches to Cancer Control and Population Sciences. Bethesda, MD. September 12-14, 2016.

Geographic cancer disparities: Why it matters where you live. Medical College of Wisconsin, Milwaukee, WI, September 30, 2016.

Data collection: Embracing new technology. Science of global prostate cancer disparities. University of Florida Research and Academic Center, Lake Nona Medical City, Orlando, FL. Nov 9-12, 2016.

Geographic cancer disparities: Why it matters where you live. University of Arkansas Medical Sciences, Fayetteville, AR, January 9, 2017.

Observational data and propensity scores. Barnes Jewish Corporation Learning Institute, St Louis, MO, February 16, 2017.

Using new technologies to measure geographic context in cancer disparities. University of South Carolina, Columbia, SC, December 6, 2017.

The promise of using emerging technologies to measure geographic context in public health. Indiana University School of Public Health, Bloomington, IN, January 29, 2018.

The promise of using emerging technologies in a geospatial context. 2018 USGIF GEOINT symposium, Tampa FL, April 22-25, 2018.

Visiting professor

Regenstrief Institute, Inc. Indiana University, Indianapolis, IN. Contextual Effects of Neighborhood and Housing Conditions on Health. Indiana University, Indianapolis, IN. October 17-18, 2006.

University of Florida, Gainesville, FL. College of Public Health and Health Professions. 1) Neighborhood conditions and the risk of disease in aging populations. 2) Observational data and clinical trials: Narrowing the gap. March 22-23, 2010.

14. Consulting Relationships and Board Memberships:

National: Grant reviews/study sections

1. Member, Advisory Board, Missouri Cancer Registry, Missouri Department of Health, Jefferson City, MO, 2000-present.
2. Member, Advisory Board, Missouri Breast and Cervical Cancer Program, Missouri Department of Health, Jefferson City, MO, 2002-2007.
3. Member, NIH, Center for Scientific Review Special Emphasis Panel: Pathways Linking Education to Health, Chevy Chase, MD, July 15-16, 2003.
4. Member, National Institute of Dental and Craniofacial Research, Special Emphasis Panel: State Models for Oral cancer Prevention, Washington, DC, February 24, 2004.
5. Charter member, National Institutes of Health, Center for Scientific Review Community-Level Health Promotion study section, 2005 - 2009.
6. Grant reviewer for the James & Esther King Biomedical Research Program, Florida Department of Health, 2005 - 2011.
7. Member, CDC Special Emphasis Panel: Demonstration Project for Identifying Individuals at High-Risk for Chronic Kidney Disease in the United States, July 31, 2006.
8. Member, Congressionally Directed Medical Research Program, Department of Defense, Health Disparities Research Award Study Section, August 22, 2006.
9. Member, NIH Special Emphasis Panel: Facilitating Interdisciplinary Research via Methodological and Technological Innovation in the Behavioral and Social Sciences (R21). July 9-10, 2007.
10. Member, NIH Special Emphasis Panel Review Group 2009/05 ZRG1 HOP-M (02) M, December 9-11, 2008.
11. Member, NCI Site Visit/Review Meeting. Duke Comprehensive Cancer Institute. Durham, NC, May 18-20, 2009.
12. Member, NIH Distinguished Editor in Stage-2 review panel for (RC1) Challenge Grant applications, July 31, 2009.
13. Member, NIH Special Emphasis Panel, Building Sustainable Community-Linked Infrastructure to Enable Health Science Research, part of the American Recovery and Reinvestment Act, February 2010.
14. Member, College of Center for Scientific Review, 2010-present.
15. Member, NIH Special Emphasis Panel/Scientific Review Group 2011/05 ZCA1 SRLB-B (M3) R13 meeting, March 7, 2011.
16. Member, NIH Special Emphasis Panel/Scientific Review Group. Review of Deepwater Horizon Disaster Consortia. April 6-8, 2011.
17. Member, Autism Speaks Review Group, October 21, 2011.
18. Member, Health Services Organization and Delivery. National Institutes of Health, Center for Scientific Review. June 14-15, 2012.
19. Member, NCI Special Emphasis Panel, ZCA1 RTRB-E (O1) R, Institutional Training and Education. July 24, 2012.
20. Member, National Institutes of Health, Center for Scientific Review, 2013/01 ZCA1 RPRB-B (J1), November 15-16, 2012.
21. Member, National Institutes of Health, Center for Scientific Review, 2013/05 ZCA1 SRLB-B (M1) B, Institutional Training and Education. February 25-26, 2013.

22. Member, National Institutes of Health, Center for Scientific Review, 2013/05 NCI-F R, Cancer Management, Epidemiology and Health Behavior, February 28-March 1, 2013.
23. Member, National Institutes of Health, Center for Scientific Review, 2013/10 ZCA1 SRLB-B (O1) S Cancer Management, Epidemiology and Health Behavior, June 25-June 26, 2013.
24. Member, National Cancer Institute, Center for Scientific Review, ZCA1 RPRB-B J1 P, NCI Program Project Meeting II. October 15-16, 2013.
25. Member, Department of Veterans Affairs Study Section HSR3, March 5, 2015.
26. Co-chair, Center for Scientific Review, ZCA1 SRB-5 (M1) S NCI Omnibus SEP-8, March 11, 2016.
27. Chair, Center for Scientific Review, ZCA1 SRB-5 (O1) NCI Omnibus R03 SEP 1, June 28-29, 2016.
28. Member, National Cancer Institute Special Emphasis Panel, ZCA1 SRB-5 (J1), Oct 28-28, 2016.
29. Member, National Cancer Institute Special Emphasis Panel, ZCA1 SRB-J (M2) S, February 22, 2017.
30. Member, Cancer Prevention and Research Institute of Texas (CPRIT) grant review committee, April 28, 2017.
31. Co-chair, Special Emphasis Panel of UM1 and U24 applications for the NCI Population-based Research to Optimize the Screening Process (PROSPR) (UM1) and Coordinating Center for Population-based Research to Optimize the Screening Process (PROSPR), June 13, 2017.

National consulting relationships

32. Member, Steering Committee for the Conference in Geospatial Approaches to Cancer Control and Population Sciences. September 12-14, 2016. NIH Campus, Bethesda, MD

National: Abstract reviews

33. Reviewer of abstracts for the Annual Meetings of the American Public Health Association, 2004-2006.
34. Reviewer of abstracts for the Annual Meetings of the National Rural Health Association, 2005-2009.
35. Reviewer of abstracts for the Annual Meetings of the Society for Epidemiologic Research, 2009-2010.

National: Board membership

36. Member, Board of Directors, National Program for Playground Safety, University of Northern Iowa, Cedar Falls, Iowa, 1997-2003.
37. Member, Multilevel interventions across the cancer care continuum working group. National Cancer Institute, Bethesda, MD, June 19, 2009.

International Grant review/study section

38. Reviewer, Netherlands Cancer Society, 2009.

39. Reviewer, Netherlands Organization for Scientific Research, 2011.
40. Reviewer, Netherlands Organization for Health Research and Development Review Group, September 23, 2011.
41. Reviewer, French Cancer Institute, March 15, 2012.
42. Reviewer, Social Sciences and Humanities, Research Council of Canada, 2018.
43. Reviewer, French public scientific organizations (CNRS and INSERM), 2018.

Regional/local

44. Member and Chair, Data and Planning Committee, Missouri Cancer Consortium, 2004-2009.
45. Member, 2009 Community Profile for the St. Louis Affiliate of Susan G. Komen for the Cure, St. Louis, 2008-2009.
46. Member, 2011 Community Profile for the St. Louis Affiliate of Susan G. Komen for the Cure, St. Louis, 2010-2011.

Dissertation committee

47. Cheryl Kelly. Using a participatory method to develop locally relevant evidence-based Interventions. Saint Louis University School of Public Health, St. Louis, 2006.
48. Yan Lin. Cervical cancer disparities in Texas. Texas State University-San Marcos, Texas, December 2013.
49. Kendra Ratnapradipa. Older adult driving patterns: Driving resumption among former drivers. Saint Louis University, St. Louis, 2017 (committee chair & mentor).
50. Scott Vouri, PharmD, MSCI. Antimuscarinics for overactive bladder and cognitive impairment in older adults. Saint Louis University, St. Louis, 2018 (committee chair & mentor).
51. Nosayaba Osazuwa-Peters, BDS, MPH, CHES. Epidemiology of cancer-associated suicide among head and neck cancer survivors in the United States. Saint Louis University, St. Louis, 2018 (committee chair & mentor).
52. Eric Adjei Boakye. The incidence and risk of developing second primary malignancies in patients with head and neck squamous cell carcinoma. Saint Louis University, St. Louis, 2018 (committee member).

15. Research Support

a. Governmental

Completed Research Support:

R01 AA021492-01 (Heath, Schootman) 09/01/13 — 05/31/17 3.0 calendar NCE
NIAAA \$810,000

Neighborhood, Family and Individual Factors in Adolescent Drinking

This study will add innovative measures of neighborhood environment (e.g., alcohol outlet density), generated using Geographic Information System (GIS) technologies, to previously collected data on a female adolescent twin cohort, followed across multiple waves of assessment into young adulthood, allowing better characterization of the separate contributions of neighborhood, family and individual factors to early initiation of alcohol use, onset of drinking to intoxication, as well as heaviness of

alcohol consumption and alcohol-related problems. No overlap with proposed ACS grant.

1R56AG049503 (Schoutman) 9/15/15 – 8/31/17 1.35 academic NCE
NIH \$181,940 .60 summer
Colonoscopy in Colorectal Cancer Patients with Multiple Chronic Conditions
This study describes the pattern of surveillance colonoscopy among colorectal cancer patients with specific ACCs over time, specifically focusing on the date of the dissemination of surveillance guidelines. We will also determine the incremental value of identifying additional chronic conditions using Medicare part D data.

R01 HL11928 (Freedland) 3/15/2014 – 2/28/2019
NIH \$689,183
Depression and rehospitalization in heart failure patients.
The primary aim is to test the hypothesis that depression is an independent predictor of recurrent hospitalizations and mortality in patients with heart failure. The secondary aim is to test the hypothesis that multiple hospitalizations predict persistent or worsening depression in patients with HF.

R01 CA19032 (Wetter) 7/15/2015 – 6/30/2020
NIH \$665,384
Socioeconomic status, stress and smoking cessation
This longitudinal cohort study will examine the influence of SES and social history, contextual and environmental influences, biobehavioral/psychosocial predispositions, and acute momentary precipitants on stress, smoking lapse, and abstinence among 300 smokers attempting to quit.

R43 CA19252 (Goovaerts) 1/1/2016 – 12/31/2017 NCE
NIH \$204,574
Geostatistical software for spatial and multi-dimensional joinpoint regression analysis of time series of health outcomes.
This SBIR project is developing the first commercial software to offer tools for the geostatistical modeling and join point regression analysis of time series of health outcomes. The research product will be a stand-alone module into the desktop space-time visualization core developed by BioMedware, an ESRI partner.

R01 CA137750-01A1 (Schoutman) 5/1/09 — 2/28/16 2.76 calendar
NIH \$263,010
Geographic Disparities in Colorectal Cancer Survival
The purpose of the project is to: 1) determine the extent of geographic clustering of colorectal cancer (CRC) survival among persons 66 years of age and older at the level of the census tract, 2) determine the extent to which geographic variation of CRC survival can be explained by the geographic variation in area social and material deprivation, and 3) identify potential pathways by which area social and material deprivation explains any geographic variation of CRC survival.

R21AA022064 (Shacham) 12/1/13 — 2/28/2016
NIH
Using Ecologic Momentary Assessment to Define Alcohols Impact on HIV Outcomes

The goals of the study are to: (1) collect detailed patterns of alcohol use based on: time of day when consumption begins, duration of consumption, number of drinks, type of alcohol, and location where consumption occurs, and (2) characterize the effect of detailed alcohol consumption on daily cART adherence among PLWHA (as measured by cART adherence, HIV viral load, CD4 cell count, liver functions).

R21 CA169807-01A1 (Lian) 09/10/13 — 08/31/15 1.8 calendar
NIH \$138,170

Modeling Spatial Accessibility to Lower Endoscopy Services in the United States

The goals of the project are to: (1) compute and map small-area spatial accessibility to lower endoscopy services across the United States including 50 states and Washington DC, using a GIS, Medicare data, and spatial statistical modeling, and (2) examine the effects of small-area spatial accessibility to lower endoscopy services on CRC-related outcomes, including the risks of incident CRC, advanced stage at diagnosis, and CRC-specific mortality through linking to the NIH-AARP Diet and Health Study cohort data. No overlap with proposed ACS grant.

1 UL1 RR024992-02 (Evanoff) 9/17/07 □ 5/31/13 1.80 calendar
1 KL2 RR024994-02 \$711,520
1 TL1 RR024995-02
NIH/NCRR

Washington University Institute of Clinical and Translational Sciences

The Clinical and Translational Science Award is the key component for the establishment of the Washington University Institute of Clinical and Translational Sciences (ICTS). By implementing 15 key Program Functions, the ICTS will conceptually and operationally reinvent and reinvigorate clinical and translational research and clinical research training at Washington University and its regional partner institutions.

R24 MD001590 (Baker) 7/1/08 — 6/30/13 1.20 calendar
NIH \$31,633 (sub)

Men on the Move: Growing Communities

The major goal of this grant is to improve environmental determinants of cardiovascular disease, specifically through improved individual and community access to fruits and vegetables.

(Schootman) 6/1/12 — 5/31/13 1.08 calendar
ICTS/BJHF \$49,656

Timing and Frequency of Surveillance Colonoscopy in Recurrent Colorectal Cancer

This project will compare the effectiveness of the timing and frequency of surveillance colonoscopy on risk of death among CRC patients aged 66 or older using the 2000-2008 large, high-quality, population-based, linked Surveillance, Epidemiology, and End Result-Medicare data and advanced epidemiologic and statistical methods.

R01 CA109675 (Schootman) 7/1/08 — 6/30/13 2.76 calendar
NIH \$280,419 (NCE)

Spatial, Temporal, Social Disparities in Breast Cancer

The major goal of this study is to investigate the spatio-temporal variation of early stage breast cancer, advanced stage breast cancer, and breast cancer mortality at the county-level using 1988-2005 data from 9 SEER programs and 200 counties.

NIH R01 (Schootman) 9/1/05 — 6/30/12 (NCE) \$363,062/year

Neighborhood Effects on Quality of Life in Breast Cancer

The goal of this project is to: 1) determine the extent of geographic clustering of the change in QoL over time among women with and those without breast cancer at the level of the census tract; 2) determine the extent to which the change in QoL over time can be explained by neighborhood disadvantage among women with breast cancer and among women without breast cancer; and 3) identify potential pathways by which neighborhood disadvantage affects changes in QoL over time among women with breast cancer.

NIA R01 (Miller) 9/30/91 — 4/30/12 \$606,955/year

Physical Frailty in Urban African Americans

The major goals of this project are to identify (1) the effects of frailty factors on falls, excess hospitalizations, progressive disability, and death in a cohort of inner-city African Americans aged 70 to 99 at baseline and (2) the timing of development, precursors, and consequences of sarcopenia and subclinical disability on the function and health services utilization of a cohort of urban African Americans aged 50 to 64 at baseline.

NCI P30 (Eberlein) 7/1/04 — 6/30/10 \$2,643,419/year

The Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine is a multidisciplinary cancer research facility.

Co-Program Leader for Prevention and Control "Cancer Center Support Grant"

Principal Investigator "Late Stage Breast Cancer Geography"

Komen Foundation 12/1/07 — 12/31/09 \$33,972/year

The purpose of this study is to update the analysis of the clustering of late-stage breast cancer in the state of Missouri.

NCI R01 (Jefte) 9/4/03 — 6/30/10 (NCE) \$200,250/year

Quality of Life Over Time: DCIS vs Early Breast Cancer

The major goals of this study are to: (1) characterize the quality of life (QOL) over time of women diagnosed with ductal carcinoma *in situ* (DCIS), (2) identify differences in the QOL over time among women with DCIS, women with early-stage invasive (Stages I and II) breast cancer, and women without breast cancer, and (3) identify predictors of QOL among women with DCIS from among demographic, clinical, and psychosocial factors assessed at baseline.

NIH R18 (Baker) 9/1/08 — 8/31/11
 Environmental and Policy Changes to Support Physical Activity: Translation of Evidence-Based Approaches within African American Communities
 The major goal of this grant is to enhance an existing multi-disciplinary partnership to include academic, community and practice partners and work with this partnership to reduce the disparities in physical activity by translating (i.e. adapting and implementing) evidence-based environmental or policy strategies that are most appropriate for the St. Louis context and population.

NIDDK P60 (Permutt) 12/1/07 — 11/30/12 \$1,325,000/year
 Diabetes Research and Training Center
 The overall goal of this center is to support centralized resources, facilities, and expertise shared by diabetes researchers; to promote the discovery of fundamental mechanisms of leading to the disease and its complications, and to translate this information into prevention, treatments and cures.

NCI R01 (Fisher, Schootman) 9/30/00 — 2/28/08 (NCE) \$91,164/ year
 Predictors of Relapse to Smoking in Lung Cancer
 The major goal of this study is to identify factors to guide improvements in interventions for maintenance of smoking cessation among patients with lung cancer. This information will then be used to tailor smoking cessation programs to the particular needs of the patients.

NIH R01 (Schootman) 8/12/04 — 8/31/08 (NCE) \$205,000/year
 Geographic Variation of Breast Cancer Survival
 The goals of the proposed project are to: 1) examine small-area geographic clustering of breast cancer survival among women 66 years of age and older; 2) determine the extent to which geographic variation of survival can be explained by the geographic variation in area social and economic deprivation among women age 66 and older; and 3) identify potential pathways by which area social and economic deprivation explains any geographic variation of breast cancer survival among women age 66 and older.

b. Non-governmental within the last 3 years

None

16. Clinical Title and Responsibilities:

Not applicable

17. Teaching Title and Responsibilities:

Course instruction

1. Instructor and course master, Introduction to Epidemiologic Data Analysis Using Computers (2 credit hours), University of Iowa, Department of Preventive Medicine, College of Medicine, The University of Iowa, 1997-1998.

2. Instructor and course master, Managerial Epidemiology (3 credit hours), Saint Louis University School of Public Health, 2002.
3. Instructor, Amy M. Hueffmeier, Health Care Services Program, Independent Study (2 credit hours). Title: Dialysis associated bacteremia (DA-BSI) problems and solutions, Fall 2003.
4. Small group leader, The Practice of Medicine Health Promotion I course, Washington University, School of Medicine, 2004.
5. Instructor and course master, Epidemiology for Clinical Research (3 credit hours), Washington University, School of Medicine, annually during 2002-2010, 2012-2014 (co-instructor).
6. Instructor and course master, Intermediate Epidemiology (3 credit hours), Washington University, School of Medicine, 2010.
7. Instructor and course master, Epidemiology methods II (3 credit hours), Saint Louis University College for Public Health and Social Justice, 2014 (30 students).
8. Instructor and course master, Intermediate Epidemiology (3 credit hours), Washington University, School of Medicine, 2015.
9. Instructor and course master, Epidemiology methods II (3 credit hours), Saint Louis University College for Public Health and Social Justice, 2015 (33 students).
10. Professional Development (1 credit/semester) in the doctoral program for Public Health Studies, Saint Louis University College for Public Health and Social Justice, 2015-2016 (6 students).
11. Instructor and course master, Epidemiology methods II (3 credit hours), Saint Louis University College for Public Health and Social Justice, 2016 (27 students).
12. Instructor and course master, Epidemiology methods II (3 credit hours), Saint Louis University College for Public Health and Social Justice, 2016 (12 students).
13. Instructor and course master, Applied Research Skills II: Grant writing (3 credit hours), Saint Louis University College for Public Health and Social Justice, 2017 (8 students).
14. Professional Development (1 credit) in the doctoral program for Public Health Studies, Saint Louis University College for Public Health and Social Justice, 2018 (8 students).

Mentorship

15. Member, Ph.D. Dissertation Committee, Cheryl Kelly, Saint Louis University School of Public Health, 2006.
16. Secondary mentor, K30 grant, Amber Cooper MD, about the consequences of chronic cytotoxic and biologic treatments on ovarian function in rheumatoid arthritis and juvenile idiopathic arthritis patients, 2008-2010.
17. Secondary mentor, K30 grant, Emily Jungheim, MD, about effects of state mandates for infertility insurance coverage on fertility treatment outcomes, 2008-2010.
18. Secondary mentor on KL2 grant, Patricia Cavazos-Rehg, PhD, about Individual and familial alcoholism: Behavioral, health, and social consequences, 2006-2010.

19. Secondary mentor on KL2 grant, Jay MacDonald, MD, about treatment and outcomes of patients with Herpes Zoster, 2006-2008.
20. Primary mentor, Min Lian, MD PhD, postdoctoral fellow, about geographic variation of cancer outcomes, 2006-2008.
21. Secondary mentor on KL2 grant, Enbal Shacham, PhD, about HIV, psychiatric conditions, and area-level factors, 2008-2011.
22. Secondary mentor on K30 grant, Jonas Marschall, MD, about epidemiology of blood stream infection, 2007-2008.
23. Secondary mentor on American Cancer Society career development grant, Christy Hoehner, PhD, about built environment and physical activity 2007-2013.
24. Secondary mentor on KL2 grant, Allison Wright Willis, MD, about epidemiology of Parkinson disease, Medicare data outcomes, and spatial analysis, 2009-2013.
25. Primary mentor on KL2 grant, Seth Strobe, MD, about increasing efficiency of surveillance imaging for urinary tract cancer survivors, 2010-2013.
26. Primary mentor on NIH K07 grant, Seth Strobe, MD, about increasing efficiency of surveillance imaging for urinary tract cancer survivors, 2013 – present.
27. Primary mentor, Sida Yan BS, Saint Louis University School of Medicine about colorectal cancer recurrence and validation of claims data, 2011- 2012.
28. Secondary mentor on K23 grant, Marcie Harris Hayes, PT, DPT, MSCI, about rehabilitation factors in pre-arthritis hip disease, 2011 - present.
29. Primary mentor, Soghra Jarvandi, MD PhD, postdoctoral fellow, about nutrition and behavior, 2011-2014.
30. Primary mentor, Lung-Chien PhD, postdoctoral fellow, about spatial modeling of cancer, 2011-2013.
31. Primary mentor, Sandi Pruitt, PhD, postdoctoral fellow, about area-level factors and colorectal cancer screening, 2008-2010 and 2010-2012 (KL2 grant).
32. Primary mentor on NIH K07, Min Lian, MD PhD, about the interplay between neighborhood conditions and genetics predicting smoking behavior, 2013 -2015.
33. Primary mentor, Erik Nelson PhD, postdoctoral fellow, about spatial modeling in public health, 2014-2016.
34. Primary mentor, Kendra Ratnapradipa, MSW, doctoral student, 2014-2017.
35. Primary mentor, Scott Vouri, PharmD, doctoral student, 2015-2018.
36. Secondary mentor on American Cancer Society career development award, Jan Eberth PhD, about spatial accessibility to colonoscopy providers and its impact on patient-level outcomes, University of South Carolina, 2016-present.
37. Primary mentor, Saad Siddiqui, MPH, doctoral student, 2016-2018.

18. Bibliography:

a. Peer-reviewed manuscripts:

1. Schootman M, Van Mechelen W. Preventieve kniebraces en het ontstaan van knieblessures bij American Football: Een Literatuuroverzicht. Geneeskunde en Sport 1992; 24: 104-113. (in Dutch)

2. Powell JW, Schootman M. A multivariate risk analysis of natural grass and astroturf playing surfaces in the National Football League 1980-1989. An epidemiological study of knee injuries. *Am J Sports Med* 1992; 20: 686-694.
3. Schootman M, Van Mechelen W. The efficacy of preventive knee braces in football: An epidemiological assessment. *Clin J Sport Med* 1993; 3: 166-171.
4. Zwerling C, Ryan J, Schootman M. A case-control study of risk factors for industrial low back injury: The utility of preplacement screening in defining high risk groups. *Spine* 1993; 18: 1242-1247.
5. Zwerling C, Lynch CF, Schootman M. The epidemiology of firearm injuries in Iowa, 1980-1990. *Am J Prev Med* 1993; 9 (suppl. 1): 21-25.
6. Schootman M, Fuortes L, Zwerling C, Albanese MA, Watson CA. Identification of high risk groups based on self-reported safety behavior by junior high and high school students. *Am J Public Health* 1993; 83: 1628-1630.
7. Fuortes L, Shi Y, Zhang M, Zwerling C, Schootman M. Epidemiology of back injury in university hospital nurses from review of workers' compensation records and a case-control survey. *J Occup Med* 1994; 36: 1022-1026.
8. Schootman M, Powell JW, Torner JC. Study designs and biases in sports injury research: The case-control study. *Sport Med* 1994; 18: 22-37.
9. Muldoon JT, Morton R, Schootman M. Health status and utilization of cancer early detection services among farm and rural nonfarm adults in Iowa. *J Rural Health* 1996; 12: 321-331 (supplement).
10. Schootman M, Zwerling C, Miller ER, Torner JC, Fuortes L, Lynch CF, Merchant JA, Peterson TD. Method to electronically collect emergency department data. *Ann Emerg Med* 1996; 28: 213-219.
11. Schootman M, Fuortes L. Functional status following traumatic brain injuries. Population-based rural-urban differences. *Brain Inj* 1999; 13: 995-1004.
12. Schootman M, Fuortes L. Breast and cervical carcinoma. The correlation of activity limitations and rurality with screening, disease incidence, and mortality. *Cancer* 1999; 86: 1087-1094.
13. Schootman M, Fuortes L. Ambulatory care for traumatic brain injuries in the United States, 1995-1997. *Brain Inj* 2000; 14: 373-381.
14. Schootman M, Harlan M, Fuortes L. Epidemiology of severe traumatic brain injuries in Iowa: The use of the capture-recapture method. *J Trauma* 2000; 48: 70-75.
15. Schootman M, Myers-Geadelmann J, Fuortes L. Factors associated with adequacy of diagnostic work-up following abnormal breast cancer screening. *J Am Board Fam Practice* 2000; 13: 94-100.
16. Quayle KS, Wick NA, Gnauck KA, Schootman M, Jaffe DM. Description of Missouri children who suffer burn injuries. *Inj Prev* 2000; 6: 255-258.
17. Schootman M, Fuortes L. Early indicators of the effect of a breast cancer screening program for low-income women. *Cancer Detect Prev* 2001; 25: 138-146.
18. Saleh SS, Phillips KT, Schootman M, Fuortes L. Evaluation of Medicaid status, race, and urbanicity as risk factors for asthma hospitalization. *Texas J Rural Health* 2001; 19: 49-56.

19. Zafar N, Wallace CM, Kieffer P, Schroeder P, Schootman M, Hamvas A. Improving survival of vulnerable infants increases neonatal intensive care unit nosocomial infection rate. *Arch Pediatr Adolesc Med* 2001; 155: 1098-1104.
20. Schootman M, Aft R. Rural-urban differences in radiation therapy for ductal carcinoma in-situ of the breast. *Breast Cancer Res Treat* 2001; 68: 117-125.
21. Luhmann SJ, Bassett GS, Gordon JE, Schootman M, Schoenecker PL. Reduction of a dislocation of the hip due to developmental dysplasia. Implications for the need for future surgery. *J Bone Joint Surgery* 2003; 85A: 239-243.
22. Danziger-Isakov LA, DelaMorena M, Hayashi RJ, Sweet S, Mendeloff E, Schootman M, Huddleston C, DeBaun MR. Cytomegalovirus viremia associated with death or retransplantation in pediatric lung-transplant recipients. *Transplantation* 2003; 75: 1538-1543.
23. Schootman M, Jeffe DB. Influence of sociodemographic and health care factors on disability-related differences in breast cancer screening. *Cancer Causes Control* 2003; 14: 97-107.
24. Williams KG, Schootman M, Quayle KS, Struthers J, Jaffe D. Geographic variation of pediatric burn injuries in a metropolitan area. *Acad Emerg Med* 2003; 10: 743-752.
25. Luhmann SJ, Schoenecker PL, Schootman M, Dobbs MB, Gordon JE. Complications of titanium elastic nails for pediatric femoral shaft fractures. *J Pediatric Orthopaedics* 2003; 23: 443-447.
26. Johnstone B, Price T, Bounds T, Schopp LH, Schootman M, Schumate D. Rural-urban differences in vocational outcome for state vocational rehabilitation clients with traumatic brain injury. *Neurorehabilitation* 2003; 18: 197-203.
27. Schootman M, Jeffe DB, Reschke A, Aft R. Disparities related to socioeconomic status and access to medical care remain in the United States among women who never had a mammogram. *Cancer Causes Control* 2003; 14: 419-425.
28. Schootman M, Buchman TG, Lewis LM. National estimates of hospitalization charges for the acute care of traumatic brain injuries. *Brain Inj* 2003; 17: 983-990.
29. Schootman M, Kinman E, Farria D. Rural-urban differences in ductal carcinoma in situ as proxy for mammography use over time. *J Rural Health* 2003; 19: 470-476.
30. Luhmann SJ, Schoenecker PL, Schootman M, Dobbs MD, Gordon JE. Complications and outcomes of open forearm fractures in the pediatric patient. *J Pediatric Orthopaedic* 2004; 24: 1-6.
31. Luhmann J, Hurt S, Schootman M, Kennedy R. A comparison of buffered lidocaine versus ELA-Max before peripheral intravenous catheter insertions in children. *Pediatrics* 2004; 113: e217-e220.
32. Luhmann SJ, Jones A, Schootman M, Gordon JE, Schoenecker PL, Luhmann JD. Differentiation of septic arthritis and transient synovitis of the hip in children using clinical prediction algorithms. *J Bone Joint Surg* 2004; 86A: 956-961.

33. Scheers-Masters JR, Schootman M, Thach BT. Heat stress and sudden infant death syndrome incidence: a United States population epidemiologic study. *Pediatrics* 2004; 113: e586-92.
34. Schootman M, Sun D. Small-area incidence trends in breast cancer. *Epidemiology* 2004; 15: 300-307.
35. Schootman M, Jeffe DB, Reschke A, Aft R. The full potential of breast cancer screening has not yet been realized in the United States. *Breast Cancer Res Treat* 2004; 85: 219-222.
36. Luhmann SJ, Jones A, Schootman M, Gordon JE, Schoenecker PL, Luhmann JD. Reply to: Letter to the Editor by Yagupsky P: Differentiation between septic arthritis and transient synovitis of the hip in children. *J Bone Joint Surg Am* 2005; 87: 459-460.
37. Schootman M, Jeffe DB, Kinman E, Higgs G, Jackson-Thompson J. Evaluating the utility and accuracy of a reverse telephone directory to identify the location of survey respondents. *Ann Epidemiol* 2005; 15: 160-166.
38. Luhmann SJ, Schootman M, Gordon JE, Wright RW. Magnetic resonance imaging of the knee in children and adolescents. Its role in clinical decision-making. *J Bone Joint Surg Am* 2005; 87A(3): 497-502.
39. Shieh K, Gao F, Ristvedt S, Schootman M, Early D. The impact of physicians' health beliefs on colorectal cancer screening practices. *Dig Dis Sci* 2005; 50: 809-814.
40. Luhmann SJ, Bridwell KH, Cheng I, Imamura T, Lenke LG, Schootman M. Use of bone morphogenetic protein-2 for adult spinal deformity. *Spine* 2005; 30(17S): S110-S117.
41. Luhmann SJ, Lenke LG, Kim YJ, Bridwell KH, Schootman M. Thoracic adolescent idiopathic scoliosis curves between 70 and 100 degrees. *Spine* 2005; 30: 2061-2067.
42. Schootman M, Jeffe DB, West M, Aft R. Elderly patients' self-reports of receipt of some breast cancer treatments was an acceptable alternative to SEER-registry data. *J Clin Epidemiol* 2005; 58: 1316-1319.
43. Zhang S, Sun D, He CZ, Schootman M. A Bayesian semiparametric model for colorectal cancer incidence. *Stat Med* 2006; 25: 285-309.
44. Schootman M, Andresen EM, Wolinsky FD, Malmstrom TK, Miller JP, Miller DK. Neighborhood conditions and risk of incident lower-body functional limitations among middle-aged African Americans. *Am J Epidemiol* 2006; 163: 450-458.
45. Schootman M, Jeffe DB, Baker EA, Walker MS. The effect of area poverty rate on cancer screening across U.S. communities. *J Epidemiol Community Health* 2006; 60: 202-207.
46. Baker EA, Schootman M, Barnidge E, Kelly C. The role of race and poverty in access to foods that enable individuals to adhere to dietary guidelines. *Prev Chronic Dis* 2006; 3: A76.
47. Baker EA, Kelly C, Barnidge E, Strayhorn J, Schootman M, Struthers J, Griffith D. The Garden of Eden: Acknowledging the impact of race and class in our efforts to decrease rates of obesity. *Am J Public Health* 2006; 96: 1170-1174.

48. Schootman M, Fuortes L, Aft R. Prognosis of metachronous contralateral breast cancer according to stage at diagnosis: The importance of early detection. *Breast Cancer Res Treat* 2006; 99: 91-95.
49. Luhmann JD, Schootman M, Luhmann SJ, Kennedy RM. A randomized comparison of Nitrous Oxide plus Hematoma Block versus Ketamine plus Midazolam for emergency department forearm fracture reduction in children. *Pediatrics* 2006; 118: e1078-1086.
50. Nelson KA, Lee P, Yan Y, Hodgdon K, Schootman M, Strunk RC. Effect of peak expiratory flow rate measurement on exhaled Nitric Oxide levels in children with asthma. *J Allergy Clin Immunol* 2007; 119: 245-246.
51. Schootman M, Jeffe DB, Gillanders WE, Yan Y, Aft R. The effects of radiotherapy for the treatment of contralateral breast cancer. *Breast Cancer Res Treat* 2007; 103: 77-83.
52. Schootman M, Andresen EM, Wolinsky FD, Malmstrom TK, Miller JP, Miller DK. Neighborhood environment and the incidence of depressive symptoms among middle-aged African Americans. *J Epidemiol Community Health* 2007; 61: 527-532.
53. Wolinsky FD, Miller TR, Malmstrom TK, Miller JP, Schootman M, Andresen EM, Miller DK. Four-year lower extremity disability trajectories among African American men and women. *J Gerontol: Med Sci* 2007; 62: 525-530.
54. Schootman M, Sterling DA, Struthers J, Yan Y, Laboube T, Emo B, Higgs G. Positional accuracy and geographic bias of four methods of geocoding in epidemiologic research. *Ann Epidemiol* 2007; 17: 464-470.
55. Kelly CM, Baker EA, Brownson RC, Schootman M. Moving from research to practice: Using concept mapping to determine locally-relevant intervention strategies to increase physical activity. *Eval Program Plann* 2007; 30: 282-293.
56. Schootman M, Andresen EM, Wolinsky FD, Malmstrom TK, Miller JP, Yan Y, Miller DK. The effect of adverse housing and neighborhood conditions on the development of diabetes mellitus among middle-aged African Americans. *Am J Epidemiol* 2007; 166: 379-387.
57. Kelly CM, Schootman M, Baker EA, Barnidge EK, Lemes M. The association of sidewalk walkability and physical disorder with area-level race and poverty. *J Epidemiol Community Health* 2007; 61: 978-983.
58. Schootman M, Jeffe DB, Gillanders W, Yan Y, Jenkins B, Aft R. Geographic clustering of adequate diagnostic follow-up after abnormal screening results for breast cancer among low-income women in Missouri. *Ann Epidemiol* 2007; 17: 704-712.
59. Schootman M, Walker M, Rohrer J, Jeffe DB, Baker EA. Breast cancer screening and incidence in communities with high proportion uninsured. *Am J Prev Med* 2007; 33: 379-386.
60. White G, Sun D. Schootman M. An additive model for spatio-temporal smoothing of cancer mortality rates. *Iran J Mathematical Sciences and Informatics* 2007; 2: 57-72.
61. Dai L, He Z, Sun D, Schootman M. Hierarchical models for detecting geographical effects in cancer incidence and survival. *Far East Journal of Applied Mathematics* 2007; 29: 1-8.

62. Andresen EM, Malmstrom TK, Wolinsky FD, Schootman M, Miller JP, Miller DK. Rating neighborhoods for older adult health: Results from the African American Health Study. BMC Public Health 2008: 8: 35. PMCID: PMC2262887.
63. Wolinsky FD, Miller TR, Malmstrom TK, Miller JP, Schootman M, Andresen EM, Miller DK. Self-rated health: Changes, trajectories and their antecedents among African Americans. J Aging Health 2008: 20: 143-158. PMCID: PMC2673048.
64. Luhmann SJ, Schootman M. Use of femoral nerve blocks in adolescents undergoing patellar realignment surgery. Am J Orthopedics 2008: 37: 39-43.
65. Turabelidze G, Zhu BP, Schootman M, Malone JL, Horowitz S, Weidinger J, Williamson DM, Simoes E. An epidemiologic investigation of Amyotrophic Lateral Sclerosis in Jefferson County, Missouri, 1998-2002. Neurotoxicology 2008: 29: 81-86.
66. Baker EA, Kelly CM, Barnidge EK, Schootman M. Do recreational resources contribute to physical activity? J Physical Act Health 2008: 5: 252-261.
67. Olsen MA, Krauss M, Agniel D, Schootman M, Gentry CN, Yan Y, Damiano RJ, Fraser VJ. Mortality associated with bloodstream infection following coronary artery bypass graft. Clin Infect Dis 2008: 46: 1537-1546.
68. Schootman M, Jeffe DB, Lian M, Aft R, Gillanders WE. Surveillance mammography and the risk of death among elderly breast cancer patients. Breast Cancer Res Treat 2008: 111: 489-496.
69. Charney RL, Griffith BR, Yan Y, Schootman M, Kennedy RM, Luhmann JD. A randomized study of Oxycodone vs. Codeine for triage pain control in children with forearm fracture. J Ped Emergency Med 2008: 24: 595-600.
70. Turabelidze G, Schootman M, Zhu BP, Malone JL, Horowitz S, Weidinger J, Williamson D, Simoes E. Multiple sclerosis prevalence and possible lead exposure. J Neurological Sciences 2008: 269: 158-162.
71. Lian M, Jeffe DB, Schootman M. Racial and geographic differences in mammography screening in St. Louis city: A multilevel study. J Urban Health 2008: 85: 677-692. PMCID: PMC2527433.
72. DeFranco E, Lian M, Muglia L, Schootman M. Area-level poverty and preterm birth risk: A population-based multilevel analysis. BMC Public Health 2008: 8: 316. PMCID: PMC2564937.
73. Lian M, Schootman M, Yun S. Geographic variation and effect of area-level poverty rate on colorectal cancer screening. BMC Public Health 2008: 8: 358. PMCID: PMC2588456
74. Sumner W, Schootman M, Asaro P, Yan Y, Hagen M. Using county-level public health data to prioritize medical education. J Cont Ed Health Prof 2008: 28: 197-204.
75. Schootman M, Jeffe DB, Lian M, Deshpande AD, Gillanders WE, Aft R, Sumner W. Area-level poverty is associated with an increased risk of ambulatory-care-sensitive hospitalizations among older breast cancer survivors. J Am Geriatrics Soc 2008: 56: 2180-2187. PMCID: PMC2735731.
76. Luhmann SJ, Lenke LG, Kim YJ, Bridwell KH, Schootman M. Financial analysis of circumferential fusion versus posterior-only with thoracic pedicle screw

constructs for main thoracic idiopathic curves between 70 degrees and 100 degrees. *J Child Orthop* 2008; 2: 105-112. PMID: PMC2656792.

77. Schootman M, Jeffe DB, Gillanders W, Aft R. Racial disparities in the development of breast cancer metastases among older women. *Cancer* 2009; 115: 731-740. PMID: PMC2756080.
78. Schootman M, Yun S. Trends in cancer disparities between African Americans and whites in Missouri. *Mo Med* 2009; 106: 9-13.
79. Schootman M, Jeffe D, Lian M, Gillanders WE, Aft R. The role of poverty rate and racial distribution in the geographic clustering of breast cancer survival among older women: A geographic and multilevel analysis. *Am J Epidemiol* 2009; 169: 554-561. PMID: PMC2727182.
80. Wolinsky FD, Andresen EM, Malmstrom TK, Schootman M, Miller JP, Miller DK. Three-year measured weight change in the African American Health Study. *J Aging Health* 2009; 21: 231-243.
81. Wolinsky FD, Andresen EM, Malmstrom TK, Schootman M, Miller JP, Miller DK. Antecedents of global decline in health-related quality of life among middle aged African Americans. *J Gerontol: Soc Sci* 2009; 64B: 290-295. PMID: PMC2655163.
82. Nelson KA, Meadows L, Yan Y, Schootman M, Strunk RC. Asthma prevalence in low-income urban elementary school students in St. Louis, 1992 and 2004. *J Pediatrics* 2009; 154: 111-115. PMID: PMC2649880.
83. Miller DK, Malmstrom TK, Andresen EM, Miller JP, Herning MM, Schootman M, Wolinsky FD. Development and validation of a short portable sarcopenia measure in the AAH Project. *J Gerontology: Med Sci* 2009; 61A: 388-394. PMID: PMC2655004.
84. Kapp JM, Jackson-Thompson J, Petroski G, Schootman M. Reliability of health-related quality of life indicators in cancer survivors from a population-based sample. *Public Health* 2009; 123: 321-325. PMID: PMC2718054.
85. Luhmann SJ, Lenke LG, Bridwell KH, Schootman M. Revision surgery after primary spine fusion for idiopathic scoliosis. *Spine* 2009; 34: 2191-2197.
86. Cavazos-Rehg PA, Krauss, MJ, Spitznagel EL, Schootman M, Bucholz KK, Peipert JL, Sanders-Thompson V, Cottler LB, Bierut LJ. Age of sexual debut among U.S. adolescents. *Contraception* 2009; 80: 158-162.
87. Schootman M, Aft R, Jeffe DB. An evaluation of lower-body functional limitations among long-term survivors of 11 different types of cancers. *Cancer* 2009; 115: 5329-5338. PMID: PMC2791371.
88. Cavazos-Rehg PA, Spitznagel EL, Schootman M, Strickland JR, Afful SE, Cottler LB, Bierut LJ. Risky sexual behaviors and STDs: A comparison study of cocaine dependent individuals in treatment versus a community-matched sample. *AIDS Patient Care and STDs* 2009; 23: 727-734. PMID: PMC2804246.
89. Liu Y, Pérez M, Aft RL, Massman K, Queen E, Myles S, Schootman M, Gillanders WE, Jeffe DB. Accuracy of perceived risk of recurrence among patients with early-stage breast cancer. *Cancer Epidemiol Biomarkers Prev* 2010; 19: 675-680. PMID: PMC2836416.

90. Miller DK, Malmstrom TK, Miller JP, Andresen EM, Schootman M, Wolinsky FD. Predictors of change in grip strength over three years in the African American health project. *J Aging Health* 2010; 22: 183-196.
91. Schootman M, Andresen EM, Wolinsky FD, Malmstrom TK, Morley JE, Miller DK. Adverse housing and neighborhood conditions, and inflammatory markers among middle-aged African Americans. *J Urban Health* 2010; 87: 199-210. PMID: PMC2845834.
92. Keune JD, Jeffe DB, Schootman M, Hoffman A, Gillanders WE, Aft R. Accuracy of ultrasonography and mammography in predicting pathologic response after neoadjuvant chemotherapy for breast cancer. *Am J Surgery* 2010; 199: 477-484. PMID: PMC3252889.
93. Schootman M, Lian M, Deshpande AD, Baker EA, Pruitt SL, Aft R, Jeffe DB. Temporal trends in geographic disparities in small-area breast cancer incidence and mortality, 1988-2005. *Cancer Epidemiol Biomarkers Prev* 2010; 19: 1122-1131. PMID: PMC2852484.
94. Pruitt SL, Schootman M. Geographic disparity, area poverty and Human Papillomavirus (HPV) vaccination. *Am J Prev Med* 2010; 38: 525-533. PMID: PMC3259737.
95. Bailey EH, Perez M, Aft RL, Liu Y, Schootman M, Jeffe DB. Impact of multiple caregiving roles on elevated depressed mood in early-stage breast cancer patients and same-age controls. *Breast Cancer Res Treat* 2010; 121: 709-718. PMID: PMC2869396.
96. Cavazos-Rehg PA, Spitznagel EL, Krauss MJ, Schootman M, Bucholz KK, Cottler LB, Bierut LJ. Understanding adolescent parenthood from a multisystemic perspective. *J Adoles Health* 2010; 46: 525-531. PMID: PMC2872634.
97. Schootman M, Andresen EM, Wolinsky FD, Miller JP, Yan Y, Miller DK. Neighborhood conditions, diabetes, and risk of lower-body functional limitations among middle-aged African Americans. *BMC Public Health* 2010; 10: 283. PMID: PMC2885338.
98. Schootman M, Lian M, Deshpande AD, Baker EA, Pruitt SL, Aft R, Jeffe DB. Temporal trends in area socioeconomic disparities in breast-cancer incidence and mortality, 1988-2005. *Breast Cancer Res Treat* 2010; 122: 533-543. PMID: PMC2888952.
99. Schootman M, Deshpande AD, Pruitt SL, Jeffe DB. National estimates of racial disparities in health status and behavioral risk factors among long-term cancer survivors and noncancer controls. *Cancer Causes Control* 2010; 21: 1387-1395. PMID: PMC 3281263.
100. Hoehner C, Schootman M. Concordance of commercial data sources for neighborhood-effects studies. *J Urban Health* 2010; 87: 713-725. PMID: PMC2900563.
101. Min X, Sun D, He Z, Schootman M. A Bayesian hierarchical model of nontraumatic lower-extremity amputation rates. *Spat Spatiotemporal Epidemiol* 2010; 1: 169-176. NIHMS #506820.

102. Pérez M, Liu Y, Schootman M, Aft RL, Schechtman K, Gillanders WE, Jeffe DB. Changes in sexual problems over time in women with and without early-stage breast cancer. *Menopause* 2010; 17: 924-937. PMCID: PMC2939280.
103. Liu Y, Pérez M, Schootman M, Aft RL, Gillanders WE, Ellis MJ, Jeffe DB. A longitudinal study of factors associated with perceived risk of recurrence in women with ductal carcinoma in situ and early-stage invasive breast cancer. *Breast Cancer Res Treat* 2010; 124: 835-844. PMCID: PMC3227389.
104. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Schootman M, Piepert JF, Cottler LB, Bierut LJ. Type of contraception method used at last intercourse and associations with health risk behaviors among U.S. adolescents. *Contraception* 2010; 82: 549-555. PMCID: PMC2993018.
105. Thuet ED, Winscher JC, Padberg AM, Bridwell KH, LEnke LG, Dobbs MB, Schootman M, Luhmann SJ.. Validity and reliability of intraoperative monitoring in pediatric spinal deformity surgery: A 23-year experience of 3436 surgical cases. *Spine* 2010; 35: 1880-1886.
106. Willis AW, Evanoff BA; Lian M, Wegrzyn A, Galarza A, Schootman M, Racette BA. Metal emissions and urban incident Parkinson Disease: A community health study of Medicare beneficiaries using geographical information systems. *Am J Epidemiol* 2010; 172: 1357-1366. PMCID: PMC2998201.
107. Collins KK, Liu Y, Schootman M, Aft R, Yan Y, Dean G, Eilers M, Jeffe DB. Effects of breast cancer surgery and surgical side effects on body image over time. *Breast Cancer Res Treat* 2011; 126: 167-176. PMCID: PMC3265936.
108. Malmstrom TK, Andresen EM, Wolinsky FD, Schootman M, Miller JP, Miller DK. Urinary and fecal incontinence and quality of life among African Americans. *J Am Geriatrics Soc* 2011; 58: 1941-1945.
109. Cavazos-Regh P, Krauss MJ, Spitznagel EL, Schootman M, Cottler LB, Bierut LJ. Substance use and the risk for sexual intercourse with and without a history of teenage pregnancy among adolescent females. *J Studies Alcohol Drugs* 2011; 72: 194-198. PMCID: PMC3052889.
110. Schootman M, Lian M, Deshpande AD, McQueen A, Pruitt SL, Jeffe DB. Temporal trends in geographic disparities in small-area-level colorectal cancer incidence and mortality in the United States. *Cancer Causes Control* 2011; 22: 1173-1181. PMCID: PMC3153856.
111. Willis AW, Schootman M, Evanoff BA, Perlmutter JS, Racette BA. Neurologist care in the treatment of Parkinsons Disease: A utilization, outcomes and survival study of Medicare beneficiaries. *Neurology* 2011; 77: 851-857. PMCID: PMC3162639.
112. Liu Y, Perez M, Schootman M, Aft RL, Gillanders WE, Jeffe DB. Correlates of fear of cancer recurrence in women with ductal carcinoma in situ and early invasive breast cancer. *Breast Cancer Res Treat* 2011; 130: 165–173. PMCID: PMC3227390.
113. Lian M, Schootman M, Doubeni CA, Park Y, Major JM, Torres Stone RA, Laiyemo AO, Hollenbeck A, Graubard BI, Schatzkin A. Geographic variation in colorectal cancer survival and the role of small-area socioeconomic deprivation: A Multilevel Survival Analysis of the NIH-AARP Diet and Health Cohort. *Am J Epidemiol* 2011; 174: 828-838. PMCID: PMC3203377.

114. Cavazos-Rehg P, Krauss M, Spitznagel E, Schootman M, Cottler L, Bierut L. Number of sexual partners and associations with initiation and intensity of substance use. *AIDS Behav* 2011; 15(4): 869-874. PMCID: PMC3131132.
115. Deshpande A, Sefko JA, Jeffe DB, Schootman M. The association between chronic disease burden and quality of life among breast cancer survivors in Missouri. *Breast Cancer Res Treat* 2011; 129: 877-886. PMCID: PMC3250926.
116. Schootman M, Deshpande AD, Pruitt S, Aft R, Jeffe DB. Estimated effects of potential interventions to prevent decreases in self-rated health among breast cancer survivors. *Ann Epidemiol* 2012; 22: 79-86. PMCID: PMC3255081.
117. Wilson JS, Kelly CM, Schootman M, Baker EA, Banerjee A, Clennin M, Miller D. Assessing the built environment using omnidirectional imagery. *Am J Prev Med* 2012; 42: 193-199. PMCID: PMC3263366.
118. Cavazos-Rehg P, Krauss MJ, Spitznagel EL, Iguchi M, Schootman M, Cottler L, Grucza RA, Bierut LJ. Associations between sexuality education in schools and adolescent birthrates: A state-level longitudinal model. *Arch Pediatr Adolesc Med* 2012; 166: 134-140.
119. Sumner W, O'Neill T, Owens PL, Schootman M, Hagen MD. ABFM examination asthma item performance and asthma prevention quality indicators in Kentucky. *J Ky Med Assoc* 2012; 110: 263-266.
120. Pruitt SL, Jeffe DB, Yan Y, Schootman M. Reliability of perceived neighborhood conditions and the effects of measurement error on self-rated health across urban and rural neighborhoods. *J Epidemiol Community Health* 2012; 66: 342-351. PMCID: PMC3151345.
121. Jeffe DB, Pérez M, Liu Y, Collins KK, Aft RL, Schootman M. Quality of life over time in women diagnosed with ductal carcinoma in situ, early-stage invasive breast cancer, and age-matched controls. *Breast Cancer Res Treat* 2012; 134: 379-391. PMCID: PMC3448489.
122. Lian M, Struthers J, Schootman M. Comparing GIS-based measures in access to mammography and their validity in predicting neighborhood risk of late-stage breast cancer. *PLOS One* 2012; 7: e43000. PMCID: PMC3429459.
123. Schootman M, Deshpande AD, Pruitt SL, Jeffe DB. Neighborhood foreclosures and self-rated health among breast cancer survivors. *Qual Life Res* 2012; 21: 133-141. PMCID: PMC3183409.
124. Doubeni CA, Laiyemo AO, Major JM, Schootman M, Lian M, Graubard BI, Hollenbeck AR, Sinha R. Socioeconomic status and the risk of colorectal cancer: An analysis of over one-half million adults in the NIH-AARP Diet and Health Study. *Cancer* 2012; 118: 3636-3644. PMCID: PMC3422782.
125. Doubeni CA, Torres Stone RA, Major JM, Laiyemo AO, Schootman M, Park Y, Lian M, Messer L, Graubard BI, Sinha R, Hollenbeck AR, Schatzkin A. Health status, neighborhood socioeconomic context and premature mortality in the United States: The NIH-AARP Diet and Health Study. *Am J Public Health* 2012; 102: 680-688. PMCID: PMC3489366.
126. Jarvandi S, Davidson NO, Jeffe DB, Schootman M. Influence of lifestyle factors on inflammation in men and women with type 2 diabetes. Results from the National Health and Nutrition Examination Survey, 1999-2004. *Ann Beh Med* 2012; 44: 399-407.

127. Willis AW, Schootman M, Tran R, Kung N, Evanoff BA, Perlmutter JS, Racette BA. Neurologist associated reduction in Parkinson's Disease cost and disease-related hospitalizations. *Neurology* 2012; 79: 1774-1780.
128. Jarvandi S, Yan Y, Schootman M. Income disparity and risk of death: The importance of health behaviors and other mediating factors. *PLOS ONE* 2012; 7: e49929.
129. Cavazos-Rehg P, Krauss M, Spitznagel E, Chaloupka F, Schootman M, Grucza R, Bierut L. Associations between selected state laws and teenagers' drinking and driving behaviors. *Alcohol Clin Exp Res* 2012; 166: 134-140. PMCID: PMC3433801
130. Hoehner CM, Barlow CE, Allen P, Schootman M. Commuting distance and its association with cardiorespiratory fitness and metabolic risk. *Am J Prev Med* 2012; 42: 571-578. PMCID: PMC3360418.
131. Chien LC, Deshpande AD, Jeffe DB, Schootman M. Influence of primary care physician availability and socioeconomic deprivation on breast cancer incidence and mortality from 1988 to 2008 - a spatio-temporal analysis. *PLOS One* 2012; 7: e35737. PMCID: PMC3335009.
132. Schootman M, Andresen EM, Wolinsky FD, Miller JP, Miller DK. Effect of street connectivity on incidence of lower-body functional limitations among middle-aged African Americans. *Ann Epidemiol* 2012; 22: 568-574. PMCID: PMC3396770.
133. Pruitt SL, McQueen A, Deshpande AD, Jeffe DB, Schootman M. Mediators of the effect of neighborhood poverty on physical functioning among breast cancer survivors: A longitudinal study. *Cancer Causes Control* 2012; 23: 1529-1540. PMCID: PMC3425435.
134. Wolinsky FD, Andresen EM, Malmstrom TK, Miller JP, Schootman M, Miller DK. Childhood school segregation and later life sense of control and physical performance in the African American Health cohort. *BMC Public Health* 2012; 12: 827. PMCID: PMC3526414.
135. Doubeni CA, Major JM, Laiyemo AO, Schootman M, Zauber AG, Hollenbeck AR, Sinha R, Allison J. Contribution of behavioral risk factors and obesity to socioeconomic differences in colorectal cancer incidence. *JNCI* 2012; 104: 1353-1362. PMCID: PMC3529596.
136. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Schootman M, Cottler LB, Bierut LJ. Pregnant by age 15 years and substance use initiation among US adolescent girls. *J Adolesc Health* 2012; 35: 1393-1397. PMCID: PMC3432655.
137. Willis WA, Schootman M, Huang N, Evanoff BA, Perlmutter JS, Racette BA. Predictors of survival in patients with Parkinson Disease. *Arch Neurology* 2012; 69: 601-607. PMCID: PMC3599783.
138. Schootman M, Deshpande AD, Lynskey M, Pruitt SL, Lian M, Jeffe DB. Alcohol outlet availability and excessive alcohol consumption in breast cancer survivors. *J Prim Care Comm Health* 2013; 4: 50-58. PMCID: PMC4154367.
139. Chien LC, Schootman M, Pruitt SL. The modifying effect of patient location on stage-specific survival following colorectal cancer using geosurvival models. *Cancer Causes Control* 2013; 24: 473-484. PMCID: PMC3617359.
140. Kelly CM, Wilson J, Baker EA, Miller DK, Schootman M. Using Google Street View to audit the built environment: Inter-rater reliability results. *Ann Beh Med* 2013; 45: S108-S112. PMCID: PMC3549312.

141. Chien LC, Yu HL, Schootman M. Efficient mapping and geographic disparities in breast cancer mortality at the county-level by race and age in the U.S. *Spatial Spatiotemp Epidemiol* 2013; 5: 27-37. PMID: PMC3671497.
142. Wolinsky FD, Malmstrom TK, Miller JP, Andresen EM, Schootman M, Miller DK. The association between childhood school segregation and changes in adult sense of control in the African American Health Cohort. *J Gerontol: Soc Sciences* 2013; 68: 956-962. PMID: PMC3805289.
143. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Schootman M, Cottler LB, Bierut LJ. Characteristics of sexually active teenage girls who would be pleased with becoming pregnant. *Maternal Child Health J* 2013; 17: 470-476. PMID: PMC3517783.
144. Waters EA, Liu Y, Schootman M, Jeffe DB. Worry about cancer progression and low perceived social support: Implications for quality of life among early-stage breast cancer patients. *Ann Beh Med* 2013; 45: 57-68. PMID: PMC3561492.
145. Thompson T, Rodebaugh TL, Pérez M, Schootman M, Jeffe DB. Perceived social support change in patients with early-stage breast cancer and controls. *Health Psych* 2013; 32: 886-895. PMID: PMC3935244.
146. Willis AW, Schootman M, Kung N, Racette BA. Epidemiology and neuropsychiatric manifestations of young onset Parkinson's Disease in the United States. *Parkinsonism and Related Disorders* 2013; 19: 202-206. PMID: PMC3562561.
147. Ayyagari P, Ullrich F, Malmstrom T, Andresen E, Schootman M, Miller JP, Miller, DK, Wolinsky FD. Self-rated health trajectories in the African American Health cohort. *PLOS ONE* 2013; 7: e53278. PMID: PMC3534051.
148. Pruitt SL, Harzke AJ, Davidson NO, Schootman M. Do diagnostic and treatment delays for colorectal cancer increase risk of death? *Cancer Causes Control* 2013; 24: 961-977. PMID: PMC3708300.
149. Hoehner CM, Allen P, Barlow CE, Marx C, Brownson RC, Schootman M. Understanding the independent and joint associations of the home and workplace built environment on cardiorespiratory fitness and body mass index. *Am J Epidemiol* 2013; 178: 1094-1105. PMID: PMC3783097.
150. Schootman M, Homan S, Weaver KE, Jeffe DB, Yun S. The health and welfare of rural and urban cancer survivors in Missouri. *Prev Chron Dis* 2013; 10: E152. PMID: PMC3775393.
151. Strobe SA, Chang SH, Chen L, Sandhu G, Piccirillo JF, Schootman M. Survival impact of follow-up care after radical and partial cystectomy for bladder cancer. *J Urol* 2013; 190:1698-703. PMID: PMC3896325.
152. Jarvandi S, Davidson NO, Schootman M. Increased risk of colorectal cancer in type 2 diabetes is independent of diet quality. *PLOS ONE* 2013; 8: e74616. PMID: PMC3771921.
153. Bruchas RR, de las Fuentes L, Carney RM, Reagan JL, Bernal-Mizrachi C, Riek AE, Gu CC, Bierhals A, Schootman M, Malmstrom TK, Burroughs TE, Stein PK, Miller DK, Davila-Roman VG. The St. Louis African American Health-Heart Study: Methodology for the study of cardiovascular disease and depression in young-old African-Americans. *BMC Cardiovascular Disorders* 2013; 13: 66. PMID: PMC3847628.
154. Andresen EM, Malmstrom TK, Schootman M, Wolinsky FD, Miller JP, Miller DK. Observer ratings of neighborhoods: Comparison of two methods. *BMC Public Health* 2013; 13: 1024. PMID: PMC3840667.

155. Baker EA, Barnidge E, Langston ME, Schootman M, Motton F, Rose F. Leadership and job readiness: Addressing social determinants of health among rural African American men. *Int J Men's Health*. 2013; 12: 245-259.
156. Willis AW, Schootman M, Kung N, Wang WY, Perlmutter JS, Racette BA. Disparities in deep brain stimulation surgery among insured elders with Parkinson Disease. *Neurology* 2014; 82: 163-171. PMID: PMC3897433.
157. Wolinsky FD, Ayyagari P, Malmstrom TK, Miller JP, Andresen EM, Schootman M, Miller DK. Lower extremity function trajectories in the African American Health Cohort. *J Gerontol: Med Sciences* 2014; 69: 1004-1010. PMID: PMC4158401.
158. Schootman M, Lian M, Pruitt SL, Hendren S, Deshpande AD, Jeffe DB, Davidson NO. Hospital and geographic variability in 30-day all-cause mortality following colorectal cancer surgery. *Health Serv Res* 2014; 49: 1145-1164. PMID: PMC4111769.
159. Barnoya J, Colditz G, Russell S, Cyr J, Snider D, Schootman M. Prevalence of cigarette advertising and other promotional strategies at the point of sale in St. Louis, Missouri: analysis by store type and distance from a school. *Prev Chron Dis* 2014; 17: E61. PMID: PMC3992291.
160. Schootman M, Lian M, Pruitt SL, Hendren S, Mutch M, Deshpande AD, Jeffe DB, Davidson NO. Hospital and geographic variability in two colorectal cancer surgery outcomes: complications and mortality after complications. *Ann Surg Oncol* 2014; 21: 2659-2666. PMID: PMC4090776.
161. De Vries S, Jeffe DB, Pruitt SL, Davidson NO, Schootman M. Patient, hospital, and geographic disparities associated with comanagement during hospitalization for colorectal cancer surgery. *J Hosp Med* 2014; 9: 226-231. PMID: PMC4054603.
162. Pruitt SL, Leonard T, Zhang S, Schootman M, Halm EA, Gupta S. Physicians, clinics, and neighborhoods: Multiple levels of influence on colorectal cancer screening. *Cancer Epidemiology Biomarkers and Prevention* 2014; 23: 1346-1355. PMID: PMC4140391.
163. Lian M, Perez M, Liu Y, Schootman M, Frisse A, Foldes E, Jeffe DB. Neighborhood socioeconomic deprivation, tumor subtypes, and causes of death after non-metastatic invasive breast cancer diagnosis: A multilevel competing-risk analysis. *Breast Cancer Research and Treatment* 2014; 147: 661-670. PMID: PMC4181526.
164. Liang Y, Sun D, Chong H, Schootman M. Modeling bounded outcome scores using the Binomial-Logit-Normal distribution. *Chilean J Statistics* 2014; 5: 3-14.
165. De Vries S, Jeffe DB, Davidson NO, Deshpande AD, Schootman M. Postoperative 30-day mortality in patients undergoing surgery for colorectal cancer: development of a prognostic model using administrative claims data. *Cancer Causes & Control* 2014; 25: 1503-1512. PMID: PMC4216620.
166. Kelly CM, Wilson J, Schootman M, Clennin M, Baker E, Miller D. The built environment predicts observed physical activity. *Frontiers in Public Health* 2014; 2: 52. PMID: PMC4033002.
167. Pruitt SL, Leonard T, Zhang S, Schootman M, Halm EA, Gupta S. Physicians, clinics and neighborhoods: multiple levels of influence on colorectal cancer screening. *Cancer Epidemiol Biomarkers Prev* 2014; 23: 1346-1355. PMID: PMC4140391.
168. Deshpande AD, Mayer A, Schootman M. Development of a claims-based algorithm to identify colorectal cancer recurrence. *Ann Epi* 2015; 25: 297-300. PMID: PMC4369323.

169. Jarvandi S, Schootman M, Racette S. Breakfast intake among adults with type 2 diabetes: is it better to consume more energy? *Public Health Nutrition* 2015; 18: 2146-2152. PMID: PMC4526261.
170. Barnoya J, Jin L, Hudmon KS, Schootman M. Nicotine replacement therapy, tobacco products, and electronic cigarettes in pharmacies in St. Louis, Missouri. *J Am Pharm Assoc* 2015; 55: 405-412.
171. Schootman M, Toor A, Cavazos-Rehg P, Jeffe DB, McQueen A, Eberth J, Davidson NO. The utility of Google Trends data to examine interest in cancer screening. *BMJ Open* 2015; June 8 e006678. PMID: PMC4466617.
172. Barnidge E, Baker EA, Schootman M, Motton F, Sawicki M, Rose F. The effect of nutrition education plus fruit and vegetable access on fruit and vegetable consumption in a community-based nutrition intervention in a rural African American community. *Health Educ Res* 2015; 30: 773-785. PMID: PMC4668755.
173. Nelson EJ, Shacham E, Boutwell BB, Rosenfeld R, Schootman M, Vaughn MG, Lewis R. Childhood lead exposure and sexually transmitted infections: new evidence. *Env Res* 2015; 143: 131-137.
174. Bumpass DB, Fuhrhop SK, Schootman M, Luhmann SJ. Vertebral body stapling for moderate juvenile and early adolescent idiopathic scoliosis: Cautions and patient selection criteria based on 4-year follow-up. *Spine* 2015; 40: E1305–E1314.
175. Yan L, Zhan FB, Schootman M. Racial/ethnic, socioeconomic, and geographic disparities of cervical cancer survival in Texas. *Applied Geography* 2015; 56: 21-28.
176. Jeffe D, Perez M, Cole E, Liu Y, Schootman M. The effects of surgery type and chemotherapy on early-stage breast cancer patients' quality of life over two-year follow-up. *Ann Surg Oncol* 2016; 23: 735-743.
177. Vaughn MG, Nelson EJ, Salas-Wright CP, Qian Z, Schootman M. Racial and ethnic trends and correlates of non-medical use of prescription opioids among adolescents in the United States 2004-2013. *J Psychiatric Res* 2016; 73: 17-24.
178. Thompson T, Rodebaugh TL, Perez M, Struthers J, Sefko JA, Lian M, Schootman M, Jeffe DB. Influence of neighborhood-level factors on social support in early-stage breast cancer patients and controls. *Soc Science Medicine* 2016; 156: 55-63. PMID: PMC4837028.
179. Porter NR, Eberth JM, Samson ME, Garcia-Dominic O, Lengerich EJ, Schootman M. Associations of being up-to-date on colorectal cancer screening, 2012 BRFSS. *Prev Chron Dis* 2016; 13: E19. PMID: PMC4747441.
180. Lian M, Madden PA, Lynskey MT, Colditz GA, Lessov-Schlaggar CN, Schootman M, Heath AC. Geographic variation in maternal smoking during pregnancy in the Missouri Adolescent Female Twin Study (MOAFTS). *PLOS ONE* 2016; 11: e0153930.
181. Harris-Hayes, M, Czuppon S, Van Dillen LR, Steger-May K, Sahrman S, Schootman M, Salsich G, Clohis y, JC, Mueller MJ. Movement pattern training may improve function in people with prearthritic hip disorders: A feasibility randomized clinic trial. *J Ortho & Sports Phys Therapy* 2016; 46: 452-461. PMID: PMC4889512
182. Martin DN, Lam TK, Brignole K, Ashing KT, Blot WJ, Burhansstipanov L, Chen JT, Dignan MB, Gomes SL, Martinez ME, Matthews AK, Palmer JR, Perez-Stable EJ, Schootman M, Vilchis H, Vu A, Srinivasan S. Recommendations for cancer epidemiologic research in understudied populations and implications for future needs. *Cancer Epidemiol Biom Prev* 2016; 25: 573-580. PMID: PMC4874661

183. Boutwell B, Nelson EJ, Emo B, Vaughn M, Schootman M, Rosenfeld R, Lewis R. The intersection of aggregate-level lead exposure and crime. *Env Research* 2016; 148: 79-85.
184. Schootman M, Nelson EJ, Werner K, Shacham E, Elliott M, Ratnapradipa K, Lian M, McVay A. Emerging technologies to measure neighborhood conditions in public health: Implications for interventions and next steps. *Int J Health Geographics* 2016; 1: 1-9.
185. Osazuwa-Peters N, Boakye EA, Loux T, Varvares MA, Schootman M. Insufficient evidence to support or refute the association between head and neck cancer and marijuana use. *J Evidence-Based Dental Practice* 2016; 16: 127-129.
186. Schootman M, Chien L, Yun S, Pruitt S. Explaining large mortality differences between adjacent counties. *BMC Public Health* 2016; 16: 681.
187. Schootman M, Hendren S, Ratnapradipa K, Stringer L, Davidson NO. Adoption of robotic technology for treating colorectal cancer. *Dis Colon Rectum* 2016; 59: 1011-1016.
188. Baker E, Barnidge E, Schootman M, Sawicki M, Motton-Kreshaw F. Adaptation of the DASH diet to a rural African American community setting. *Am J Prev Med* 2016; 51: 967-974.
189. Lin H, Liu T, Fang F, Xiao J, Zeng W, Li X, Guo L, Schootman M, Stamatakis KA, Qian Z, Ma W. Mortality benefits of vigorous air quality improvement interventions during the periods of APEC Blue and Parade Blue in Beijing, China. *Env Pollution* 2017; 220: 222-227.
190. Schootman M, Hendren S, Loux T, Ratnapradipa K, Eberth JM, Davidson NO. Differences in effectiveness and use of robotic surgery in patients undergoing minimally invasive colectomy. *J Gastrointest Surg* 2017; 21: 1296-1303.
191. Tabet M, Nelson E, Schootman M, Chien LC, Chang JJ. Geographic variability in gestational weight gain: A Multilevel population-based study. *Ann Epidemiol* 2017; 27: 421-428.
192. Tabet M, Sanders E, Schootman M, Chang JJ, Wolinsky F, Malmstrom T, Miller D. Neighborhood conditions and psychosocial outcomes among middle-aged African Americans: A cross-sectional study. *J Prim Care and Community Health* 8, 63-70, 2017.
193. Boakye EA, Tobo BB, Osazuwa-Peters N, Mohammed KA, Geneus C, Schootman M. A comparison of parental and provider reported HPV vaccination of adolescents. *Am J Prev Med* 52, 742-752, 2017.
194. Massa ST, Osazuwa-Peters N, Christopher, KM, Arnold L, Schootman M, Walker RJ, Varvares MA. Competing causes of death in the head and neck cancer population. *Oral Oncology* 65, 8-15, 2017.
195. Ratnapradipa KL, Lian M, Jeffe DB, Davidson NO, Eberth JM, Pruitt SL, Schootman M. Patient, hospital, and geographic variability in laparoscopic surgery use among SEER-Medicare colon cancer patients. *Dis Colon Rectum* 60, 905-913, 2017.
196. Shacham E, Nelson EJ, Hoft DF, Schootman M, Garza A. Potential high risk areas for Zika virus transmission in the United States. *Am J Public Health* 107, 724-731, 2017.
197. Osazuwa-Peters N, Adjei Boakye E, Mohammed KA, Tobo BB, Geneus C, Schootman M. Not just a woman's business! Understanding disparities in men's knowledge of HPV, the HPV vaccine, and HPV-associated cancers. *Prev Med* 99, 299-304, 2017.

198. Lin H, Guo Y, Kowal P, Airhihenbuwa CO, Di Q, Zheng Y, Zhao X, Vaughn MG, Howard S, Schootman M, Salinas-Rodriguez A, Yawson AE, Arokiasamy P, Manrique-Espinoza BS, Biritwum RB, Rule SP, Minicuci N, Naidoo N, Chatterji S, Qian ZM, Ma W, Wu F. Exposure to ambient PM2.5, tobacco smoking, and their interactive effects on depression in six low- and middle-income countries. *Br J Psychiatry* 211, 157-162, 2017.
199. Pérez M, Schootman M, Hall L, Jeffe DB. Accelerated partial breast irradiation is associated with less severe radiation therapy-related side effects over time compared with whole breast radiation therapy in early-stage breast cancer patients. *Breast Cancer Res Treat* 162, 329-342, 2017.
200. Boutwell BB, Nelson EJ, Qian Z, Vaughn MG, Wright JP, Beaver KM, Barnes JC, Petkovsek M, Lewis R, Schootman M, Rosenfeld R. Aggregate-level lead exposure, gun violence, homicide, and rape. *PLoS ONE* 12, e0187953, 2017.
201. Lewis MA, Sharabash N, Miao Z, Lyons LN, Piccirillo J, Kallogjeri D, Schootman M, Mutch M, Yan Y, Levin MS, Castells A, Cuatrecasas M, Mills JC, Wang Z, Rubin DC. Increased IFRD1 expression in human colon cancers predicts reduced patientsurvival. *Dig Dis Sci* 62, 3460-3467, 2017.
202. Harris-Hayes M, Steger-May K, Van Dillen LR, Schootman M, Salsich GB, Czuppon S, Clohisy JC, Commean PK, Hillen TJ, Sahrman SA, Mueller MJ. Reduced hip adduction is associated with improved function after movement pattern training in people with chronic hip joint pain. *J Orthopaedic Sports Physical Therapy* 48, 316-324, 2018.
203. Eberth JM, Josey MJ, Mobley LR, Davidson NO, Jeffe DB, Odahowski C, Probst JC, Schootman M. Who performs colonoscopy? Workforce trends over space and time. *J Rural Health* 34, 138-147, 2018.
204. Vouri SM, Schootman M, Strobe SA, Birge SJ, Olsen MA. Differential prescribing of antimuscarinic agents in older adults with cognitive impairment. *Drugs & Aging* 35, 321-331, 2018.
205. Jupka K, Kapp JM, Young A, Riley M, Kemner A, Schootman M. Operationalizing population health management in practice. *MO Medicine* 115, 533-536, 2018.
206. Osazuwa-Peters N, Arnold L, Loux TM, Varvares MA, Schootman M. Factors associated with increased risk of suicide among survivors of head and neck cancer: a population-based analysis. *Oral Oncology* 81, 29-34, 2018.
207. Boakye EA, Buchanan P, Hinyard L, Osazuwa-Peters N, Schootman M, Piccirillo JF. Incidence and risk of second primary malignancy after a first head and neck squamous cell carcinoma: a population based study. *JAMA Otolaryngology* 144, 727-737, 2018.
208. McElfish PA, Long CR, Kaholokula JK, Aitaoto N, Bursac Z, Capelle L, Laelan M, Bing WI, Riklon S, Rowland B, Ayers BL, Wilmoth RO, Langston KN, Schootman M, Selig JP, Yearly KHK. Design of a comparative effectiveness randomized controlled trial testing a faith-based Diabetes Prevention Program (WORD DPP) vs. a Pacific culturally-adapted Diabetes Prevention Program (PILI DPP) for Marshallese in the United States. *Medicine* 97, e0677, 2018.
209. Wang X, Qian Z, Wang X, Hong H, Yang Y, Xu Y, Xu X, Yao Z, Zhang L, Rolling CA, Schootman M, Liu T, Xiao J, Li X, Zeng W, Ma W, Lin H. Estimating the acute effects of fine and coarse particle pollution on stroke mortality of in six Chinese subtropical cities. *Environmental Pollution* 239, 812-817, 2018.

210. Vouri SM, Van Tuyl JS, Olsen MA, Xian H, Schootman M. Prevalence and factors associated with a potential Calcium Channel Blocker – Lower Extremity Edema – Loop Diuretic Prescribing Cascade. *J Am Pharmacists Assoc* 58, 534-539, 2018.
211. Ratnapradipa K, Wang J, Berg-Weger M, Schootman M. Coming out of retirement - predictors of driving resumption among older drivers. *Innovation in Aging* 2,(3),2018.
212. Osazuwa-Peters N, Simpson MC, Zhao L, Boakye EA, Olomukoro SI, Loux TM, Varvares MA, Schootman M. Suicide risk among cancer survivors: head and neck versus other cancers. *Cancer* 124, 4072-4079, 2018.
213. Vouri SM, Strobe SA, Olsen MA, Xian H, Schootman M. Antimuscarinic use in men treated with bladder outlet obstruction medication therapy. *Urology* 122, 76-82,2018.
214. Luhmann SJ, Smith JC, Schootman M, Prasad N. Recurrent patellar instability: implications of preoperative patellar crepitation on the status of the patellofemoral articular cartilage. *J Pediatr Orthop* 39, 33-37, 2019.
215. Wheeler DC, Jones RM, Schootman M, Nelson EJ. Explaining variation in elevated blood lead levels among children in Minnesota using area-level socioeconomic variables. *Science Total Env* 650, 970-977, 2019.
216. Vouri SM, Olsen M, Schootman M, Xian H, Strobe SA. Antimuscarinic use and discontinuation in an older adult population. *Arch Gerontol Geriatrics* 80, 1-11,2019.
217. Nelson E, Loux T, Siddiqui S, Arnold LD, Schootman M. Obtaining contextually relevant geographic data using Facebook recruitment in public health studies. *Health & Place* 55, 37-42, 2019.
218. Vouri SM, van Tuyl JS, Olsen MA, Xian H, Schootman M. An evaluation of a potential calcium channel blocker-lower-extremity edema-loop diuretic prescribing cascade. *J Am Pharm Assoc* 58, 534-539, 2018.
219. Wheeler DC, Raman S, Jones RM, Schootman M, Nelson EJ. Bayesian deprivation index models for explaining variation in elevated blood lead levels among children in Maryland. *Spat Spatiotemporal Epidemiol.* 30, 100286, 2019.
220. Ekenga CC, Wang X, Perez M, Schootman M, Jeffe DB. A prospective study of weight gain in women diagnosed with early-stage invasive breast cancer, Ductal Carcinoma In Situ, and women without breast cancer. *J Womens Health* 29,524-533, 2020.
221. Josey MJ, Odahowski CL, Zahnd WE, Schootman M, Eberth JM. Disparities in utilization of medical specialists for colonoscopy. *Health Equity* 3, 464-471,2019.
222. Loux T, Nelson EJ, Arnold LD, Shacham E, Schootman M. Using multilevel regression with poststratification to obtain regional health estimates from a Facebook-recruited sample. *Ann Epidemiol.* 39, 15-20, 2019.
223. Adjei Boakye E, Buchanan P, Hinyard L; Osazuwa-Peters N, Simpson M, Schootman M, Piccirillo JF. Trends in the risk and burden of second primary malignancy among survivors of smoking-related cancers in the United States. *Int J Cancer* 145, 143-153, 2019.
224. Adjei Boakye E, Osazuma-Peters N, Hinyard L, Buchanan P, Schootman M, Piccirillo J, Stamatakis K, Simpson M. Risk and outcomes for second primary HPV-related and unrelated head and neck malignancy. *Laryngoscope* 129, 1828-1835, 2019.
225. Josey M, Schootman M, Mobley L, Probst J, Strayer S, Sercy E, Eberth J. Should measures of health care availability be based on the providers or the procedures? A

- case study with implications for rural colorectal cancer disparities. *J Rural Health* 35, 236-243, 2019.
226. Shacham E, Lew D, Xiao T, López J, Trull T, Schootman M, Presti R. Testing the feasibility of using ecological momentary assessment to collect real-time behavior and mood to predict technology-measured HIV medication adherence. *AIDS and Behavior* 23, 2176-2184, 2019.
 227. Johnston KJ, Wen H, Schootman M, Joynt Maddox KE. Association of Patient Social, Cognitive, and Functional Risk Factors with Preventable Hospitalizations: Implications for Physician Value-Based Payment. *J Gen Int Med* 34, 1645-1652, 2019.
 228. Ebert JM, Crouch E, Josey M, Zahnd W, Adams S, Stiles B, Schootman M. Rural-urban differences in access to thoracic surgery in the United States, 2010-2014. *Ann Thoracic Surg* 108, 1087-1093, 2019.
 229. Schootman M, Ratnapradipa K, Loux T, McVay A, Su J, Nelson E, Kadlubar S. Individual- and county-level determinants of high breast cancer incidence rates. *Translation Cancer Res* 8, supplement 4, 2019.
 230. Harris-Hayes M, Schootman M, Schootman JC, Hastings M. The role of physical therapists in fighting the diabetic epidemic. *J Orthop Sports Phys Therapy*, 50, 5-16, 2020.
 231. Liao J, Yang S, Xia W, Peng A, Zhao J, Li Y, Zhang Y, Qian Z, Vaughn MG, Schootman M, Zhang B, Xu S. Associations of exposure to green space with problem behaviors in preschool-aged children. *Int J Epidemiol* 49, 944-953, 2020.
 232. Wang M, Sharma Am Osazuwa-Peters N, Simpson MC, Schootman M, Piccirillo JF, Huh WK, Adjei Boakye E. Risk of subsequent malignant neoplasms after an index potentially-human papillomavirus (HPV)-associated cancers. *Cancer Epidemiol* 64, 101649, 2020.
 233. Gebauer S, Schootman M, Xian H, Xaverius P. Neighborhood built and social environment and meeting physical activity recommendations among older adults with joint pain. *Prev Med* 18, 101063, 2020.
 234. Hsu PC, Kadlubar S, Su LJ, Acheampong D, Rogers LJ, Runnells G, McElfish PA, Schootman M. County poverty levels influence genome-wide DNA methylation profiles in African American and European American women. *Translational Cancer Research* 8, 683-692, 2019.
 235. Schootman M, Jeffe DB, Ratnapradipa KL, Eberth JM, Davidson NO. Increased 30-day mortality risk in patients with Diabetes Mellitus after colon cancer surgery: A mediation analysis. *Dis Colon Rectum* 63, 290-299, 2020.
 236. Schootman M, Perez M, Schootman JC, Fu Q, McVay A, Margenthaler J, Colditz GA, Kreuter MW, Jeffe DB. Influence of built environment on quality of life changes in African-American patients with early-stage breast cancer. *Health and Place* 63, 102333, 2020.
 237. Adjei Boakye E, Wang M, Sharma A, Jenkins WD, Osazuwa-Peters, Chen B, Lee M, Schootman M. Risk of second primary cancers in individuals diagnosed with an index smoking- and non-smoking- related cancers. *J Cancer Research Clinical Oncology* 146, 1765-1779, 2020.

238. Plascak JJ, Schootman M, Rundle AG, Xing CY, Llanos AAM, Stroup AM, Mooney SJ. Spatial predictive properties of built environment characteristics assessed by drop-and-spin virtual neighborhood auditing. *Int J Health Geogr* 19, 21, 2020.
239. Adjei Boakye E, Osazuwa-Peters N, López J, Pham V, Tobo BB, Wan L, Schootman M, McElroy JA. Disparities in human papillomavirus (HPV) vaccine initiation and completion based on sexual orientation among women in the United States. *Human Vaccines and Immunotherapeutics* 17, 428-433, 2021.
240. Zahnd WE, Josey MJ, Schootman M, Eberth JM. Spatial accessibility to colonoscopy and its role in predicting late-stage colorectal cancer. *Health Services Research* 56, 73-83, 2021.
241. Yu H, Zhou Y, Wang R, Qian Z, Knibbs LD, Jalaludin B, Schootman M, McMillin SE, Howard SW, Lin LZ, Zhou P, Hu LW, Liu RQ, Yang BY, Chen G, Zeng XW, Feng W, Xiang M, Dong GH. Associations between trees and grass presence with childhood asthma prevalence using deep learning image segmentation and a novel green view index. *Environmental Pollution*, Volume 286, 117582, 2021.
242. Yu H, Hu LW, Zhou Y, Qian Z, Schootman M, LeBaige MH, Zhou Y, Xiong S, Shen X, Lin LZ, Zhou P, Liu RQ, Yang BY, Chen G, Zeng XW, Yu Y, Dong GH. Association between eye-level greenness and lung function in urban Chinese children. *Env. Research* 202, 111641, 2021.
243. Mody A, Pfeifauf K, Bradley C, Fox B, Hlatshwayo MG, Ross W, Sanders-Thompson V, Maddox KY, Reidhead M, Schootman M, Powderly WG, Geng EH. Understanding drivers of COVID-19 racial disparities: A population-level analysis of COVID-19 testing among Black and White Populations. *Clin Inf Disease*, in press.
244. Schootman M, Mutch M, Loux T, Eberth JM, Davidson NO. Differences in effectiveness and use of laparoscopic surgery in locally advanced coloncancer patients. *Scientific Reports* 11, 10022, 2021.
245. Trevathan E, Abdullahi A, Aliyu M, Iliyasu Z, Salihu A, Adamu H, Sabo U, Prieto Garcia J, Abdullahi S, Mande A, Xian H, Yakasai H, Schootman M, Ingles D, Patel A, Yakasai A, DeBaun M, Wudil U, Curry-Johnson S. Bridging the Childhood Epilepsy Treatment Gap in Northern Nigeria (BRIDGE): Rationale and Design of Pre-Clinical Trial Studies. *Contemporary Clinical Trials*, in press.
246. Ratnapradipa, K, Wang J, Berg-Weger M, Schootman M. Effects of older adult driving resumption on all-cause mortality. *Journal of Gerontology: Social Sciences*, in press.
247. Plascak JJ, Rundle AG, Xu X, Mooney SJ, Schootman M, Lu B, Stroup AM, Llanos AAM. Associations between neighborhood disinvestment and breast cancer outcomes within a populous state registry. *Cancer*, in press.
248. Boakye EA, Stierwalt T, Grundy S, Osazuwa-Peters N, Lee M, Elgee M, Schootman M. Human papillomavirus vaccination uptake among Native Hawaiian and Pacific Islander adults in the United States. *Ann Epidemiol*, in press.
249. Geng EH, Schwab J, Foraker R, Fox B, Hoehner CM, Schootman M, Mody A, Powderly W, Yount B, Woeltje K, Petersen M. Outcomes associated with social distancing policies in St Louis, Missouri, during the early phase of the COVID-19 pandemic. *JAMA Network Open* 4(9): e2123374, 2021.

b. Invited publications:

1. Schootman M, Powell JW, Albright JP. Statistics in sports injury research. In: Orthopaedic Sports Medicine. Delee JC, Drez D (Eds), 160-183, 1993.
2. Torner J, Schootman M. Epidemiology of closed head injury. In: Rizzo M, Tranel D (Eds). Head injury and postconcussive syndrome. Churchill Livingstone, New York, 1996.
3. Schootman M, Torner JC. Epidemiology of rural traumatic brain injuries. In: Yoganandan N (Ed.): Frontiers in head and neck trauma. Clinical and biomechanical. IOS Press, Harvard, MA, 1998.
4. Fisher EB, Brownson R, Haire-Joshu DL, Eyler EA, Schootman M. Interventions to promote key behaviors in cancer prevention and early detection. Prepared for: Curry SJ, Yers T, Hewitt M (Eds). Fulfilling the potential of cancer prevention and early detection. Institute of Medicine, National Cancer Policy Board, National Academies Press, Washington DC, 2003.
5. Schootman M, Andresen EM, Wolinsky FD, Malmstrom TK, Miller JP, Yan Y, Miller DK. Schootman et al. Response to "Untangling the Web of Diabetes Causality in African Americans" Am J Epidemiol 2007; 166: 391-392
6. Schootman M. Geographical and spatial analysis. In: Encyclopedia of Epidemiology. Sarah Boslaugh (Ed.). Thousand Oaks, CA: SAGE Publications, 2008. vol. I, pp 433-435.
7. Deshpande A, Harris-Hayes M, Schootman M. The epidemiology of diabetes and diabetes-related complications. Physical Therapy 2008; 88: 1254-1264.
8. Collins KK, Liu Y, Schootman M, Aft R, Yan Y, Dean G, Eilers M, Jeffe DB. Effects of breast cancer surgery and surgical side effects on body image over time. Breast Cancer Res Treat 2011; 126: 263-264. Response to Munhoz AM, Gemperli R, Filassi JR. Effects of breast cancer surgery and surgical side effects on body image over time. Breast Cancer Res Treat 2011; 126: 261-262
9. Schootman M, Gomez SL, Henry K, Paskett E, Ellison GL, Oh A, Taplin SH, Tatalovich Z, Berrigan D. Geospatial approaches to cancer control and population sciences. Cancer Epi Biomarkers Prev 2017; 26: 472-475.

c. Movies, videotapes, etc:

None

d. Abstracts, conference presentations:

1. Torner JC, Zwerling C, Miller EF, Fischer A, Schootman M. Injury surveillance in rural emergency departments. (Abstract) Am J Epidemiol 1995; 141: 56
2. Luhmann SJ, Bassett GS, Gordon JE, Schootman M, Schoenecker PL. Reduction of a dislocated hip due to DDH: Does a delay increase the need for future surgery? American Academy of Orthopaedic Surgeons. February 1999. Anaheim, CA.

3. Luhman JD, Schootman M, Kennedy RM. Making IVs ouchless: Buffered lidocaine versus benzyl alcohol. Presented at: Pediatric Academic Societies and the American Academy of Pediatrics, Boston, MA, May, 2000.
4. Griffith KM, Quayle KS, Schootman M, Struthers JW, Jaffe DM. Burns in St. Louis Children. An ecological analysis. Presented at: Pediatric Academic Societies & American Academy of Pediatrics Joint Meeting, Boston, MA, May 2000.
5. Schootman M, Aft R. Rural-urban differences in radiation therapy for ductal carcinoma in situ (DCIS) of the breast. Presented at: 23rd San Antonio Breast Cancer Symposium, San Antonio, TX, December 6-9, 2000. *Breast Cancer Res Treat* 2000: 74: 92
6. Jeffe DB, Schootman M, Jahnige MK, Aft R. African American users of postmenopausal hormone replacement therapy present with larger breast cancers. Presented at: 22nd Annual Scientific Session of the Society for Behavioral Medicine, Seattle, WA, March 21-24, 2001.
7. De La Morena M, Sweet S, White F, Mendeloff E, McBride G, Huddelston C, Shapiro S, Schootman M. Pediatric lung transplantation and CMV pneumonitis: A ten year experience. Presented at: 21st Annual Meeting and Scientific Sessions of the International Society for Health and Lung Transplantation, Vancouver, Canada, April 25-28, 2001. *J Heart Lung Transplant* 2001: 20: 221
8. Aft R, Schootman M, Jeffe D, Reschke A. Characteristics of women presenting with locally advanced breast cancer: National and local analysis. 3rd Annual Lynn Sage Breast Cancer Symposium, Chicago, IL, October 19-21, 2001.
9. Jeffe DB, Schootman M, Reschke A, Aft R. Factors associated with presentation of breast cancer symptoms. Presented at: 23rd Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, D.C., April 3-6, 2002. *Ann Behav Med* 2002: 24(suppl): S180
10. Jackson-Thompson J, King MJ, Schootman M, Deshpande A. Screening practices and stage at diagnosis: Factors contributing to cervical cancer mortality. North American Association of Central Cancer Registries Annual Meeting and workshops. Toronto, Canada, June 11-13, 2002.
11. Schootman M. The state of colorectal cancer in the region. Colorectal cancer. Continuing Medical Education Symposium. Washington University, St. Louis, September 27, 2002.
12. Schootman M. The local geography of cancer. What is a city? 8th Annual Conference. Sustainable environments and healthy living. University of Missouri-St. Louis, St. Louis, October 18, 2002.
13. Everard K, Jeffe DB, Schootman M, Reschke A, Aft R. Age differences in quality of life among women with and without in situ or stage I breast cancer. Presented at: 55th Annual Scientific Meeting of the Gerontological Society of America, Boston, November 22-26, 2002. *Gerontologist* 2002: 42(1): 269
14. Schootman M, Jeffe D, Reschke A, Aft R. The full potential of breast cancer screening has not yet been realized. Presented at: 24th San Antonio Breast Cancer Symposium, San Antonio, TX, December 11-14, 2002. *Breast Cancer Res Treat* 2002: 76(supplement 1): S151

15. Luhmann JD, Hurt S, Schootman M, Kennedy RM: A Comparison of buffered Lidocaine versus Ela-maxTM before peripheral intravenous catheter insertion in children. *Pediatr Res* 2003; 53: 115A
16. Luhmann SJ, Gordon JE, Schootman M, Schoenecker PL. Open pediatric forearm fractures: Complications and outcomes. *American Academy of Orthopaedic Surgeons*. February, 2003. New Orleans, LA.
17. Luhmann SJ, Schootman M, Schoenecker PL, Gordon JE. The use of femoral nerve blocks in adolescents undergoing patellar realignment surgery. *American Academy of Orthopaedic Surgeons*. February, 2003. New Orleans, LA.
18. Luhmann SJ, Schootman M, Schoenecker PL, Dobbs MB, Gordon JE. Complications of titanium elastic nails for pediatric femur fractures. *American Academy of Orthopaedic Surgeons*. February 2003. New Orleans, LA.
19. Jeffe DB, Smith M, Everard KM, Schootman M, Reschke A, Aft R. Body image is associated with quality of life in ductal carcinoma in situ and stage I breast cancer patients and in healthy women. Presented at: 24th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Salt Lake City, UT, March 19-22, 2003. *Ann Behav Med* 2003; 25(suppl): S60
20. Luhmann JD, Jones A, Schootman M, Luhmann SJ: Evaluation of a clinical algorithm to differentiate septic arthritis and transient synovitis in children with an irritable hip. *Pediatr Res* 53:215A, 2003. Poster presentation at: Pediatric Academic Societies' Annual Meeting, Seattle, WA, April 2003.
21. Luhmann JD, Jones A, Schootman M, Gordon JE, Schoenecker PL, Luhmann SJ. Differentiation of septic arthritis and transient synovitis of the hip in children using clinical prediction algorithms. *Society for Pediatric Research*. May, 2003. Seattle, WA.
22. Luhmann SJ, Jones A, Schootman M, Gordon JE, Schoenecker PL, Luhmann JD. Differentiation of septic arthritis and transient synovitis of the hip in children using clinical prediction algorithms. *Pediatric Orthopaedic Society of North America*. May, 2003. Amelia Island, FL.
23. Jones A, Luhmann SJ, Gordon JE, Schootman M, Luhmann J. Septic arthritis of the hip: Testing the Boston Children's clinical predictor algorithm and novel analysis. *Pediatric Orthopedic Society of North America Annual Meeting*, Orlando, FL, May, 2003.
24. Baker EA, Williams D, Kelly C, Nanney S, Vo H, Barnidge E, Schootman M, Struthers J. Access, income and racial composition: Dietary patterns aren't just a personal choice. 131st Annual Meeting of the American Public Health Association, San Francisco, November 15-19, 2003.
25. Schootman M, Baker EA. Are women from states with higher income inequality less likely to be screened for breast cancer? A multilevel study. 131st Annual Meeting of the American Public Health Association, San Francisco, November 15-19, 2003.
26. Aft R, Schootman M, Jeffe D. Adjuvant chemotherapy is not delayed by immediate reconstruction. Presented at: 26th Annual San Antonio Breast Cancer Symposium, San Antonio, TX, December 3-6, 2003.
27. Schootman M, Jeffe D, Reschke A, Aft R. The full potential of breast cancer screening has not yet been realized. Presented at: 7th International Symposium

- on Predictive Oncology & Intervention Strategies, Nice, France, February 7-10, 2004. Cancer Detection and Prevention 2004 Symposium Volume, S31, 2004.
28. Luhmann SJ, Schootman M, Gordon JE. Anterior knee pain in adolescents: implicating the medial patellofemoral ligament. Pediatric Orthopaedic Society of North America. April 2004. St. Louis, MO.
 29. Luhmann JD, Schootman M, Voytas L, Luhmann SJ, Kennedy RM. A comparison of Ketamine/Midazolam and Nitrous Oxide/Hematoma Block for forearm fracture reduction in children. Society for Academic Emergency Medicine. May, 2004. Orlando, FL. Academic Emergency Medicine 2004: 11: 488-489
 30. Luhmann SJ, Schootman M, Gordon JE, Wright RW. Magnetic Resonance Imaging of the knee in children and adolescents: A comparison between formal radiologic and orthopaedic surgeon interpretations. American Orthopaedic Association. June, 2004. Boston, Massachusetts.
 31. Schootman M, He C, Early D, Sun D. Trends in small-area colorectal cancer incidence by age, sex, and anatomic subsite. Presented at: 37th Annual Society for Epidemiologic Research Meeting, Salt Lake City, Utah, June 16-19, 2004. Am J Epidemiol 2004: 159: S94
 32. Luhmann SJ, Lenke LG, Kim YJ, Bridwell KH, Schootman M. Thoracic adolescent idiopathic scoliosis curves between 70 and 100 degrees: Is anterior release necessary? Scoliosis Research Society. September, 2004. Buenos Aires, Argentina.
 33. Aft, RA, YlaganY, Watson M, Schootman M, Weilbaeher K, Naughton M. Discordance in the detection of occult breast cancer cells in bone marrow aspirates from right and left iliac crests in women with locally advanced breast cancer. 27th Annual San Antonio Breast Cancer Symposium, December 8-11, 2004.
 34. Steurer L, Schootman M, Luhmann JD. Evaluation of adverse effects after emergency department sedation. Ped Res 55: 118A-118A 663 Part 2 Suppl, 2004.
 35. Hoffman A, Jeffe D, Schootman M, Dietz J, Aft R. Accuracy of ultrasonography and mammography compared with pathologic residual breast tumor size after neoadjuvant chemotherapy. 6th annual meeting of the American Society of Breast Surgeons. Los Angeles, CA, March 16-20, 2005.
 36. Jeffe, DB, Pérez, M, Everard, KM, Schootman, M, Aft, R. Sexual functioning in women with and without breast cancer. Society of Behavioral Medicine's 26th Annual Meeting and Scientific Sessions, Boston, MA, April 13-16, 2005.
 37. Walker MS, Schootman M, Fisher EB. Who tried to quit smoking? Multilevel analysis of individual and community influences. Society of Behavioral Medicine's 26th Annual Meeting and Scientific Sessions, Boston, MA, April 13-16, 2005.
 38. Schootman M, Andresen EM, Miller DK. Neighborhood conditions and risk of incident lower body functional limitations among middle-aged African Americans. A Joint Meeting of the Society for Epidemiologic Research and Canadian Society for Epidemiology and Biostatistics. Toronto, Canada, June 27-30, 2005. Am J Epidemiol 2005: 161: S29

39. Luhmann SJ, Bridwell KH, Cheng I, Imamuram T, Lenke LG, Schootman M. Use of bone morphogenetic protein-2 for adult spinal deformity. International Meeting of Advanced Spinal Techniques. Banff, Canada. July 7-9, 2005.
40. Luhmann SJ, Lenke LG, Kim YJ, Bridwell KH, Schootman M. Cost analysis of circumferential fusion vs. posterior-only with thoracic pedicle screw constructs of 70-100 degree idiopathic curves. International Meeting of Advanced Spinal Techniques. Banff, Canada. July 7-9, 2005.
41. Everard K, Aft R, Schootman M, Dietz J, Herrmann V, Hsueh E, Jeffe, DB. Associations among age, type of surgery, and psychological outcomes in women with in situ and early-stage breast cancer. 58th Annual Scientific Meeting of the Gerontological Society of America. Orlando, FL, November 18-22, 2005. Gerontologist 2005: 45: 11 (special issue II)
42. Miller D, Diez-Roux A, Wolinsky F, Miller J, Andresen E, Malmstrom T, Schootman M, Cagney K, Mendes de Leon C, Glass T, Everson-Rose S, Bienias J, Beck T, Evans D. Observed and self-reported neighborhood scales: Improved measurement and associations with health status in 3 studies. 58th Annual Scientific Meeting of the Gerontological Society of America. Orlando, FL, November 18-22, 2005. Gerontologist 2005: 45: 645-646 (special issue II)
43. Everard KM, Pérez M, Aft RL, Schootman M, Gillanders W, Jeffe DB. Extent of surgery and sexual attractiveness among women with early-stage breast cancer. Presented at: 27th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, San Francisco, March 22-25, 2006. Ann Behav Med 2006: 31(suppl): S135
44. Jeffe DB, Massman BA, Everard KM, Schootman M, Gillanders W, Aft RL. Breast cancer patients' perceived risk of recurrence versus calculated risk of recurrence. 27th Annual Scientific Sessions of the Society of Behavioral Medicine, San Francisco, March 22-25, 2006.
45. Turabelidze G, Schootman M, Zhu BP, Malone J, Horowitz S, Weidinger J, Williamson D, Simoes E. Multiple Sclerosis in Jefferson County, Missouri - An epidemiologic investigation. 58th Annual Meeting of the American Academy of Neurology. San Diego, California, April 1-8, 2006.
46. Kelly C, Barnidge E, Schootman M, Baker EA. Are all sidewalks equal? The association of area-level race and income and sidewalk conditions. International Congress on Physical Activity and Public Health. Atlanta, GA, April 17-20, 2006.
47. Luhmann JD, Miller S, Schootman M. A comparison of emergency health care workers' perception of procedural pain in pre-verbal children. 2006 Pediatric Academic Societies' Meeting. San Francisco, CA. April 29-May 2, 2006.
48. Schootman, M, Sterling D, Struthers J, Yan Y, Laboube T, Emo B, Higgs G. Positional accuracy and geographic bias of 3 methods of geocoding in epidemiologic research. A Joint Meeting of the American College of Epidemiology, American Public Health Association (Epidemiology Section), and Society for Epidemiologic Research. Seattle, WA, June 21-24, 2006. Am J Epidemiol 2006: 163: S26
49. Turabelidze G, Zhe B-P, Schootman M, Malone JL, Horowitz J, Weidinger J, Williamson D, Simoes E. Prevalence and spatial clustering of amyotrophic

- lateral sclerosis in Jefferson County, Missouri, 1998-2002. A Joint Meeting of the American College of Epidemiology, American Public Health Association (Epidemiology Section), and Society for Epidemiologic Research. Seattle Washington, June 21-24, 2006. *Am J Epidemiol* 2006; 163: S123
50. Kapp J, Schootman M, Yun S: Women 65 and older who report never having a mammogram. 16th Annual Caring for the Frail Elderly Conference. Columbia, Missouri, August 18-19, 2006.
 51. Scott J. Luhmann, Yongjung J. Kim, Lawrence G. Lenke, Keith H. Bridwell, Schootman M. The impact of curve characteristics and spine fusion on pulmonary function in adolescent idiopathic scoliosis. Scoliosis Research Society. September, 2006. Monterey, CA.
 52. Lemes AM, Baker EA, Schootman M, Kelly C, Harrold K. A walk in the park: Not necessarily a healthy, serene experience. 134th Annual Meeting & Exposition of the American Public Health Association. November 4-8, 2006, Boston, MA.
 53. Smith CE, Baker EA, Kelly C, Strayhorn J, Schootman M: Evaluating the effectiveness of communication and outreach strategies for a community based approach to addressing disparities in access to fruits and vegetables. 134th Annual Meeting & Exposition of the American Public Health Association. November 4-8, 2006, Boston, MA.
 54. Wolinsky FD, Miller TR, Malmstrom TK, Miller JP, Schootman M, Andresen EM, Miller DK. Four-year lower extremity disability trajectories among African-American men and women. 59th Annual Scientific Meeting of the Gerontological Society of America. November 16-20, 2006, Dallas, TX. *Gerontologist* 2006; 46: 251
 55. Schootman M, Andresen E, Miller D. The interplay between neighborhood conditions and presence of diabetes on risk of incident lower-body functional limitations. 59th Annual Scientific Meeting of the Gerontological Society of America. November 16-20, 2006, Dallas, TX. *Gerontologist* 2006; 46: 551-552
 56. DeFranco EA, Muglia LJ, Schootman M. Regional poverty rate is a risk factor for preterm birth. 54th Annual Meeting of the Society for Gynecologic Investigation, Reno, NV, March 14-17, 2007.
 57. Jeffe DB, Myles S, Pérez M, Queen E, Massman KL, Schootman M, Gillanders W, Aft RL. Factors associated with early-stage breast cancer patients' concerns about risk of recurrence. 28th Annual Scientific Sessions of the Society of Behavioral Medicine, Washington, DC, March 21-24, 2007.
 58. Pérez M, Bailey E, Aft RL, Schootman M, Gillanders WE, Jeffe DB. Relationships among age, caregiving, social support, and depressed mood in women with and without early-stage breast cancer. 28th Annual Scientific Sessions of the Society of Behavioral Medicine, Washington, DC, March 21-24, 2007.
 59. Schootman M, Lian M, Jeffe DB. The role of poverty in explaining geographic variation in breast cancer survival among older women. 6th Annual International Conference on Urban Health. Baltimore, MD, October 31-November 2, 2007.

60. Lian M, Jeffe DB, Schootman M. Lower mammography use is associated with the geographic clustering of late-stage breast cancer in Saint Louis City. Paper presented at the 135th Annual Meeting & Exposition of the American Public Health Association, Washington, DC, November 3-7, 2007.
61. Lian M, Schootman M, Yun S. Geographic clustering and variation in five chronic diseases in Missouri. 25th Annual Behavioral Risk Factor Surveillance System Conference, Orlando, FL, March 15-19, 2008.
62. Lian M, Schootman M, Jeffe DB. Neighborhood socioeconomic status, regular religious activity and cigarette smoking among women aged 40 or older in St. Louis City. 32nd Annual Meeting of the American Society of Preventive Oncology (ASPO), Bethesda, MD, March 16-18, 2008.
63. Lian M, Schootman M, Jeffe DB. Spatial clustering and neighborhood socioeconomic effect on cigarette smoking among women aged 40+ in Saint Louis City. 32nd Annual American Society for Preventive Oncology, Bethesda, MD, March 16-18, 2008.
64. Pérez M, Liu Y, Schechtman K, Schootman M, Aft RL, Gillanders WE, Jeffe DB. Does sexual functioning change over time in women with and without early-stage breast cancer? 29th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, San Diego, CA, March 26-29, 2008.
65. Liu Y, Pérez M, Schootman M, Aft RL, Gillanders WE, Jeffe DB. Psychosocial factors associated with perceived risk of recurrence among early-stage breast cancer patients: A longitudinal study. 29th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, San Diego, CA, March 26-29, 2008.
66. Lian M, Schootman M, Yun S. Area socioeconomic status and disparity in colorectal cancer screening. 29th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, San Diego, CA, March 26-29, 2008.
67. Lian M, Struthers J, Schootman M. Neighborhood characteristics associated with advanced breast cancer incidence in Missouri. 2008 American College of Epidemiology, Tucson, AZ, September 14-16, 2008. *Ann Epidemiol* 2008; 18: 715-716
68. Lian M, Schootman M, Dixon KR, Warner RD, Alexander JL. Spatial pattern of West Nile neuroinvasive disease. 2008 American College of Epidemiology, Tucson, AZ, September 14-16, 2008. *Ann Epidemiol* 2008; 18: 729
69. Liu Y, Pérez M, Aft R, Schootman M, Gillanders W, Jeffe DB. Racial differences in accuracy of perceived risk of recurrence among patients with early-stage breast cancer. 33rd Annual Meeting of the American Society of Preventive Oncology, Tampa, FL, March 8-10, 2009.
70. Schootman M, McQueen A, Jeffe D. Mediators of the effect of area-level poverty on physical functioning among breast cancer survivors. 33rd Annual Meeting of the American Society of Preventive Oncology, Tampa, FL, March 8-10, 2009.
71. Lian M, Schootman M and Jeffe DB. Spatial accessibility to mammography facilities, area socioeconomic deprivation and breast cancer screening. 33rd Annual American Society of Preventive Oncology, Tampa, FL, March 8-10, 2009.

72. Schootman M, Aft R, Jeffe DB. Reasons for elevated prevalence of functional limitations among 12 types of long-term cancer survivors in the United States, 2005-2007. Society of Behavioral Medicine's 30th Annual Meeting and Scientific Sessions, Montreal, Canada, April 22 - 25, 2009.
73. Collins K, Schootman M, Yan Y, Perez M, Liu Y, Aft R, Jeffe, DB. Does diabetes affect clinically important changes in quality of life over and above the impact of breast cancer? Society of Behavioral Medicine's 30th Annual Meeting and Scientific Sessions, Montreal, Canada, April 22 - 25, 2009.
74. Perez M, Liu Y, Schootman M, Aft R, Gillanders W, Jeffe D. Racial differences in depressed mood in women with early-stage breast cancer. Society of Behavioral Medicine's 30th Annual Meeting and Scientific Sessions, Montreal, Canada, April 22 - 25, 2009.
75. Liu Y, Massman K, Queen E, Perez M Myles S, Aft R, Schootman M, Gillanders W, Jeffe D. Accuracy of perceived risk of recurrence in patients with early-stage breast cancer. Society of Behavioral Medicine's 30th Annual Meeting and Scientific Sessions, Montreal, Canada, April 22 - 25, 2009.
76. Schootman M, Morley JE, Miller. Is inflammation mediating the association between adverse housing/neighborhood conditions and disease and middle-aged African Americans? 42nd Annual meeting of the Society for Epidemiologic Research, Anaheim, CA, June 23-26, 2009. Am J Epidemiol 2009: 169(supplement): S72
77. Liu Y, Sun D, He Z, Schootman M. A CAR model on quality of life of breast cancer survivors with application of an ancillary sufficiency interweaving scheme. SAMSI, Computation, Visualization and Dimension Reduction. December 4, 2009.
78. Doubeni C, Laiyemo AO, Lian M, Park Y, Schootman M, Schatzkin A. The association of neighborhood socioeconomic context and mortality in a large national cohort in the United States: The NIH-AARP Diet and Health Study American Association for Cancer Research Frontiers in Cancer Prevention Research Meeting, Houston, TX, December 6-9, 2009.
79. Chyke DA, Laiyemo AO, Lian M, Park Y, Li W, Schootman M, Schatzkin A. Geographic and socioeconomic variations in colorectal cancer incidence in the prospective NIH-AARP Health and Diet study. American Association for Cancer Frontiers in Cancer Prevention Research Meeting, Houston, TX, December 6-9, 2009.
80. Lian MN, Schootman M, Doubeni C, Laiyemo AO, Park Y, Schatzkin A. Geographic variation and the role of small-area socioeconomic deprivation in colorectal cancer survival: A multilevel analysis of the NIH-AARP Diet and Health Study. American Association for Cancer Frontiers in Cancer Prevention Research Meeting, Houston, TX, December 6-9, 2009.
81. Pruitt SL, Schootman M. Geographic Disparity, Area-level Poverty and Human Papillomavirus Vaccination (HPV) among Girls in 6 U.S. States. American Association for Cancer Frontiers in Cancer Prevention Research Meeting, Houston, TX, December 6-9, 2009.
82. Wilson JS, Kelly CM, Miller DK, Schootman M, Baker EA, Banerjee A. Improving observational measurement of the built environment with

omnidirectional imagery. Robert Wood Johnson Foundation, Active Living Research Conference, San Diego, California, February 9, 2010.

83. Jeffe DB, Schootman M, Pérez M, Frisse A, Aft RL. Racial disparities in breast cancer patients' experience of depression before and after diagnosis. 31st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, Seattle, Washington, April 7-10, 2010. (citation award for excellence in research)
84. Liu Y, Perez M, Aft RL, Gillanders WE, Schootman M, Jeffe DB. Predictors of early-stage breast cancer survivors' concern about recurrence two years after definitive surgical treatment. 31st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA, April 7-10, 2010.
85. Pérez M, Liu Y, Schootman M, Aft RL, Jeffe DB. Quality of life changes over time in age-matched women with and without early-stage breast cancer. 31st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA, April 7-10, 2010.
86. Schootman M, Pruitt SL, Deshpande AD, Aft RL, Jeffe DB. Neighborhood foreclosures and health status. 31st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, Seattle, WA, April 7-10, 2010 (citation award for excellence in research).
87. Waters EA, Liu Y, Schootman M, Jeffe DB. Interrelationships among social support, worry, and health-related quality of life among early-stage breast cancer patients. 32nd Annual Meeting of the Society for Medical Decision Making Toronto, Canada, Oct 24-26, 2010.
88. Lian M, Foldes E, Pérez M, Deshpande AD, Schootman M, Jeffe DB. Geographic disparity in triple-negative breast cancer survival: A prospective multilevel study. American Society for Preventive Oncology 2011. 35th Annual Meeting. Las Vegas, NV, March 5-8, 2011.
89. Thompson T, Rodewald, T, Perez M, Schootman M, Jeffe DB. Social support change over time in early stage breast cancer patients and controls. Presented at: 33rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, New Orleans, LA, April 11-14, 2012.
90. Perez M, Schootman M, Jeffe DB. Radiotherapy type affects side effects and quality of life in early-stage breast cancer patients. Presented at: 33rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, New Orleans, LA, April 11-14, 2012.
91. Schootman M, Pruitt S, Jeffe DB. Alcohol outlet availability and excessive alcohol consumption in breast cancer survivors. Presented at: 33rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, New Orleans, LA, April 11-14, 2012.
92. Pruitt SL, Jeffe DB, Deshpande AD, Schootman M. Socioeconomic disparities in depressive symptoms among breast cancer survivors. 32nd Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, DC, April 27-30, 2011. Ann Behav Med 2011: 41(suppl 1): S87
93. Lian M, Foldes E, Pérez M, Deshpande AD, Schootman M, Jeffe DB. Geographic variation in triple-negative breast cancer diagnosis. 32nd Annual

Meeting & Scientific Sessions of the Society of Behavioral Medicine.
Washington DC, April, 27-30, 2011.

94. Pérez M, Collins KK, Schechtman KB, Schootman M, Jeffe DB. Ductal carcinoma in situ patients' depressed mood after surgical treatment is similar to that of women without breast cancer over time. Presented at: 32nd Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, DC, April 27-30, 2011. *Ann Behav Med* 2011; 41(suppl 1): S82
95. Pruitt SL, Davidson NO, Gupta S, Yan Y, Schootman M. Racial and socioeconomic disparities in emergency presentation of colorectal cancer. Poster to be presented at the Frontiers in Cancer Prevention meeting, American Association of Cancer Research. October 18, 2012. Anaheim, CA.
96. Pruitt SL, Davidson NO, Gupta S, Yan Y, Schootman M. Racial and socioeconomic disparities in emergency presentation of colorectal cancer. Poster to be presented at the Innovations in Cancer Prevention and Research Conference, Annual meeting of the Cancer Prevention and Research Institute of Texas. October 25, 2012. Austin, TX.
97. Jin L, Barnoya J, Hudmon K, Yun S, Schootman M. Geographic disparities in access to nonprescription nicotine replacement therapy in St. Louis pharmacies. 140th APHA Annual Meeting. San Francisco, CA, October 27-31, 2012.
98. Harris-Hayes M, Czuppon S, Van Dillen LR, Sahrman SA, Schootman M, Salsich GB, Clohisey JC, Mueller MJ. Movement Pattern Training Improves Function in People with Pre-arthritis Hip Disease: Preliminary Data. *Journal of Orthopaedic and Sports Physical Therapy*. In press.
99. Harris-Hayes M, Czuppon S, Dillen L, Steger-May K, Sahrman SA, Schootman M, Salsich GB, Clohisey JC, Mueller MJ. Movement pattern training improves function in people with pre-arthritis hip disease: A preliminary study. 2014 American Association of Hip and Knee Surgeons Annual Meeting, Dallas, TX, November 6-9, 2014.
100. Lian M, Madden P, Lynskey M, Miller R, Colditz GA, Schootman M, Heath A. Geographic Variation in Maternal Smoking: Findings from the Missouri Adolescent Female Twin Study (MOAFTS). 2015 Annual Meeting of Society for Research on Nicotine and Tobacco, February 25-28, 2015. Philadelphia, PA.
101. Lian M, Sefko J, Struthers J, Schootman M. Neighborhood socioeconomic deprivation and geographic heterogeneity of tobacco environment in Missouri (in top 18 of all submitted abstracts). 40th Annual Conference of the American Society of Preventive Oncology, Columbus, OH. March 12-15, 2016. *Cancer Epidemiol Biom Prev* 2016; 25; 562-563.
102. Adjei Boakye E, Osazuwa-Peters N, Wan L, Tobo BB, Pham V, Schootman M, McElroy JA Disparities in HPV vaccine initiation and completion based on sexual orientation among women in the United States. Ninth AACR Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. September 25-28, Ft. Lauderdale, FL. *Cancer Epidemiology, Biomarkers & Prevention*, 2017; 26 (2 Suppl).

103. Shacham E, Nelson E, Garza A, Schootman M. Potential high risk areas for Zika Virus transmission in the United States. 2016 National STD Prevention Conference, Atlanta GA, September 20-23, 2016.
104. Ratnapradipa K, Lian M, Jeffe DB, Davidson N, Eberth J, Pruitt S, Schootman M. Patient, geographic and hospital variability in laparoscopic surgery use among elderly colon cancer patients. Conference on Geospatial Approaches to Cancer Control and Population Sciences. Bethesda, MD. September 12-14, 2016.
105. Schootman M, Hendren S, Loux T, Ratnapradipa K, Eberth JM, Davidson NO. Differences in robotic surgery outcomes in obese versus non-obese colectomy patients. 8th European Multidisciplinary Colorectal Cancer Congress, December 11-13, 2016, Amsterdam, the Netherlands.
106. Ratnapradipa K, Wang J, Berg-Weger M, Schootman M. Cross-sectional analysis of driving resumption among older former drivers. 2017 annual meeting of the American College of Epidemiology, New Orleans, LA, September 24-26, 2017.
107. Kapp JM, Schootman M. Translating program effect to population health impact. 2017 annual meeting of the American College of Epidemiology, New Orleans, LA, September 24-26, 2017.
108. Xaverius P, Schootman M, Vaughn M, Hinyard L. Dental visits in women at various levels of risk for unintended pregnancy. 2017 CityMatCH MCH Leadership Conference & Healthy Start Convention. Nashville, TN, September 17-20, 2017.
109. Ratnapradipa K, Schootman M, Loux T, McVay A, Su LJ, Nelson E, Kadlubar S. Individual- and county-level determinants of high breast cancer incidence rates. Poster presentation at the 11th Winter Meeting of The International Consortium for Interdisciplinary Education about Health and the Environment; University of Cologne, Cologne, Germany, Dec 2-3, 2017.
110. Adjei Boakye E, Buchanan P, Hinyard L, Osazuwa-Peters N, Schootman M, Piccirillo JF. Differences in time to second primary malignancies: development among patients with head and neck squamous cell carcinoma. 2018 Annual AACR Meeting, Chicago, IL, April 14-18, 2018.
111. Schootman M, Perez M, Schootman JC, Fu JQ, McVay A, Jeffe DB. Influence of the built environment on quality of life in early-stage African American breast cancer patients. 39th Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA, April 11-14, 2018.
112. Gebauer S, Xaverius P, Schootman M. Walkability and meeting physical activity recommendations in a nationally representative sample of adults with arthritis. 46th Annual Meeting of the North American Primary Care Research Group. Chicago, November 9-13, 2018.

APPENDIX B

Curricula vitae of oncology clinical faculty

CURRICULUM VITAE

CESAR GENTILE SANCHEZ, MD
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gentile@stanford.edu

I. EDUCATION

2006-2012 MD Cayetano Heredia University, Lima, Peru

II. POSTGRADUATE TRAINING

2015-2018 Internal Medicine Residency
Houston Methodist Hospital, Houston, TX

2018-2020 Hematology/Oncology Fellowship
Houston Methodist Hospital, Houston, TX

2021-2022 Blood and Marrow Transplantation/Cellular Therapy Fellowship
Stanford University, Stanford, CA

III. PROFESSIONAL APPOINTMENTS

2013 Coordinator of Course “Emergencias y Desastres en el primer nivel de atención”
School of Medicine. Universidad Peruana Cayetano Heredia. Lima, Peru

2013 Coordinator Assistant of the Gorgas Tropical Medicine Course, “Instituto de
Medicina Tropical Alexander Von Humboldt”
School of Medicine. Universidad Peruana Cayetano Heredia. Lima, Peru

2013 Coordinator Assistant of the Clinical Ultrasound in Tropical Medicine Course,
“Instituto de Medicina Tropical Alexander Von Humboldt”
School of Medicine. Universidad Peruana Cayetano Heredia. Lima, Peru

2013-2015 Hospital Assistant
“San Felipe” Clinic, Lima, Peru

2014-2015 Adjunct Professor of Neuroanatomy Course
Universidad Peruana Cayetano Heredia. Lima, Peru

IV. HONORS AND AWARDS

2012 Scholarship for Academic Excellence
Universidad Peruana Cayetano Heredia, Lima, Peru

- 2013, 2010 Scholarship for International Travel
Universidad Peruana Cayetano Heredia, Lima, Peru
- 2016 The 2nd place of Best Research Poster.
Leukapheresis Reduces 4-Week Mortality in Acute Myeloid Leukemia Patients with Hyperleukocytosis--a Retrospective Study from a Tertiary Center
ACP Associates Day, April 30, 2016, Houston, TX
- 2017 Hematology Opportunities for the Next-Generation of Research Scientists (HONORS) Award
American Society of Hematology 2017
- 2018-2019 Fellow of the Year
Hematology-Oncology Fellowship program 2018-2019. Houston Methodist Hospital, Houston, TX
- 2019 Outstanding Fellow
Texas Society of Clinical Oncology. TxSCO Annual Conference, September 14th, 2019. San Antonio, TX
- 2020 American Society of Hematology Abstract Achievement Award
62nd American Society of Hematology Annual meeting, December 4th-8th, 2020

V. PROFESSIONAL AND SOCIETY MEMBERSHIPS

American Society of Hematology
American Society of Clinical Oncology
American Society for Transplantation and Cellular Therapy
American College of Physicians
Peruvian Medical Association

VI. PUBLICATIONS

De Ferrari A., **Gentile C.**, Davalos L., Huayanay L., Malaga G. Attitudes and relationship between physicians and the pharmaceutical industry in a public general hospital in Lima, Peru. *PLoS One* 2014 Jun 30;9(6) 2014. doi: 10.1371/journal.pone.0100114.

Gentile C., Arriaga M, Peckins C. Paget-Schroetter: Primary axillo-subclavian vein thrombosis in a young patient. *American Journal of Medical Case Reports*. Vol. 4, No. 9, 2016, pp 315-318.

Nan X, Qin Q, **Gentile C.**, Puppala M, Ensor J, Leveque C, Pingali S R, Rice L, Phan A, Iyer S. Leukapheresis Reduces 4-Week Mortality in Acute Myeloid Leukemia Patients with Hyperleukocytosis--a Retrospective Study from a Tertiary Center. *Leukemia & Lymphoma* 2017 Jan 31:1-11.

Gentile C, Qin Q, Barbieri A, Pingali SR, Iyer S. Use of asparaginase in enteropathy-associated T-cell lymphoma, a disease with diagnostic and therapeutic challenges. *Ecancermedicalscience* 2017; 11:771.

Sun K, **Gentile C**, Pingali S R, Iyer S. Use of PEG-asparaginase in a case of Hepatosplenic $\gamma\delta$ T-cell lymphoma with long-term remission after stem cell transplantation. *Ecancermedicalscience* 2018; 12: 872.

Burns EA, **Gentile C**, Kasparian S, Pingali SR. A Case of Histiocytic Sarcoma Arising from Mycosis Fungoides. *Case Reports in Hematology* 2019;2019:7834728.

Kasparian S, **Gentile C**, Burns E, Bernicker EH. Hyperprogressive non-small cell lung cancer with two immune-checkpoint inhibitors, *JTO Clinical and Research Reports* 2020; 1 (2): 2666-3643.

Gentile, C, Anand, K, Dalwadi, S, Puri, A, Farach, A, Pingali, SR. Radiation therapy in primary mediastinal large B-cell lymphoma treated with DA-R-EPOCH. *Clinical Case Reports* 2020; 8: 1153– 1155.

Mooneyham J, **Gentile C**, Barbieri A, Shah S. Use of rituximab in lymphomatoid granulomatosis with isolated central nervous system involvement. *BMJ Case Reports CP* 2020;13:e235412.

Burns EA, **Gentile C**, Trachtenberg B, Pingali SR, Anand K. Cardiotoxicity Associated with Anti-CD19 Chimeric Antigen Receptor T-Cell (CAR-T) Therapy: Recognition, Risk Factors, and Management. *Diseases* 2021; 9(1):20.

Sarfraz, H., **Gentile, C.**, Ensor, J., Wang, L., Wong, S., Ketcham, M., Joshi, J. and Pingali, S. Primary Cutaneous Anaplastic Large-Cell Lymphoma (PC-ALCL): A review of the SEER database from 2005-2016. *Clinical and Experimental Dermatology* 2021 Jun 3. doi: 10.1111/ced.14777

VII. ABSTRACTS AND ORAL PRESENTATIONS

Gentile C, Iqbal S, Cherry M, Zimmerman J. Bickerstaff brainstem encephalitis. An uncommon presentation of Anti-GQ1b antibody syndrome. Poster presented at the American College of Physicians Associates Day, April 30th, 2016, Houston, TX

Qin Q, Nan X, **Gentile C**, Fosso C, Donohue R, Zieske A, Blieden C, Sarna A, Iyer S, Pingali S. A Case of Isolated Pulmonary Nodular AL amyloidosis: Diagnostic Challenges and Therapeutic Options. Poster presented at the Texas American College of Physicians, November 5th, 2016, Houston, TX

Nan X, Qin Qian, Greenwood M, **Gentile C**, Xing Y, Zeiski A, Ibrahim I, Baker K, Rice L, Merritt B, Pingali S R, Olsen R, Iyer S. An Integer Weighted Genomic Mutation Scoring (IWGMS) Using the Trusight Myeloid Sequencing Panel (Illumina) Shows Higher Mortality in Patients with Intermediate Risk Acute Myeloid Leukemia- a Retrospective Study. Poster presented at the American Society of Hematology 58th Annual meeting, December 3rd-6th, 2016, San Diego, California

Gentile C, Iqbal S, Kumar K. Unexpected cause of obstructive jaundice in a patient with ulcerative colitis. Poster presented at the American College of Physicians Associates Day, April 29th, 2017, Houston, Texas

Agrawal T, **Gentile C**, Perez J. An unusual complication in ALL blast crisis. Poster presented at American College of Physicians Associates Day, April 29th, 2017, Houston, Texas

Qin Qian, Nan X, **Gentile C**, Miller T, Ewton A, Fisher R, Teh B, Farach A, Gonzalez-Bonilla H, Pingali SR, Iyer S. The Synergistic Effects of Nivolumab and Radiation on Refractory Nodular-Sclerosing Hodgkin's Lymphoma - Sustained Remission through the Abscopal Effect? Poster presented at the American College of Physicians Associates Day, April 29th, 2017, Houston, TX

Gentile C, Sun K, Teegavarapu P, Qin Q, Mamta P, Wong S, Ibrahim I, Rice L, Pingali SR, Iyer S. Escape drug-resistant infections in hematological malignancies. Dare to review! Poster presented at the 22nd European Hematology Association annual conference June 22th-25th, 2017, Madrid, Spain.

Gentile C, Qin Q, Ensor J, Mamta P, Wong S, Ibrahim I, Rice L, Pingali SR, Iyer S. Infections in Patients with Myelodysplastic Syndrome. Looking for the Escape Clause! Poster presented at the American Society of Hematology 59th annual meeting, December 9th-12th, 2017, Atlanta, Georgia.

Qin Q, **Gentile C**, Nan X, Rice L. Acquired Thrombotic Thrombocytopenic Purpura and Acute Pancreatitis: Variable and Reciprocal Pathophysiologic Relationships. Poster presented at the American Society of Hematology 59th annual meeting, December 9th-12th, 2017, Atlanta, Georgia.

Burns E, **Gentile C**, Pingali SR. A case of Histiocytic Sarcoma arising from Mycosis Fungoides. Poster presented at 1st Annual Hematologic Malignancies Symposium Baylor St. Luke's and Dan L Duncan Comprehensive Cancer. November 3rd, 2018, Houston, Texas.

Gentile C, Anand K, Puri A, Farach A, Pingali SR. Use of Radiation Therapy in Primary Mediastinal Large B-Cell Lymphoma (PMLBCL) Treated With DA-R-EPOCH. Poster presented at the Texas Society of Clinical Oncology. September 13th-14th, 2019, San Antonio, Texas.

Puri A, Puri A, **Gentile C**, Pingali SR. Prurigo Nodularis: An association with CD 30 positive lymphomas. Poster presented at the Texas Society of Clinical Oncology. September 13th-14th, 2019, San Antonio, Texas.

Mooneyham J, **Gentile C**, Barbieri A, Shah S. Use of rituximab in Lymphomatoid Granulomatosis with primary central nervous system involvement. Poster presented at the 2nd Annual Hematologic Malignancies Symposium. Baylor St. Luke's and Dan L Duncan Comprehensive Cancer Center. November 2nd, 2019, Houston, Texas.

Gentile C, Ensor J, Puri A, Randhawa J, Shilpan S, Pingali SR. Primary Cutaneous Anaplastic Large-Cell Lymphoma: A Surveillance, Epidemiology, and End Results Database Analysis from 2005-2016. Poster presented at American Society of Hematology 61st Annual Meeting, December 7th-10th, 2019, Orlando, Florida.

Gentile C, Ensor A, Ensor E, Anand K. Diffuse Large B-cell Lymphoma of the Uterus: A Look at the Texas Cancer Registry. Poster presented at the 8th Annual Houston Methodist Cancer Symposium. August 7th, 2020, Houston, Texas.

Gentile C, Ensor A, Ensor J, Anand K. ABCL-325: Diffuse Large B-Cell Lymphoma of the Uterus: A SEER Database Analysis. Clinical Lymphoma Myeloma and Leukemia. 2020 Sep;20:S273. Poster presented at Society of Hematologic Oncology, September 9th-12th, 2020, Houston, Texas.

Gentile C, Sarfraz H, Randhawa J, Shah S, Pingali SR. TCL-404: Use of Brentuximab-ICE and Romidepsin-ICE in Relapsed/Refractory Peripheral T-Cell Lymphoma. Clinical Lymphoma Myeloma and Leukemia. 2020 Sep;20:S257. Poster presented at Society of Hematologic Oncology, September 9th-12th, 2020, Houston, Texas.

Gentile C, Lulla P. Donor Considerations. Clinical Vignette presented at the Extension for Community Healthcare Outcomes (ECHO): Heal Sickle, October 12th, 2020.

Gentile C, Burns E, Muhsen I, Sarfraz H, Guerrero C, Rogers JT, et al. Primary and Secondary Central Nervous System Lymphoma: Outcomes from Houston Methodist Cancer Center. Blood. 2020 Nov 5;136(Supplement 1):16–7. Poster presented at American Society of Hematology 62nd Annual Meeting, December 4th-8th, 2020.

Gentile C, Burns E, Muhsen I, Sarfraz H, Guerrero C, Randhawa JK, et al. Central Nervous System Lymphoma: Analysis of the Texas Cancer Registry. Blood. 2020 Nov 5;136(Supplement 1):45–6. Poster presented at American Society of Hematology 62nd Annual Meeting, December 4th-8th, 2020.

Emily Mosow Newsome

2018 Rodeo Drive Bryant, Arkansas 72022

Phone: 662-822-1917 E-Mail: emosow89@gmail.com

Education:

Millsaps College, Jackson Mississippi	B.S. in Biology	2007-2011
William Carey University College of Osteopathic Medicine	D.O.	2013-2017

Post Graduate Education:

Resident in Internal Medicine/Pediatrics UAMS	2017-2021
Fellow in Hospice and Palliative Care	2021-Present

Employment:

Biological Science Assistant for USDA-ARS - Division: Southern Insect Management Research	Summers 2007-2011
Biological Science Technician for USDA-ARS - Division: Southern Insect Management Research	2011-2013

Licensures and Certifications:

Passed Comlex Level 1, Comlex Level 2 CE, Comlex Level 2 PE, and Comlex Level 3 First Attempts	
Arkansas State Medical License	Current
BLS/PALS	Expires June 2021

Honors/Awards:

Phi Beta Kappa Scholar	2017
Magna Cum Laude Graduate from Millsaps College	2017

Memberships:

American Academy of Pediatrics- Resident Member	2017-present
American College of Physicians- Resident Member	2017-present

Quality Improvement Projects:

Improvement in Transitions into Adult Care in Teenage Pediatric Patients	June 2021
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Natalie Brooke Peeples (Brooke), M.D.

Atlanta, GA 30306

Work Phone: 1-470-799-8559

Personal Phone: 1-901-493-7556

Email: natalie.peeples89@gmail.com

Titles

- Assistant Professor, Division of Palliative Medicine at Emory University School of Medicine (September 2021 - present)

Education

- Doctor of Medicine: University of Arkansas for Medical Sciences, August 2013 - May 2017
- Bachelor of Science: University of Arkansas at Fayetteville, August 2008 - May 2013

Postgraduate Training

- Hospice and Palliative Medicine Fellowship, University of Arkansas for Medical Sciences, 2020-2021
- Internal Medicine Residency, University of Arkansas for Medical Sciences, 2017-2020

Licensures/Boards

- Board Eligible for Hospice and Palliative Medicine
- Board Certified in Internal Medicine by the American Board of Internal Medicine, August 2020
- BLS Certification (4/30/2020, expires 4/30/2022)
- AR State Medical License (#E-13534)
- GA State Medical License (#89323)

Honors/Awards

- Emergency Department Consultant of the Month, University of Arkansas for Medical Sciences, May 2020

Society Memberships

- AAHPM

Abstract Presentations

- Regional: "A Rare Case of Temporalis Muscle Abscess Secondary to Mayfield Clamp Pin Sites in a Post-Operative Neurosurgery Patient." Presented at Southern Society for Clinical Investigation Southern Regional Meeting in February 2019 (poster)

Lectures/Didactics

- Quality Improvement in Palliative Care: Appropriateness of Narcan Prescribing in Outpatient Palliative Care Clinic, June 2021
- ECMO and Palliative Care, June 2021
- Journal Club: Voluntary Stopping Eating and Drinking, May 2021
- Serious Illness Communication During a Pandemic, September 2020

SUNNY RK SINGH M.D.

Medical Education

Hematology Oncology Fellowship (07/2021-6/2022)
University of Arkansas for Medical Sciences, Little Rock

Hematology Oncology Fellowship (07/2019-6/2021)
Henry Ford Hospital, Detroit

Chief Medical Resident (07/2018 - 06/2019)
John H Stroger Jr. Hospital of Cook County, Chicago

Internal Medicine Residency (07/2015 - 06/2018)
John H Stroger Jr. Hospital of Cook County, Chicago

Bachelor of Medicine, Bachelor of Surgery (MBBS)
King George's Medical University, India 07/2008 - 03/2013

Membership and Honorary/Professional Societies

American Society of Clinical Oncology (ASCO)
American Society of Hematology (ASH)
European Society of Medical Oncology (ESMO)
Michigan Society of Hematology and Oncology (MSHO)

Certification/Licensure

ECFMG, ACLS, BLS

Committee Participation/Volunteering

Henry Ford Cancer Institute scientific review committee (2020-2021)
Covid-19 and Cancer Consortium (CCC19) Collaborator
Vice-President, House staff Association: John H Stroger Jr Hospital (07/2017 - 06/2018)
Secretary of Physiology Society: King George's Medical University (07/2008 - 07/2009)

Awards/Accomplishments

Henry Ford Cancer Institute ASCO Travel award (2020)
Henry Ford Cancer Institute ASCO Travel award (2021)
Department of Medicine Clinical Skills and Scholarship Award (2017)
Honors in Pediatrics, Pathology, Microbiology, ENT and Surgery (2013)

Journal Reviewer

Current Problems in Cancer: Case Reports
World Journal of Surgical Oncology
BMC Health Services Research

Case Report

Desperate times, desperate measures: successful use of chemotherapy in treatment of haemophagocytic lymphohistiocytosis (HLH) due to disseminated histoplasmosis. Singh SRK, Thanikachalam K, Donthireddy V. *BMJ Case Rep.* 2020 Sep 2;13(9):e235144. doi: 10.1136/bcr-2020-235144. PMID: 32878853; PMCID: PMC7470499.

Epidermal Growth Factor Receptor-mutated Lung Cancer as the Initial Manifestation of Germline TP53 Mutation Associated Cancer. Pathak S, Singh SRK, Katiyar V, McDunn S. *Cureus.* 2018 Mar 30;10(3):e2395. doi: 10.7759/cureus.2395. PMID: 29854570; PMCID: PMC5976273.

Multiple System Atrophy Mistaken for Autoimmune Cerebellar Degeneration. Mathevossian S, Singh SR, Pu CY. *Am J Med.* 2016 Sep;129(9):e183-4. doi: 10.1016/j.amjmed.2016.03.034. Epub 2016 Apr 21. PMID: 27107926.

Acute ST elevation myocardial infarction following an initial sipuleucel-t infusion for castration resistant prostate cancer. Balanchivadze N*, Afana M, Al-Saheli Z, Singh S, Hwang C. *Biom Case Rep Open A Open J.* 2021; 2(1): 41-43. doi: 10.33169/biomcase.BACROAOJ-2-114

Book Chapter

Leptomeningeal Carcinomatosis. Singh SRK, Malapati SJ, Mattour A. Accepted for publication in “Cancer Metastasis Through the Lymphovascular System” (Springer), 2021

Manuscript

NCDB Analysis of Melanoma 2004-2015: Epidemiology and Outcomes by Subtype, Sociodemographic Factors Impacting Clinical Presentation, and Real-World Survival Benefit of Immunotherapy Approval. Singh SRK, Malapati SJ, Kumar R, Willner C, Wang D. *Cancers (Basel).* 2021 Mar 22;13(6):1455. doi: 10.3390/cancers13061455. PMID: 33810182; PMCID: PMC8004999.

Association of Clinical Factors and Recent Anti-Cancer Therapy with COVID-19 Severity among Patients with Cancer: A Report from the COVID-19 and Cancer Consortium. Grivas P, Khaki AR, Wise-Draper TM, French B, Hennessy C, Hsu CY, Shyr Y, Li X, Choueiri TK, Painter CA, Peters S, Rini BI, Thompson MA, Mishra S, Rivera DR, Acoba JD, Abidi MZ, Bakouny Z, Bashir B, Bekaii-Saab T, Berg S, Bernicker EH, Bilen MA, Bindal P, Bishnoi R, Bouganim N, Bowles DW, Cabal A, Caimi PF, Chism DD, Crowell J, Curran C, Desai A, Dixon B, Doroshov DB, Durbin EB, Elkrief A, Farmakiotis D, Fazio A, Fecher LA, Flora DB, Friese CR, Fu J, Gadgeel SM, Galsky MD, Gill DM, Glover MJ, Goyal S, Grover P, Gulati S, Gupta S, Halabi S, Halfdanarson TR, Halmos B, Hausrath DJ, Hawley JE, Hsu E, Huynh-Le M, Hwang C, Jani C, Jayaraj A, Johnson DB, Kasi A, Khan H, Koshkin VS, Kuderer NM, Kwon DH, Lammers PE, Li A, Loaiza-Bonilla A, Low CA, Lustberg MB, Lyman GH, McKay RR, McNair C, Menon H, Mesa RA, Mico V, Mundt D, Nagaraj G, Nakasone ES, Nakayama J, Nizam A, Nock NL, Park C, Patel JM, Patel KG, Peddi P, Pennell NA, Piper-Vallillo AJ, Puc M, Ravindranathan D, Reeves ME, Reuben DY, Rosenstein L, Rosovsky RP, Rubinstein SM, Salazar M, Schmidt AL, Schwartz GK, Shah MR, Shah SA, Shah C, Shaya JA, Singh SRK, Smits M, Stockerl-Goldstein KE, Stover DG, Streckfuss M, Subbiah S, Tachiki L, Tadesse E, Thakkar A, Tucker MD, Verma AK, Vinh DC, Weiss M, Wu JT, Wulff-Burchfield E, Xie Z, Yu PP, Zhang T, Zhou AY, Zhu H, Zubiri L, Shah DP, Warner JL, Lopes GD Jr. *Ann Oncol.* 2021 Mar 18: S0923-7534(21)00874-7. doi: 10.1016/j.annonc.2021.02.024. Epub ahead of print. PMID: 33746047; PMCID: PMC7972830.

COVID-19 and Cancer: Lessons Learnt from a Michigan Hotspot. Singh SRK, Thanikachalam K, Jabbour-Aida H, Poisson LM, Khan G. *Cancers (Basel).* 2020 Aug 22;12(9):2377. doi: 10.3390/cancers12092377. PMID: 32842584; PMCID: PMC7565165.

Outcomes of in-hospital cardiopulmonary resuscitation for cardiac arrest in adult patients with metastatic solid cancers: A Nationwide Inpatient Sample database analysis from 2012 to 2014. Malapati S, Singh SRK, Kumar R, Hadid T. Cancer. 2021 Mar 9. doi: 10.1002/cncr.33451. Epub ahead of print. PMID: 33687740.

Knowledge, Attitudes, and Practices Pertaining to Lung Cancer Screening Among Primary Care Physicians in a Public Urban Health Network. Mukthinuthalapati VVPK, Putta A, Farooq MZ, Singh SRK, Gupta S, Smith S. Clin Lung Cancer. 2020 Sep;21(5):450-454. doi: 10.1016/j.clcc.2020.03.005. Epub 2020 Apr 11. PMID: 32389506.

Incidence and outcomes of heparin-induced thrombocytopenia in solid malignancy: an analysis of the National Inpatient Sample Database. Kumar R, Bhandari S, Singh SRK, Malapati S, Cisak KI. Br J Haematol. 2020 May;189(3):543-550. doi: 10.1111/bjh.16400. Epub 2020 Jan 28. PMID: 31990984.

Life and training in the time of Corona. Malapati S, Singh SR. Cancer Res Stat Treat 2020; 3, Suppl S1:92-3

Abstract/Poster

Primary Pancreatic Adenocarcinoma (PPDA) and Metastatic Pancreatic Adenocarcinoma (MPDA): Are they Genomically Distinct? Sunny R K Singh, Shravan Leonard-Murali, Ruicong She, Chun-Hui Lin, Laila Poisson, Jonathan Freaney, Gazala Khan. Accepted for online publication ASCO 2021

Infectious mononucleosis manifesting with cold-type autoimmune hemolytic anemia. Kevin Ginnebaugh, MD, Harshita Mehrotra, MD, Sunny R K Singh, MD, Zaher K. Otroock, MD. Accepted for poster presentation at International Symposium on Technical Innovations in Laboratory Hematology 2021

Incidence and Outcomes of Acute Transfusion Reactions in Hospitalized Patients in the United States. Rohit Kumar, Sindhu Malapati, Sunny R K Singh, Bokhodir Mamedov, Myra R Shah, Shruti Bhandari; Blood 2020; 136 (Supplement 1): 30–31. doi: <https://doi.org/10.1182/blood-2020-138982>

Survival outcomes of neoadjuvant versus adjuvant chemotherapy in early-stage pancreatic adenocarcinoma: A subgroup analysis of the National Cancer Database. Rohit Kumar, Shruti Bhandari, Sunny R K Singh, Sindhu Janarthanam Malapati, and Adam Rojan. Journal of Clinical Oncology 2020 38:15_suppl, e16777-e16777

Perioperative chemotherapy versus adjuvant chemoradiation in resectable gastric cancer: A national cancer database analysis. Malapati, Sindhu & Singh, Sunny & Kumar, Rohit & Abdalla, Ahmed & Hadid, Tarik. (2020). Abstract accepted for poster presentation in ASCO 2020. Journal of Clinical Oncology. 38. 7066-7066. 10.1200/JCO.2020.38.15_suppl.7066.

Neoadjuvant treatment with chemotherapy or chemoradiation in stage III non-small cell lung cancer: Analysis of the National Cancer Database. Malapati, Sindhu & Singh, Sunny & Kumar, Rohit & Hadid, Tarik. (2020). Abstract accepted for poster presentation in ASCO 2020. Journal of Clinical Oncology. 38. 7046-7046. 10.1200/JCO.2020.38.15_suppl.7046.

Etanercept with extracorporeal photopheresis (ECP) for steroid-refractory acute graft versus host disease following allogeneic hematopoietic stem cell transplantation. Singh, Sunny & Malapati, Sindhu & Neme, Klodiana & Michael, Angela & Mikulandric, Nancy & Vulaj, Vera & Emole, Josephine (2020). Abstract accepted for poster presentation in ASCO 2020. Journal of Clinical Oncology. 38. 7543-7543. 10.1200/JCO.2020.38.15_suppl.7543.

Clinical outcomes of patient migration in locally advanced rectal cancer from community cancer centers: An analysis of the National Cancer Database. Rohit Kumar, Shruti Bhandari, Phuong Ngo, **Sunny R K Singh**, Sindhu Janarthanam Malapati, Adam Rojan. Abstract accepted for poster presentation at Gastrointestinal Cancer Symposium 2020.

Plasma Exchange in Thrombotic Microangiopathy: Is It Time Sensitive? Sindhu Malapati, MD, **Sunny R K Singh, MD**, Rohit Kumar, MD, Jason Mouabbi, MD and Tarik Hadid, MD, MS. Abstract accepted for poster presentation at ASH annual meeting 2019, Orlando

In-Hospital Outcomes in Elderly Acute Myeloid Leukemia (AML) Receiving Aggressive Inpatient Care: An Analysis of National Inpatient Sample (NIS) Database between Years 2005 and 2014. Sindhu Malapati, MD, **Sunny R K Singh, MD**, Rohit Kumar, MD, Jibran Ahmed, MD, Ishaan Vohra, MD and Vatsala Katiyar, MD. Abstract accepted for poster presentation at ASH annual meeting 2019, Orlando

Elective Splenectomy in Immune Thrombocytopenic Purpura: An Analysis of National Inpatient Sample (NIS) Database between Years 2006 and 2014. **Sunny R K Singh, MD**, Sindhu Malapati, MD, Rohit Kumar, MD, Prasanth Lingamaneni, Leila Khaddour, MD and Vijayalakshmi Donthireddy. Abstract accepted for poster presentation at ASH annual meeting 2019, Orlando

Predictors of Transfer to Different Facility at Discharge in Patients Admitted with Hematologic Malignancy: A Nationwide Inpatient Sample (NIS) Database Analysis. **Sunny R K Singh, MD**, Sindhu Malapati, MD, Rohit Kumar, MD, Oleksandra Lupak, MD and Philip Kuriakose, MD. Abstract accepted for poster presentation at ASH annual meeting 2019, Orlando

Therapeutic Plasma Exchange (PLEX) in Thrombotic Microangiopathy (TMA): Experiences of an Inner-City Hospital over a Decade. Aakash Putta, Hafeez Shaka, Shristi Upadhyay Banskota, **Sunny RK Singh**, Sindhu Malapati, Muhammad Zain Farooq, Kumar Kunnal Batra. Abstract accepted for poster presentation at ASH annual meeting 2019, Orlando

Bilateral mastectomy in ductal carcinoma in situ: 10-year analysis of national inpatient sample database. Sindhu Janarthanam Malapati, **Sunny RK Singh**, Rohit Kumar, Jason Mouabbi, Ahmed Abdalla, Carrie Dul and Tarik Hadid. Abstract accepted for poster presentation at the San Antonio Breast Cancer Symposium 2019

Cultural disparities in end-of-life choices and advanced care planning in cancer patients. Vatsala Katiyar, Ishaan Vohra, Sindhu Janarthanam Malapati, **Sunny Singh**, Prasanth Lingamaneni, Orlanda Mackie, Ruhi Shariff. Abstract accepted for poster presentation Supportive Care in Oncology Symposium 2019, San Francisco

Predictors of transfer to different facility at discharge in patients admitted with metastatic solid malignancy: Five-year National Inpatient Sample (NIS) database analysis. **Singh SRK**, Malapati S, Kumar R, Thanikachalam K, Al Khatib Y. Abstract accepted for poster presentation Supportive Care in Oncology Symposium 2019, San Francisco

Geographic distribution of clinical trials for breast cancer across the United States, 2011-2015. Malapati S, **Singh SRK**, Kumar R, Ahmed J, Katiyar V, Vohra I. Abstract accepted for poster presentation at ASCO Quality Symposium 2019, San Diego.

Retrospective Audit of Malignant Epidural Spinal Cord Compression (MESCC) in an Inner-City Safety Net Hospital. Rayli, P., Putta, A., Katiyar, V., **Singh, S.**, Batra, K., Malapati, S. Abstract accepted for poster presentation at ASTRO meeting 2019, Chicago

Regorafenib tolerance and outcomes in inner-city minority colorectal cancer population. *Journal of Clinical Oncology*. 2018, Feb; 36(4_suppl): 722-722. Ahmed, T.A., Malapati, S., Yim, B., **Singh, S.R.K.**, and Gupta, S. Abstract accepted for poster presentation at The Gastrointestinal Cancers Symposium 2018, San Francisco

Factors affecting adherence to standard cisplatin-based chemotherapy regimen for locally advanced squamous cell head and neck cancer in an inner-city safety net hospital. Journal of Clinical Oncology. 2017, Nov; 35(31_suppl): 252. Singh, S., Malapati, S., Lu, P. & Rosen, F. Abstract accepted for poster presentation at Palliative and Supportive Care in Oncology Symposium 2017; San Diego

Efficacy of olanzapine for prevention of chemotherapy-induced nausea and vomiting: A systematic review and meta-analysis. Kumar, R., Singh, N., Thekkekkara, R.J., Singh, SRK., Harrington, S.E., & Shah, M. (Abstract) Journal of Clinical Oncology. 2017, May; 35(15_suppl): e21692.

Outcomes in left versus right metastatic colorectal cancer (mCRC) in patients presenting to an inner-city safety net hospital. Singh, S.R.K., Lu, P., Malapati, S.J., Ahmed, T.A. & Mullane, M. (Abstract) Journal of Clinical Oncology. 2018, May; 36(15_suppl): e15542.

Language Fluency

English, Hindi and Urdu

Hobbies & Interests

Music

Indian cooking, trying new cuisines and restaurants

Watching movies

Gardening

Matthew Thomas Solverson

9816 Emmet St.

Omaha, NE 68134

Preferred Phone: 414-232-5024

Email: matthew.solverson@unmc.edu

Surgical Residency

University of Nebraska Medical Center

Dept. of Otolaryngology – Head and Neck Surgery

Start Date: 07/01/2017

Expected completion date: 06/30/2022

Medical Education

Medical College of Wisconsin, United States

Doctor of Medicine

08/2013 - 05/2017

Undergraduate Education

University of Wisconsin-Madison, Madison, WI

Bachelor of Science

Majors: Neurobiology and Psychology

08/2008 - 05/2013

Membership and Honorary/Professional Societies

Phi Beta Kappa Honor Society, UW-Madison Chapter

Alpha Omega Alpha Society, University of Nebraska Chapter

American Academy of Otolaryngology-Head and Neck Surgery #143772

Certification/Licensure

Basic Life Support, American Heart Association

Nebraska TEP 8039

CITI ID 4016794

Volunteer Experience

MCW Buddies, Milwaukee, WI, United States

Date: 01/2015 - 04/2015, medical student volunteer with pediatric dialysis patients

Repairers of the Breach-Homeless Clinic, Milwaukee, WI, United States

Date: 09/2014 - 06/2015, medical student volunteer

Saturday Clinic for the Uninsured, Milwaukee, WI, United States

08/2014 - 05/2015, medical student volunteer

Milwaukee Lakefront Marathon Medical Tent, Milwaukee, WI, United States

10/2013 - 10/2014, medical student volunteer

American Family Children's Hospital, Madison, WI, United States

Date: 01/2012 - 07/2012, undergraduate student volunteer

Work Experience

Harlow Primate Laboratory, Madison, WI, United States

Date: 05/2011 - 08/2013, student research assistant

Wisconsin Sleep Laboratory, Madison, WI, United States

Date: 05/2010 – 04/2011, student research assistant

Ozaukee County Highway Patrol, Cedarburg, WI, United States

05/2009 – 08/2009

Presentations

UNMC ENT Morbidity and Mortality/Quality Improvement

- 02/14/2017 – Esophageal variceal bleed after total thyroidectomy – mortality
- 10/10/2018 – Distal tip necrosis of nasal bilobed flap
- 11/14/2018 – Hematoma after alar concentric advancement flap
- 01/09/2019 – Retained tube in middle ear space
- 02/04/2019 – Delayed neck exploration in case of necrotizing fasciitis
- 03/13/2019 –
 - Acquired choanal stenosis
 - Wound infections after dog bite injury to head and neck
- 04/10/2019 – Chyle leak after supraomohyoid neck dissection
- 08/14/2019 – Severe post-op epistaxis after FESS
- 11/13/2019 – Complicated hospital course after total laryngopharyngectomy – mortality
- 11/11/2020 – Acute MI after paramedian and melolabial flaps – mortality
- 12/08/2020 – Acute respiratory failure during pediatric tracheostomy

UNMC ENT Grand Rounds

- 05/30/2018 – Laryngectomy: a historical perspective
- 02/27/2019 – Deep neck space infections
- 06/13/2020 – Free flap reconstruction in head and neck surgery
- 10/28/2020 – Mental health in head and neck cancer patients

American College of Surgeons – Student Symposium, 2016 Oct.

- Solverson M, Neideen T. Extended review of beta blockers in geriatric trauma patients: Pre-injury beta blockers are associated with decreased mortality. Poster presentation. 2016 Oct. Washington, DC.

Fall Voice Conference – 2019 Oct.

- Solverson M, Klute L, Bingcang C, Dowdall J. Diffuse spontaneous laryngeal hemorrhage with Trastuzumab. Poster Presentation. 2019 Oct. Plano, TX.

Publications

- Solverson M. Authorship - Perspective of an ENT resident. Graduate Medical Education Research Journal. 2020 Sep 29; 2(1). doi: 10.32873/unmc.dc.gmerj.2.1.006.
- Klute L, Solverson M, Bingcang CM, Dowdall JR. Diffuse spontaneous laryngeal hemorrhage with Trastuzumab. Case Reports in Otolaryngology. 2020 Aug 24; 2020. Article ID 8818905, <https://doi.org/10.1155/2020/8818905>
- Faria J, Solverson M, Faria M, Benoit M, McCormick M. Potential cytochrome p450 drug-drug interactions among pediatric patients undergoing tonsillectomy. Otolaryngol Head Neck Surg. 2019 Jan;160(1):145-149. doi: 10.1177/0194599818793850.

Ongoing Research

Date: 05/2020 – current

Location: Dept. Otolaryngology - Head and Neck Surgery, University of Nebraska Medical Center, Omaha, NE

Role: Resident researcher

Supervisors: Elizabeth Bradford Bell, MD, Zafar Sayed, MD

Title: Predictors of Salvage Laryngectomy

Goals: Retrospective review of patients with laryngeal cancer to evaluate for patient and treatment factors associated with eventual salvage laryngectomy.

Role: Assist with project design and implementation, data collection.

Status: Data analysis, collecting further data

Date: 03/2020 – current

Location: Dept. Otolaryngology - Head and Neck Surgery, University of Nebraska Medical Center, Omaha, NE

Role: Resident researcher

Supervisors: Kristy Carlson, PhD; Jayme Dowdall, MD; Christie Barnes, MD

Critique of nasopharyngeal swab educational videos

Goals: Have otolaryngologists review and critique a multitude of educational videos teaching nasopharyngeal swab technique.

Role: Development of scoring system for rating the educational videos. Distribution of videos to otolaryngologists for review. Writing and revision of manuscript.

Status: in preparation for submission to journal

Date: 05/2019 – current

Location: Dept. Otolaryngology - Head and Neck Surgery, University of Nebraska Medical Center, Omaha, NE

Role: Resident researcher

Supervisors: Jayme Dowdall, MD; Christie Barnes, MD

Title: Tracheostomy Quality Improvement

Goals:

1.) Improve care providers' knowledge and comfort with tracheostomy related care.

2.) Evaluate the utility of an e-learning module in the quality improvement process.

Role: Development of quiz and survey to assess learner's comfort and knowledge of tracheostomy care pre- and post-module.

Status: The module, quiz, and survey are currently implemented into the curriculum of residents who undergo clinical rotation in the ICU. Data is currently being collected.

Courses

AOCMF Management of Facial Trauma

- Sep 8-9, 2018

UNMC Anatomy of the Head and Neck

- Aug 16-18, 2017
- Aug 15-17, 2018
- Aug 14-16, 2019
- Aug 1-9-21, 2020
- Aug 18-20, 2021

UNMC Basic Temporal Bone

- Mar 22-23, 2018

UNMC Skull Base and Advanced Otology

- Mar 28-29, 2019
- June 24-25, 2021

UNMC Basic Sinus

- May 16-17, 2019

UNMC Skull Base and Advanced Sinus

- May 11-12, 2018

UNMC Airway

- Feb 22, 2019

UNMC Facial Trauma

- Jul 28, 2018
- Jul 18, 2020

UNMC Ultrasound of the Head and Neck

- Nov 2, 2018
- Nov 6, 2020

Awards

Werner Progressive Care Unit Physician of the Quarter, 12/2019 – 02/2020

InterCOM Resident of the Month, November 2020

UNMC Oto-HNS Resident of the Year, 2020-2021

Hobbies & Interests

Ice hockey, soccer, deer hunting, turkey hunting, personal fitness, fishing, cooking, Wisconsin sports

TRILOK SHRIVASTAVA, MD

2415 W Flournoy St. Apt 1, Chicago, IL, 60612
773-869-2936, trilok.shrivastava@cookcountyhhs.org

Education and Medical Training

RESIDENCY

John H. Stroger Jr. Hospital of Cook County, Chicago, IL
Internal Medicine
07/2019 - 06/2022 (Present)

INTERNSHIP

Kathmandu Medical College and Teaching Hospital, Kathmandu
Rotational internship in different disciplines
06/2015 - 05/2016

BACHELOR OF MEDICINE & BACHELOR OF SURGERY

(EQUIVALENT TO DOCTOR OF MEDICINE)
Kathmandu Medical College and Teaching Hospital, Kathmandu
Affiliated to Kathmandu University
08/2010-06/2015

Professional Work History

Star Hospital, Lalitpur, Nepal
Physician in the Emergency Department
02/2019-05/2019

AASHA for Nepal, Lebanon, NH
Non-profit INGO
Outpatient physician in taking care of an underserved ethnic group in a village in Nepal.
12/2017 - 09/2018

Missionaries of Charity Nepal, Nepal
Outpatient physician in taking care of over 40 homeless women in a care home in weekly-biweekly visits
11/2015 - 03/2018

Mediciti Hospital, Nepal
Research Officer: Worked in a research project that aimed to study the sleep abnormalities among shift workers
07/2018 - 08/2018

Infertility Center, Nepal
Research Officer: Worked in a research project that studied the risk factors of male infertility
07/2017 - 03/2018

College of Biomedical Engineering & App. Sciences, Nepal
Assistant Lecturer in Anatomy & Physiology
08/2016 - 02/2017

Star Hospital, Lalitpur, Nepal
Physician in the ICU & Medicine wards
02/2017-08/2017

Medicare National Hospital, Nepal

Physician in the ED, ICU and wards on rotational basis.

06/2016 - 10/2016

MedSted Nepal (NGO), Nepal

Co-founder & President of a socio-medical organization that aimed to uplift the health standards of the community by various health campaigns.

08/2012 - 08/2015

Licensure and Certifications

Temporary License, Illinois, Active 2019-2022

Permanent Medical Practitioner, Nepal Medical Council – 2016

ACLS, BLS, Active 2019-2023

Educational Commission for Foreign Medical Graduates, 2018

Professional Memberships

American Medical Association, American College of Physicians, American Society of Clinical Oncology, American Society of Hematology, Nepal Medical Association

Additional Accomplishments**Volunteer Work**

AASHA for Nepal, Lebanon, NH

Bibeksheel Nepali, Dhading, Nepal

Surgeons Overseas, NY

Autism Care Nepal, Nepal

Nepal Heart Net & Jayanti Memorial Trust, Nepal

Kathmandu Medical College Social Committee, Nepal

Lions Club International - District 325B Nepal, Nepal

Nepal Scouts

05/2015 - 05/2015

05/2015 - 05/2015

05/2014 - 06/2014

09/2013 - 03/2014

08/2013 - 09/2013

11/2010 - 11/2012

09/2008 - 06/2010

05/2005 - 09/2007

Externship/Observership

Wellspan Good Samaritan Hospital, PA, US

Baylor University Medical Center, Dallas, TX

12/2018-12/2018

05/2018-06/2018

Awards

- Best Published Original Research Paper in FSR 2019

- Third position & bronze medal in National Orchestra & Folk song competition in His Majesty's Government's Aishwarya Cultural Shield 2005

Language

Nepali, English, Hindi, Urdu

Quality Improvement Projects

Standardization of Resident Physician Discharge Communication 2020-2021

Research and Publications

Maha A.T., Baral, Binav, **Shrivastava, Trilok**, Kumi, Dennis, Tariq, Muhammad. "Clinical Outcomes of Prophylactic vs. Therapeutic Doses of Anticoagulation In COVID-19 Patients: A Systematic Review and Meta-analysis" abstract]. *Res Pract Thromb Haemost*. 2021; 5 (Suppl 1).

Pudasaini, Garima, **Shrivastava, Trilok**, Baral, Binav, Upadhyay, Shristi, Hoffman, Michael. "Epidemiology and outcomes of COVID positive patients with venous thromboembolism, experiences from a public safety-net hospital". Abstract and Poster, Institutional Research Day, John H. Stroger Jr. Hospital of Cook County.

Shrivastava, Trilok, Hwang, Jessica L., Munshi, Laishiya, Batra, Kumar Kunnal, and Ahuja, Kriti. "A Case Report of Mesenchymal Scapular Fgf Secreting Tumor: Importance of Follow up in Tumor Induced Osteomalacia." *Radiology Case Reports* 16.4 (2021): 989-93.

Shrivastava, Trilok, and Ntiamoah, Prince. "Rare Cause of Large Anterior Mediastinal Mass–Thymolipoma." *Radiology Case Reports* 15.9 (2020): 1538-40.

Shrivastava, Trilok, Li, Lin, Tanwar, Sonia, Nasim, Rabab, Gullas, Vincent, Pescatore, Jay, and Nelson, Michael. "Enigmatic Rapidly Enlarging Nasal Mass That Is Not Cancer." *Case Reports in Dermatological Medicine* 2020 (2020): 8855572.

Macchi, Hugo, Salazar, Miguel, Fratti, Juan Del Cid, Upadhyay, Shristi, Baral, Binav, **Shrivastava, Trilok**, Gauto, Estefania, and Cattoni, Juan Adolfo. "Thirty-Day Readmission after Percutaneous Coronary Intervention with Drug Eluting Stent in Patients with Active Malignancy." *Journal of Clinical Oncology* 39 (2021).

Kumi, Dennis Danso, **Shrivastava, Trilok**, Elsebaie, Maha A.T., Laswi, Hisham, Ahuja, Kriti, and Batra, Kunnal. "Hypercalcemia as a Predictor of Adverse Treatment Outcomes in DLBCL During Chemotherapy: A National Inpatient Database Study." *Journal of Clinical Oncology* 39 (2021).

Baral, Binav, Salazar, Miguel, Prado, Victor, Gauto, Estefania, Upadhyay, Shristi, **Shrivastava, Trilok**, Chhabra, Navika, and Rosen, Fred R. "Impact and Predictors of Readmission in Hypercalcemia of Malignancy: Findings of a Nationwide Analysis." *Journal of Clinical Oncology* 39 (2021).

Macchi, Hugo, Salazar, Miguel, Fratti, Juan Del Cid, Gauto, Estefania, Baral, Binav, **Shrivastava, Trilok**, Upadhyay, Banskota, Shristi, Zia, Maryam, and Khanal, Nabin. "In-Hospital Outcomes of Transcatheter Aortic Valve Replacement (Tavr) in Patients with Localized and Metastatic Malignancy." *Journal of Clinical Oncology* 39 (2021).

Baral, Binav, Tariq, Muhammad Junaid, Lingamaneni, Prasanth, Barnawal, Anmol, **Shrivastava, Trilok**, Almani, Muhammad Usman, and Gupta, Shweta. "Health Care Utilization and Outcomes of Sepsis in HIV Versus Non-HIV Patients with Burkitt Lymphoma: A Nationwide Analysis." *Journal of Clinical Oncology* 39 (2021).

Lingamaneni, Prasanth, Tariq, Muhammad Junaid, Baral, Binav, **Shrivastava, Trilok**, Almani, Muhammad Usman, and Gupta, Shweta. "A Nationwide Analysis of Healthcare Utilization and Outcomes of Sepsis in HIV Versus Non-HIV Patients with Hodgkin Lymphoma." *Journal of Clinical Oncology* 39 (2021).

- Gauto, Estefania, Salazar, Miguel, Upadhyay, Shristi, Baral, Binav, Zia, Maryam, **Shrivastava, Trilok**, and Cattoni, Juan Adolfo "Risk Factors for 30-Day Readmissions in Patients with Tumor Lysis Syndrome and Solid Malignancies: Analysis from the National Readmission Database." *Journal of Clinical Oncology* 39 (2021).
- Lingamaneni, Prasanth, Katiyar, Vatsala, Moturi, Krishna, Baral, Binav, Vohra, Ishaan, **Shrivastava, Trilok**, and Zia, Maryam. "Clostridium Difficile Infection Is Independently Associated with Significantly Worse Outcomes in Acute Leukemia Patients Undergoing Chemotherapy and/or Hematopoietic Stem Cell Transplant." *Blood* 136.Supplement 1 (2020): 13-14.
- Salazar, Miguel, Upadhyay Banskota, Shristi, Acevedo, Lou Anne, Palacios, Pedro, Gauto, Estefania, Baral, Binav, **Shrivastava, Trilok**, and Khanal, Nabin. "Predictors of 30-Day Readmission Rate after Liver Transplant in Patients with Hepatocellular Carcinoma." *Journal of Clinical Oncology* 39 (2021).
- Salazar, Miguel, Gauto, Estefania, Upadhyay Banskota, Shristi, Palacios, Pedro, **Shrivastava, Trilok**, Baral, Binav, Alarcon, Pierre Alexander Rodriguez, Elsebaie, Maha A.T., and Khanal, Nabin. "Predictors of 30-Day Readmission Rate after Total Gastrectomy in Patients with Gastric Malignancy." *Journal of Clinical Oncology* 39 (2021).
- Lingamaneni, Prasanth, Baral, Binav, Moturi, Krishna Rekha, **Shrivastava, Trilok**, Darweesh, Omnia, and Gupta, Shweta. "Sixty-Day Unplanned Readmissions after Robot-Assisted Versus Open-Radical Prostatectomy." *39.6_suppl* (2021): 244-44.
- Shrivastava, Trilok**, Baral, Binav, Pudasaini, Garima, Lingamaneni, Prasanth, Batra, Kunnal, Banskota, Shristi Upadhyay, and Shrestha, Rohit "Survival Outcomes of Primary Mediastinal Germ Cell Malignancies Based on Clinicopathological Characteristics: A Seer Database Analysis." *Journal of Clinical Oncology* 39 (2021).
- Macchi, Hugo, Salazar, Miguel, Fratti, Juan Del Cid, Upadhyay, Shristi, Baral, Binav, **Shrivastava, Trilok**, Gauto, Estefania, and Cattoni, Juan Adolfo. "Thirty-Day Readmission after Percutaneous Coronary Intervention with Drug Eluting Stent in Patients with Active Malignancy." *Journal of Clinical Oncology* 39 (2021).
- Baral, Binav, Lingamaneni, Prasanth, Rosen, Fred R., **Shrivastava, Trilok**, Moturi, Krishna Rekha, Vohra, Ishaan, and Farooq, Muhammad Zain. "Impact of Failure to Thrive on Inpatient Mortality and Resource Utilization in Patients with Head and Neck Cancer: A Nationwide Analysis." *38.15_suppl* (2020): e18531-e31.
- Baral, Binav, Lingamaneni, Prasanth, **Shrivastava, Trilok**, Zia, Maryam, Vohra, Ishaan, and Moturi, Krishna Rekha. "Nationwide Trends and Outcomes in Neutropenic Acute Leukemia Patients with Invasive Aspergillosis." *Blood* 136.Supplement 1 (2020): 25-26.
- Farooq, Muhammad Zain, Ba Aqeel, Sheeba Habeeb, Lingamaneni, Prasanth, Banskota, Shristi Upadhyay, Pichardo, Rayli, Siddiqui, Mahrukh, **Shrivastava, Trilok**, and Mangla, Ankit. "Neurotoxicity Associated with Immune Checkpoint Inhibitors: Systematic Review and Meta-Analysis." *38.15_suppl* (2020): e15096-e96.
- Lingamaneni, Prasanth, Katiyar, Vatsala, Vohra, Ishaan, Moturi, Krishna, **Shrivastava, Trilok**, and Zia, Maryam. "Trends, Inpatient Outcomes and Readmissions in Patients with Myelodysplastic Syndrome Admitted for Heart Failure." *Blood* 136.Supplement 1 (2020): 7-8.
- Baral, Binav, Shaka, Hafeez, **Shrivastava, Trilok**, Upadhyay Banskota, Shristi, Mendez-Hernandez, Andres E, and Zia, Maryam. "Protein Energy Malnutrition Significantly Increases Mortality and Adverse Outcomes in Acute

Myelogenous Leukemia (Aml) Patients with Neutropenic Fever: Findings of a Nationwide Inpatient Sample Analysis." *Blood* 136.Supplement 1 (2020): 26-26.

Shresth, Sanjeet Krishna, Shrestha, Sanjeev, Sharma, Lucky, **Shrivastava, Trilok**, Mahaseth, Rinky, and Neopane, Arpana. "Assessing Quality of Sleep, Its Functional Outcome and Excessive Day Time Sleepiness in Shift Workers and Non-Shift Workers." (2019).

Shrivastava, Trilok, Pokhrel, Uma, Shrestha, Sumina, and Shrestha, Sanjeev. "Assessing the Possible Risk Factors of Male Infertility." 5.2 (2018): 60-64.

Malla, Aakriti, Pathak, John, Shrestha, Sanjeev, Pant, Aditi, **Shrivastava, Trilok**, Amatya, Sunita, and Joshi, Sunil Kumar. "A Study on Parental Age, Pregnancy Events and Autism Spectrum Disorders." (2017).

Jaskirat Sethi

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Flowood, MS 39232

256.783.5833

JSETHI@UMC.EDU

EDUCATION

Bachelor of Science in Chemistry

The University of Minnesota-Twin Cities, Minneapolis, MN

September 2007-May 2011

Post-Baccalaureate Coursework

The University of Alabama in Huntsville, Huntsville, AL

May 2011-May 2013

Medical Degree

The University of Alabama in Birmingham, Birmingham, AL

May 2013-May 2017

Internal Medicine Residency

The University of Mississippi

July 2017-Present

WORK EXPERIENCE

Pathology Interest Group

University of Alabama in Birmingham, Birmingham, AL

May 2014-March 2015

- President
- Organized meetings and workshops for medical students

Teaching Assistant

University of Alabama in Huntsville, Huntsville, AL

August 2012-May 2013

- Work ten hours per week teaching Quantitative Analysis Laboratory
- Make chemicals that are needed for the laboratory experiments

Peer Assisted Study Session (PASS) Leader

University of Alabama in Huntsville, Huntsville, AL

January 2012-May 2012

- Work eight hours per week assisting other students with Quantitative Analysis
- Work with faculty to ensure group study sessions are accurate and effective

RESEARCH

Research Assistant

Peter Mannon Group at University of Alabama in Birmingham, Birmingham, AL

January 2014-May 2017

- Identifying Cell Source of IL-13 Production in Ulcerative Colitis
- Poster Presentation at Medical Student Research Day 2014

Research Assistant

William Setzer Group at University of Alabama in Huntsville, Huntsville, AL

August 2010-May 2013

- Assist with HPLC work under the supervision of Dr. Setzer
- Use Spartan software to build molecules and use Molegro Virtual Docker to dock molecules

Research Assistant

Wayland Noland Group at University of Minnesota-Twin Cities, Minneapolis, MN

January 2009-May 2010

- Assist with organic synthesis under the supervision of Wayland Noland
- Gain insight into study of Diels-Alder Reactions

COMMUNITY SERVICE

Medical Student Volunteer

UAB Student Run Mental Health Clinic

January 2014- May 2017

- Evaluated and followed-up on patients with mental illnesses

Volunteer

Equal Access Birmingham, Follow-Up Volunteer

December 2013-March 2015

- I would help patients get follow-up appointments

Volunteer

Huntsville Hospital, Huntsville, AL

June 2010-June 2013

- Work four hours a week in Progressive Surgery Unit 2
- Work with the staff to help patients
- Organize and file papers



CURRICULUM VITAE

Shi-Ming Tu, MD

PRESENT TITLE AND AFFILIATION

Primary Appointment

Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX

Dual/Joint/Adjunct Appointment

N/A

CITIZENSHIP

United States

HOME ADDRESS

5210 Eagle Pointe
Sugar Land, TX 77479
Phone: (281) 565-0795

OFFICE ADDRESS

The University of Texas MD Anderson Cancer Center
1155 Pressler Street
Unit Number: 1374
Houston, TX 77030
Room Number: CPB7.3468
Phone: (713) 792-2830
Fax: (713) 745-1625
Email: stu@mdanderson.org

EDUCATION

Degree-Granting Education

The Johns Hopkins University, Baltimore, MD, BA, 1982, Chemistry
Washington University, St. Louis, MO, MD, 1987, Medicine

Postgraduate Training

Residency in Internal Medicine, University of Illinois Hospitals, Chicago, IL, 1987-1990
Clinical Fellowship, Genitourinary Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, 1990-1993

CREDENTIALS

Board Certification

Diplomate, National Board of Medical Examiners, 7/1988
Diplomate, American Board of Internal Medicine, 9/1990-9/2000
American Board of Medical Oncology, 11/1993-12/2023, Recertification Date: 11/2013

Licensures

Active

State of Texas, TX, J3922, 8/1993-2/2022

Inactive

State of California, CA, #G 75744, 1/1992

EXPERIENCE/SERVICE

Academic Appointments

Instructor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 9/1993-8/1995

Assistant Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 9/1995-8/2002

Associate Professor, Department of Genitourinary Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, 9/2002-9/2012

Professor, Department of Genitourinary Medical Oncology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, 9/2012-present

Administrative Appointments/Responsibilities

N/A

Other Appointments/Responsibilities

Associate Member, The University of Texas Graduate School of Biomedical Sciences, Houston, TX, 8/1998-8/2000

Endowed Positions

N/A

Consultantships

Abiraterone in Advanced Prostate Cancer Advisory Board, Phoenix, Arizona, Advisory Board, 4/2010

Denomusab Prostate Oncology Advisory Board, San Diego, California, Advisory Board, 7/2010

Amgen, San Diego, CA, Scientific/Advisory Committee Member, 7/2010

Novartis Advisory Board on use of Zometa and Denosumab in Prostate Cancer, Coral Gables Florida, 10/2010

Quadramet Advisory Board, Miami, FL, Consultant, 4/2011

Bayer/Algeta, San Francisco, CA, Scientific/Advisory Committee Member, 1/2014

AstraZeneca, Denver, CO, Scientific/Advisory Committee Member, 6/2017

Janssen Biotech, Austin, TX, Scientific/Advisory Committee Member, 7/2019

Military or Other Governmental Service

N/A

Institutional Committee Activities

Quality Assurance Sub-committee, 1/1995

Medical Record Sub-committee, 1/1997

Medical Oncology Fellowship Committee, 1/1999-1/2003

Clinical Research Committee I, 1/2000

Medical Practice Sub-Committee, 1/2002

Therapeutic Nuclear Medicine (TMN) Program Steering Committee, 1/2002

The University of Texas M. D. Anderson Physicians Network, Faculty Consultant, 2006-present

HONORS AND AWARDS

University Cancer Foundation Research Award, 1993

Upjohn Research Award, 1993

Americas Registry of Outstanding Professionals, 2001

Merit Awards, MD Anderson Cancer Center, 2003-2009

Keynote Presenter, National Defense Medical Center Alumni Association of North America, 2009

Melvin L. Samuels Award for Excellence in Patient Care Nominee, MD Anderson Cancer Center, 2012, 2015, 2017

Gerald P. Bodey Award for Excellence in Education Nominee, MD Anderson Cancer Center, 2016

Keynote Presenter, University of Hong Kong, 2018

RESEARCH

Grants and Contracts

Funded

N/A

Pending

Mentor, Origin of germ cell tumors: presence of somatic transformation and role of cancer stem cells in the differentiation of teratoma, CDMSp, PI - Umbreit

Collaborator, Targeting glypican-3 for the treatment of lethal germ cell tumor phenotypes, Small Business Technology Transfer (STTR) Program, PI - Delpassand

Other

N/A

Completed

Co-Principal Investigator, 5%, Elucidation of bone-response factors in advanced prostate cancer after bone-targeted therapy, CaP CURE, 1/1/2000, \$100,000

Co-Principal Investigator, 2%, Soluble ErbB3 as Bone Epithelial Interacting Factor, CA090270 04 (PP-6), NIH/NCI, 1/1/2004-12/31/2004, \$149,999

Principal Investigator-MDACC, 5%, Clinical Application of bone metastasis factor-1, Institutional research grant, 2004-2006, \$49,400

Mentor, Mechanisms of somatic transformation in second malignancies and refractory tumors of patients with non-seminomatous germ cell tumor, Pathology Junior Faculty Grant, PI - Zhang M, 7/2019-6/2020

Not Funded

Principal Investigator, Origin of a second malignancy harboring isochromosome 12p [i(12p)] in patients with history of testicular germ cell tumor, Patient Donor Sponsored Grant, 2019

Principal Investigator, Origin of extragonadal versus gonadal seminomas, Patient Donor Sponsored Grant, 2020

Protocols

Funded

Principal Investigator, Phase I/II Trial of Samarium Sm-153 Lexidronam Combined with Docetaxel for Patients with Androgen-Independent Prostate, 2004-0396, 2004, \$186,102, Cytogene Corporation

Principal Investigator, Bone-Targeted Therapy Consisting Of Zolendronic Acid, Thalidomide, And Gamma Interferon In Renal Cell Carcinoma: A Phase II Study, 2005-0652, 2005, \$252,283, Novartis

Unfunded

Collaborator, Prospective tissue bank for patients with or suspected to have genitourinary malignancies, Lab02-152, PI - Logothetis, 2013

Collaborator, Intratumoral heterogeneity in nonseminomatous germ cell tumors: clinical and biological implications, PA14-0894, PI - Pisters, 2016

Consultant, Randomized phase II clinical trial using a bone-targeted regimen containing strontium-89 for the treatment of patients with high-risk metastatic prostate cancer, CSP, 2020, VA Cooperative Studies Program (CSP) clinical trial sponsored by Q BioMed Inc

Patents and Technology Licenses

Patents

University of Houston, Injectable Diethylstilbestrol Nanosuspension formulation, United States, 16/636478, Pending

Technology Licenses

N/A

Grant Reviewer/Service on Study Sections

Prostate Cancer Research Program, DOD, Member, 2013-2014

CDMSP Rare Cancers, DOD, Member, 2019

CDMSP Prostate Cancer, DOD, Member, 2020

PUBLICATIONS

Peer-Reviewed Original Research Articles

1. Deckmyn H, Tu SM, Majerus PW. Guanine nucleotides stimulate soluble phosphoinositide-specific phospholipase C in the absence of membranes. *J Biol Chem* 261(35):16553-8, 12/1986. PMID: 3023354.
2. McDonnell TJ, Troncoso P, Brisbay SM, Logothetis C, Chung LW, Hsieh JT, Tu SM, Campbell ML. Expression of the protooncogene bcl-2 in the prostate and its association with emergence of androgen-independent prostate cancer. *Cancer Res* 52(24):6940-4, 12/1992. PMID: 1458483.
3. McDonnell TJ, Marin MC, Hsu B, Brisbay SM, McConnell K, Tu SM, Campbell ML, Rodriguez-Villanueva J. The bcl-2 oncogene: apoptosis and neoplasia. *Radiat Res* 136(3):307-12, 12/1993. PMID: 8278571.
4. Tu SM, Robinson ED, Amato RJ, Ellerhorst JA, Kilbourn RG, Logothetis CJ. A phase I study of FAP (5-Fluorouracil, a-interferon and cisplatin) combined with methotrexate for the treatment of advanced urothelial malignancies. *Urol Oncol* 1(4):156-60, Jul-Aug, 7/1995. PMID: 21224110.
5. Tu SM, McConnell K, Marin MC, Campbell ML, Fernandez A, von Eschenbach AC, McDonnell TJ. Combination adriamycin and suramin induces apoptosis in bcl-2 expressing prostate carcinoma cells. *Cancer Lett* 93(2):147-55, 7/1995. PMID: 7621422.
6. Logothetis CJ, Finn LD, Smith T, Kilbourn RG, Ellerhorst JA, Zukiwski AA, Sella A, Tu SM, Amato RJ. Escalated MVAC with or without recombinant human granulocyte-macrophage colony-stimulating factor for the initial treatment of advanced malignant urothelial tumors: results of a randomized trial. *J Clin Oncol* 13(9):2272-7, 9/1995. PMID: 7666085.
7. Tu SM, Hossan E, Amato R, Kilbourn R, Logothetis CJ. Paclitaxel, cisplatin and methotrexate combination chemotherapy is active in the treatment of refractory urothelial malignancies. *J Urol* 154(5):1719-22, 11/1995. e-Pub 9/1995. PMID: 7563331.
8. Tu SM, Delpassand ES, Jones D, Amato RJ, Ellerhorst J, Logothetis CJ. Strontium-89 combined with doxorubicin in the treatment of patients with androgen-independent prostate cancer. *Urol Oncol* 2(6):191-7, Nov-Dec, 11/1996. PMID: 21224168.
9. Navone NM, Olive M, Ozen M, Davis R, Troncoso P, Tu SM, Johnston D, Pollack A, Pathak S, von Eschenbach AC, Logothetis CJ. Establishment of two human prostate cancer cell lines derived from a single bone metastasis. *Clin Cancer Res* 3(12 Pt 1):2493-500, 12/1997. PMID: 9815652.
10. Ellerhorst JA, Sella A, Amato RJ, Tu SM, Millikan RE, Finn LD, Banks M, Logothetis CJ. Phase II trial of 5-fluorouracil, interferon-alpha and continuous infusion interleukin-2 for patients with metastatic renal cell carcinoma. *Cancer* 80(11):2128-32, 12/1997. PMID: 9392335.

11. Ellerhorst JA, Tu SM, Amato RJ, Finn L, Millikan RE, Pagliaro LC, Jackson A, Logothetis CJ. Phase II trial of alternating weekly chemohormonal therapy for patients with androgen-independent prostate cancer. *Clin Cancer Res* 3(12 Pt 1):2371-6, 12/1997. PMID: 9815636.
12. DeLima M, Amato RJ, Jackson A, Tu SM, Banks M, Finn L, Ellerhorst J. Phase I-II study of gamma interferon and 5-fluorouracil for patients with metastatic renal cell carcinoma. *Cancer Biother Radiopharm* 12(6):365-70, 12/1997. PMID: 10851489.
13. Westney OL, Pisters LL, Pettaway CA, Tu SM, Pollack A, Dinney CP. Presentation, methods of diagnosis and therapy for pelvic recurrence following radical cystectomy for transitional cell carcinoma of the bladder. *J Urol* 159(3):792-5, 3/1998. PMID: 9474150.
14. Tu SM, Pagliaro LC, Banks ME, Amato RJ, Millikan RE, Bugazia NA, Madden T, Newman RA, Logothetis CJ. Phase I study of suramin combined with doxorubicin in the treatment of androgen-independent prostate cancer. *Clin Cancer Res* 4(5):1193-201, 5/1998. e-Pub 5/1998. PMID: 9607577.
15. Beham AW, Sarkiss M, Brisbay S, Tu SM, von Eschenbach AC, McDonnell TJ. Molecular correlates of bcl-2-enhanced growth following androgen-ablation in prostate carcinoma cells in vivo. *Int J Mol Med* 1(6):953-9, 6/1998. PMID: 9852630.
16. Pagliaro L, Daliani D, Amato R, Tu SM, Jones D, Smith T, Logothetis C, Millikan R. A Phase II trial of bryostatin-1 for patients with metastatic renal cell carcinoma. *Cancer* 89(3):615-8, 8/2000. PMID: 10931461.
17. Tu SM, Millikan RE, Mengistu B, Delpassand ES, Amato RJ, Pagliaro LC, Daliani D, Papandreou CN, Smith TL, Kim J, Podoloff DA, Logothetis CJ. Bone-targeted therapy for advanced androgen-independent carcinoma of the prostate a randomised phase II trial. *Lancet* 357(9253):336-41, 2/2001. PMID: 11210994.
18. Sexton WJ, Lance RE, Reyes AO, Pisters PW, Tu SM, Pisters LL. Adult prostate sarcoma: the M.D. Anderson Cancer Center Experience. *J Urol* 166(2):521-5, 8/2001. PMID: 11458058.
19. Park DS, Vassilopoulou Sellin R, Tu SM. Estramustine-related hypocalcemia in patients with prostate carcinoma and osteoblastic metastases. *Urology* 58(1):105, 2001. PMID: 11445494.
20. Siefker-Radtke AO, Millikan RE, Tu SM, Moore DF, Smith TL, Williams D, Logothetis CJ. Phase III trial of fluorouracil, interferon alpha-2b, and cisplatin versus methotrexate, vinblastine, doxorubicin, and cisplatin in metastatic or unresectable urothelial cancer. *J Clin Oncol* 20(5):1361-7, 3/2002. PMID: 11870180.
21. Fizazi K, Prow DM, Do KA, Wang X, Finn L, Kim J, Daliani D, Papandreou CN, Tu SM, Millikan RE, Pagliaro LC, Logothetis CJ, Amato RJ. Alternating dose-dense chemotherapy in patients with high volume disseminated non-seminomatous germ cell tumours. *Br J Cancer* 86(10):1555-60, 5/2002. PMCID: PMC2746595.
22. Tu SM, Reyes A, Maa A, Bhowmick D, Pisters LL, Pettaway CA, Lin SH, Troncoso P, Logothetis CJ. Prostate carcinoma with testicular or penile metastases. Clinical, pathologic, and immunohistochemical features. *Cancer* 94(10):2610-7, 5/2002. PMID: 12173328.
23. Pagliaro LC, Millikan RE, Tu SM, Williams D, Daliani D, Papandreou CN, Logothetis CJ. Cisplatin, gemcitabine, and ifosfamide as weekly therapy: a feasibility and phase II study of salvage treatment for advanced transitional-cell carcinoma. *J Clin Oncol* 20(13):2965-70, 7/2002. PMID: 12089226.
24. Papandreou CN, Daliani DD, Thall PF, Tu SM, Wang X, Reyes A, Troncoso P, Logothetis CJ. Results of a Phase II Study with Doxorubicin, Etoposide, and Cisplatin in Patients with Fully Characterized Small-Cell Carcinoma of the Prostate. *J Clin Oncol* 20(14):3072-3080, 7/2002. PMID: 12118020.
25. Tu SM, Lin SH, Logothetis CJ. Stem-cell origin of metastasis and heterogeneity in solid tumours. *Lancet Oncol* 3(8):508-13, 8/2002. PMID: 12147437.
26. Kim J, Millikan RE, Smith TL, Tu SM, Pagliaro LC, Logothetis CJ. Treating refractory advanced or metastatic urothelial carcinoma with interleukin-2: a phase II study. *Urol Oncol* 21(1):21-6, Jan-Feb, 1/2003. PMID: 12684123.
27. Daliani DD, Assikis V, Tu SM, Papandreou CN, Pagliaro LC, Holtkamp T, Wang X, Thall PF, Logothetis CJ. Phase II trial of cyclophosphamide, vincristine, and dexamethasone in the treatment of androgen-independent prostate carcinoma. *Cancer* 97(3):561-7, 2/2003. PMID: 12548597.

28. Pagliaro LC, Delpassand ES, Williams D, Millikan RE, Tu SM, Logothetis CJ. A Phase I/II study of strontium-89 combined with gemcitabine in the treatment of patients with androgen independent prostate carcinoma and bone metastases. *Cancer* 97(12):2988-94, 6/2003. PMID: 12784333.
29. Esmaeli B, Hidaji L, Adinin RB, Faustina M, Coats C, Arbuckle R, Rivera E, Valero V, Tu SM, Ahmadi MA. Blockage of the lacrimal drainage apparatus as a side effect of docetaxel therapy. *Cancer* 98(3):504-7, 8/2003. PMID: 12879466.
30. Tu SM, Millikan RE, Pagliaro LC, Daliani D, Papandreou CN, Kim J, Chen DT, Williams DL, Logothetis CJ. Treatment of refractory urothelial carcinoma with alternating paclitaxel, methotrexate, cisplatin (TMP) and 5-fluorouracil, alpha-interferon, cisplatin (FAP). *Urol Oncol* 21(5):342-8, Sep-Oct, 9/2003. PMID: 14670540.
31. Papandreou CN, Daliani DD, Nix D, Yang H, Madden T, Wang X, Pien CS, Millikan RE, Tu SM, Pagliaro L, Kim J, Adams J, Elliott P, Esseltine D, Petrusich A, Dieringer P, Perez C, Logothetis CJ. Phase I trial of the proteasome inhibitor bortezomib in patients with advanced solid tumors with observations in androgen-independent prostate cancer. *J Clin Oncol* 22(11):2108-21, 6/2004. PMID: 15169797.
32. Vakar-Lopez F, Cheng CJ, Kim J, Shi GG, Troncoso P, Tu SM, Yu-Lee LY, Lin SH. Up-regulation of MDA-BF-1, a secreted isoform of ErbB3, in metastatic prostate cancer cells and activated osteoblasts in bone marrow. *J Pathol* 203(2):688-95, 6/2004. PMID: 15141384.
33. Tu SM, Kim J, Pagliaro LC, Vakar-Lopez F, Wong FC, Wen S, General R, Podoloff DA, Lin SH, Logothetis CJ. Therapy tolerance in selected patients with androgen-independent prostate cancer following strontium-89 combined with chemotherapy. *J Clin Oncol* 23(31):7904-10, 11/2005. PMID: 16258090.
34. Tannir N, Jonasch E, Pagliaro LC, Mathew P, Siefker-Radtke A, Rhines L, Lin P, Tibbs R, Do KA, Lin SH, Tu SM. Pilot trial of bone-targeted therapy with zoledronate, thalidomide, and interferon-gamma for metastatic renal cell carcinoma. *Cancer* 107(3):497-505, 8/2006. PMID: 16795067.
35. Spiess PE, Brown GA, Liu P, Tannir NM, Tu SM, Evans JG, Czerniak B, Kamat AM, Pisters LL. Predictors of outcome in patients undergoing postchemotherapy retroperitoneal lymph node dissection for testicular cancer. *Cancer* 107(7):1483-90, 10/2006. PMID: 16944541.
36. Spiess PE, Brown GA, Pisters LL, Liu P, Tu SM, Evans JG, Kamat AM, Black P, Tannir NM. Viable malignant germ cell tumor in the postchemotherapy retroperitoneal lymph node dissection specimen: can it be predicted using clinical parameters? *Cancer* 107(7):1503-10, 10/2006. PMID: 16944534.
37. Pagliaro LC, Perez CA, Tu SM, Daliani DD. Phase II study of capecitabine single-agent therapy in patients with metastatic renal cell carcinoma. *Urol Oncol* 24(6):487-91, Nov-Dec, 11/2006. PMID: 17138128.
38. Tuziak T, Spiess PE, Abrahams NA, Wrona A, Tu SM, Czerniak B. Multilocular cystadenoma and cystadenocarcinoma of the prostate. *Urol Oncol* 25(1):19-25, Jan-Feb, 1/2007. PMID: 17208134.
39. Leibovici D, Spiess PE, Agarwal PK, Tu SM, Pettaway CA, Hitzhusen K, Millikan RE, Pisters LL. Prostate cancer progression in the presence of undetectable or low serum prostate-specific antigen level. *Cancer* 109(2):198-204, 1/2007. PMID: 17171704.
40. Spiess PE, Brown GA, Liu P, Tu SM, Tannir NM, Evans JG, Kamat AM, Kassouf W, Pisters LL. Recurrence pattern and proposed surveillance protocol following post-chemotherapy retroperitoneal lymph node dissection. *J Urol* 177(1):131-8, 1/2007. PMID: 17162023.
41. Lin BY, Chao TH, Yao Y, Tu SM, Wu CC, Chern JY, Chao SH, Shaw KY. How can activity-based costing methodology be performed as a powerful tool to calculate costs and secure appropriate patient care? *J Med Syst* 31(2):85-90, 4/2007. PMID: 17489499.
42. Kopetz S, Jimenez C, Tu SM, Sharma P. Pulmonary arteriovenous fistula in a patient with renal cell carcinoma. *Eur Respir J* 29(4):813-5, 4/2007. PMID: 17400880.
43. Spiess PE, Kassouf W, Brown GA, Kamat AM, Liu P, Gomez JA, Tu SM, Tannir NM, Pisters LL. Surgical management of growing teratoma syndrome: the M. D. Anderson cancer center experience. *J Urol* 177(4):1330-4; discussion 1334, 4/2007. PMID: 17382725.

44. Cheng CJ, Ye XC, Vakar-Lopez F, Kim J, Tu SM, Chen DT, Navone NM, Yu-Lee LY, Lin SH, Hu MC. Bone microenvironment and androgen status modulate subcellular localization of ErbB3 in prostate cancer cells. *Mol Cancer Res* 5(7):675-84, 7/2007. PMID: PMC2000833.
45. Lin PP, Mirza AN, Lewis VO, Cannon CP, Tu SM, Tannir NM, Yasko AW. Patient survival after surgery for osseous metastases from renal cell carcinoma. *J Bone Joint Surg Am* 89(8):1794-801, 8/2007. PMID: 17671020.
46. Mathew P, Thall PF, Bucana CD, Oh WK, Morris MJ, Jones DM, Johnson MM, Wen S, Pagliaro LC, Tannir NM, Tu SM, Meluch AA, Smith L, Cohen L, Kim SJ, Troncso P, Fidler IJ, Logothetis CJ. Platelet-derived growth factor receptor inhibition and chemotherapy for castration-resistant prostate cancer with bone metastases. *Clin Cancer Res* 13(19):5816-24, 10/2007. PMID: 17908974.
47. Spiess PE, Tannir NM, Brown GA, Liu P, Tu SM, Evans JG, Pisters LL. Recurrence in nonseminomatous germ cell testis tumor patients with no viable tumor at postchemotherapy retroperitoneal lymph node dissection. *Urology* 70(6):1173-8, 12/2007. PMID: 18158041.
48. Spiess PE, Tannir NM, Tu SM, Brown GA, Liu P, Kamat AM, Wood CG, Evans JG, Pisters LL. Viable germ cell tumor at postchemotherapy retroperitoneal lymph node dissection: can we predict patients at risk of disease progression? *Cancer* 110(12):2700-8, 12/2007. PMID: 17948916.
49. Jonasch E, Wood C, Tamboli P, Pagliaro LC, Tu SM, Kim J, Srivastava P, Perez C, Isakov L, Tannir N. Vaccination of metastatic renal cell carcinoma patients with autologous tumour-derived vitespen vaccine: clinical findings. *Br J Cancer* 98(8):1336-41, 4/2008. e-Pub 3/2008. PMID: PMC2361701.
50. Lin SH, Lee YC, Choueiri MB, Wen S, Mathew P, Ye X, Do KA, Navone NM, Kim J, Tu SM, Yu-Lee LY, Logothetis CJ. Soluble ErbB3 levels in bone marrow and plasma of men with prostate cancer. *Clin Cancer Res* 14(12):3729-36, 6/2008. PMID: PMC2562877.
51. Lin SH, Cheng CJ, Lee YC, Ye X, Tsai WW, Kim J, Pasqualini R, Arap W, Navone NM, Tu SM, Hu M, Yu-Lee LY, Logothetis CJ. A 45-kDa ErbB3 secreted by prostate cancer cells promotes bone formation. *Oncogene* 27(39):5195-203, 9/2008. e-Pub 5/2008. PMID: PMC2562662.
52. Bilen MA, Waguespack SG, Tannir NM, Pravinkumar SE, Tamboli P, Tu SM. Multisystem crisis in a patient with presumptive renal cell carcinoma. *Clin Genitourin Cancer* 6(2):128-30, 9/2008. PMID: 18824438.
53. Svatek RS, Spiess PE, Sundi D, Tu SM, Tannir NM, Brown GA, Kamat AM, Wood CG, Pisters LL. Long-term outcome for men with teratoma found at postchemotherapy retroperitoneal lymph node dissection. *Cancer* 115(6):1310-7, 3/2009. PMID: 19156903.
54. Gnjjatic S, Altorki NK, Tang DN, Tu SM, Kundra V, Ritter G, Old LJ, Logothetis CJ, Sharma P. NY-ESO-1 DNA Vaccine Induces T Cell Responses that are Suppressed by Regulatory T Cells. *Clin Cancer Res* 15(6):2130-9, 3/2009. e-Pub 3/2009. PMID: PMC5806520.
55. Williams BJ, Fox BD, Sciubba DM, Suki D, Tu SM, Kuban D, Gokaslan ZL, Rhines LD, Rao G. Surgical management of prostate cancer metastatic to the spine. *J Neurosurg Spine* 10(5):414-22, 5/2009. PMID: 19442002.
56. Tu SM, Lopez A, Leibovici D, Bilen MA, Evliyaoglu F, Aparicio A, Guo CC, Kuban DA, Johnson MM, Pisters LL. Ductal Adenocarcinoma of the Prostate - Clinical Features and Implications after Local Therapy. *Cancer* 115(13):2872-80, 7/2009. e-Pub 4/2009. PMID: 19402048.
57. Tu SM, Mathew P, Wong FC, Jones D, Johnson MM, Logothetis CJ. Phase I Study of Concurrent Weekly Docetaxel and Repeated Samarium-153 Lexidronam in Patients With Castration-Resistant Metastatic Prostate Cancer. *J Clin Oncol* 27(20):3319-24, 7/2009. e-Pub 5/2009. PMID: PMC4371137.
58. Guo CC, Punar M, Contreras AL, Tu SM, Pisters L, Tamboli P, Czerniak B. Testicular germ cell tumors with sarcomatous components: an analysis of 33 cases. *Am J Surg Pathol* 33(8):1173-8, 8/2009. PMID: PMC3812063.
59. Jonasch E, Wood CG, Matin SF, Tu SM, Pagliaro LC, Corn PG, Aparicio A, Tamboli P, Millikan RE, Wang X, Araujo JC, Arap W, Tannir N. Phase II presurgical feasibility study of bevacizumab in untreated patients with metastatic renal cell carcinoma. *J Clin Oncol* 27(25):4076-81, 9/2009. e-Pub 7/2009. PMID: PMC4371138.

60. Taplin ME, Regan MM, Ko YJ, Bubley GJ, Duggan SE, Werner L, Beer TM, Ryan CW, Mathew P, Tu SM, Denmeade SR, Oh WK, Sartor O, Mantzoros CS, Rittmaster R, Kantoff PW, Balk SP. "Phase II study of androgen synthesis inhibition with ketoconazole, hydrocortison and dutasteride (KHAD) in asymptomatic castration resistant prostate cancer". *Clin Cancer Res* 15(22):7099-105, 11/2009. e-Pub 11/2009. PMCID: PMC3644858.
61. Mathew P, Tannir N, Tu SM, Carter CM, Bekele NB, Pagliaro L. A modular Phase 1 study of lenalidomide and paclitaxel in metastatic castration-resistant prostate cancer following prior taxane therapy. *Cancer Chemother Pharmacol* 65(4):811-5, 3/2010. e-Pub 1/2010. PMCID: PMC4436674.
62. Contreras AL, Punar M, Tamboli P, Tu SM, Pisters L, Moran C, Czerniak BA, Guo CC. Mediastinal germ cell tumors with an angiosarcomatous component: a report of 12 cases. *Hum Pathol* 41(6):832-7, 6/2010. e-Pub 2/2010. PMCID: PMC4163004.
63. Mathew P, Tannir N, Tu SM, Wen S, Guo CC, Marcott V, Bekele BN, Pagliaro L. Accelerated disease progression in prostate cancer and bone metastases with platelet-derived growth factor receptor inhibition: observations with tandutinib. *Cancer Chemother Pharmacol* 68(4):889-96, 10/2011. e-Pub 2/2011. PMID: 21290244.
64. Atkinson BJ, Tu SM. Radiopharmaceuticals: present and future. *J Support Oncol* 9(6):206-7, Nov-Dec, 11/2011. e-Pub 9/2011. PMID: 22005215.
65. Staquicini FI, Cardó-Vila M, Kolonin MG, Trepel M, Edwards JK, Nunes DN, Sergeeva A, Efsthathiou E, Sun J, Almeida NF, Tu SM, Botz GH, Wallace MJ, O'Connell DJ, Krajewski S, Gershenwald JE, Molldrem JJ, Flamm AL, Koivunen E, Pentz RD, Dias-Neto E, Setubal JC, Cahill DJ, Troncoso P, Do KA, Logothetis CJ, Sidman RL, Pasqualini R, Arap W. Vascular ligand-receptor mapping by direct combinatorial selection in cancer patients. *Proc Natl Acad Sci U S A* 108(46):18637-42, 11/2011. e-Pub 11/2011. PMCID: PMC3219136.
66. Manoukian GE, Tannir NM, Jonasch E, Qiao W, Haygood TM, Tu SM. Pilot trial of bone-targeted therapy combining zoledronate with fluvastatin or atorvastatin for patients with metastatic renal cell carcinoma. *Clin Genitourin Cancer* 9(2):81-8, 12/2011. e-Pub 10/2011. PMCID: PMC3641665.
67. Bilen MA, General R, Tu SM. Prolonged remission of fulminant castrate-resistant prostate cancer: a case report. *Clin Genitourin Cancer* 9(2):133-6, 12/2011. e-Pub 5/2011. PMCID: PMC3205279.
68. He XX, Tu SM, Lee MH, Yeung SC. Thiazolidinediones and metformin associated with improved survival of diabetic prostate cancer patients. *Ann Oncol* 22(12):2640-5, 12/2011. e-Pub 3/2011. PMCID: PMC3221513.
69. Yennurajalingam S, Atkinson B, Masterson J, Hui D, Urbauer D, Tu SM, Bruera E. The impact of an outpatient palliative care consultation on symptom burden in advanced prostate cancer patients. *J Palliat Med* 15(1):20-4, 1/2012. e-Pub 12/2011. PMID: 22141432.
70. Tu SM, Lin SH. Prostate cancer stem cells. *Clin Genitourin Cancer* 10(2):69-76, 6/2012. e-Pub 3/2012. PMCID: PMC4141775.
71. Tu SM, Chen AH. Re: Positive effects of zoledronate on skeletal-related events in patients with renal cell cancer and bone metastases. *Can J Urol* 19(3):6268, 6/2012. PMID: 22704311.
72. Som A, Zhu R, Guo CC, Efsthathiou E, Xiao L, Pisters LL, Matin A, Tu SM. Recurrent seminomas: Clinical features and biologic implications. *Urol Oncol* 30(4):494-501, Jul-Aug, 7/2012. e-Pub 9/2010. PMCID: PMC3856193.
73. Tu SM, Som A, Tu B, Logothetis CJ, Lee MH, Yeung SC. Effect of paget's disease of bone (osteitis deformans) on the progression of prostate cancer bone metastasis. *Br J Cancer* 107(4):646-51, 8/2012. PMCID: PMC3419961.
74. Som A, Tu SM, Liu J, Wang X, Qiao W, Logothetis C, Corn PG. Response in bone turnover markers during therapy predicts overall survival in patients with metastatic prostate cancer: analysis of three clinical trials. *Br J Cancer* 107(9):1547-53, 10/2012. e-Pub 10/2012. PMCID: PMC3493771.
75. Rodney AJ, Tannir NM, Siefker-Radtke AO, Liu P, Walsh GL, Millikan RE, Swisher SG, Tu SM, Pagliaro LC. Survival outcomes for men with mediastinal germ-cell tumors: The University of Texas M. D. Anderson Cancer Center experience. *Urol Oncol* 30(6):879-85, Nov-Dec, 11/2012. e-Pub 10/2010. PMCID: PMC3956468.

76. Tu SM. Cancer: a "stem-cell" disease? *Cancer Cell Int* 13(1):40, 5/2013. PMCID: PMC3651409.
77. Bilen MA, Kim J, Wang H, Tu SM. Cixutumumab-Associated Pancolitis in a Patient With Prostate Cancer. *Clin Genitourin Cancer* 11(2):207-10, 6/2013. e-Pub 10/2012. PMCID: PMC3579009.
78. Aparicio AM, Harzstark A, Corn PG, Wen S, Araujo J, Tu SM, Pagliaro L, Kim J, Millikan RE, Ryan CJ, Tannir NM, Zurita A, Mathew P, Arap W, Troncoso P, Thall P, Logothetis CJ. Platinum-Based Chemotherapy for Variant Castrate-Resistant Prostate Cancer. *Clin Cancer Res* 19(13):3621-30, 7/2013. PMCID: PMC3699964.
79. Som A, Xiao L, Zhu R, Guo CC, Xiao L, Rao P, Efsthathiou E, Matin A, Tu SM. Clinically atypical seminomas with yolk sac tumor features. *Can J Urol* 20(4):6860-7, 8/2013. PMID: 23930614.
80. Som A, Wen S, Tu SM. Stem cell origin of testicular seminoma. *Clin Genitourin Cancer* 11(4):489-94, 12/2013. e-Pub 7/2013. PMCID: PMC3834099.
81. Bilen MA, Hariri H, Leon C, Guo CC, Kuban DA, Pisters LL, Tu SM. Positive FDG-PET/CT scans of a residual seminoma after chemotherapy and radiotherapy: case report and review of the literature. *Clin Genitourin Cancer* 12(4):e147-50, 8/2014. e-Pub 2/2014. PMCID: PMC4104212.
82. Tu SM, Bilen MA, Tannir NM. The scientific method: pillar and pitfall of cancer research. *Cancer Med* 3(4):1035-7, 8/2014. e-Pub 4/2014. PMCID: PMC4303171.
83. Bilen MA, Reyes A, Bhowmick D, Maa A, Bast R, Pisters LL, Lin SH, Logothetis CJ, Tu SM. Variant prostate carcinoma and elevated serum CA-125. *Can J Urol* 21(5):7442-8, 10/2014. PMCID: PMC4400850.
84. Efsthathiou E, Titus M, Wen S, Hoang A, Karlou M, Ashe R, Tu SM, Aparicio A, Troncoso P, Mohler J, Logothetis CJ. Molecular characterization of enzalutamide-treated bone metastatic castration-resistant prostate cancer. *Eur Urol* 67(1):53-60, 1/2015. e-Pub 5/2014. PMCID: PMC4247811.
85. Bilen MA, Johnson MM, Mathew P, Pagliaro LC, Araujo JC, Aparicio A, Corn PG, Tannir NM, Wong FC, Fisch MJ, Logothetis CJ, Tu SM. Randomized phase 2 study of bone-targeted therapy containing strontium-89 in advanced castrate-sensitive prostate cancer. *Cancer* 121(1):69-76, 1/2015. PMCID: PMC4270821.
86. Hamdi A, Mulanovich VE, Matin SF, Landon G, Sircar K, Tu SM, Nieto Y. Isolated renal mucormycosis in a transplantation recipient. *J Clin Oncol* 33(10):e50-1, 10.1200/JCO.2013.49.1969, 2015 Apr 1; 4/2015. e-Pub 5/2014. PMID: 24821884.
87. Pagliaro LC, Tannir NM, Tu SM, Logothetis CJ. Management of Clinical Stage I Testicular Cancer: How Should We Define Success? *J Clin Oncol* 33(20):2321-2, 7/2015. e-Pub 6/2015. PMID: 26033805.
88. Tu SM, Bilen MA, Lin SH. Radium-223: Optimizing Treatment and Research of Osteoblastic Bone Metastasis. *Oncology (Williston Park)* 29(7):490-2, 7/2015. PMID: 26178337.
89. Nieto Y, Tu SM, Bassett R, Jones RB, Gulbis AM, Tannir N, Kingham A, Ledesma C, Margolin K, Holmberg L, Champlin R, Pagliaro L. Bevacizumab/high-dose chemotherapy with autologous stem-cell transplant for poor-risk relapsed or refractory germ-cell tumors. *Ann Oncol* 26(10):2125-32, 10/2015. e-Pub 7/2015. PMCID: PMC5006186.
90. Nieto Y, Tu SM, Bassett R, Jones RB, Gulbis AM, Tannir N, Kingham A, Ledesma C, Margolin K, Holmberg L, Champlin R, Pagliaro L. Bevacizumab/high-dose chemotherapy with autologous stem-cell transplant for poor-risk relapsed or refractory germ-cell tumors. *Ann Oncol* 26(12):2507-8, 12/2015. e-Pub 10/2015. PMCID: PMC4855246.
91. Wu W, Liu X, Chafitani P, Cruz Carreras MT, Gonzalez C, Viets-Upchurch J, Merriman K, Tu SM, Dalal S, Yeung SC. Association of body composition with outcome of docetaxel chemotherapy in metastatic prostate cancer: a retrospective review. *PLoS One* 10(3):e0122047, 2015. e-Pub 3/2015. PMCID: PMC4379069.
92. Bilen MA, Lin SH, Tang DG, Parikh K, Lee MH, Yeung SC, Tu SM. Maintenance therapy containing metformin and/or zylamend for advanced prostate cancer: a case series. *Case Rep Oncol Med* 2015(471861):471861, 2015. e-Pub 3/2015. PMCID: PMC4377453.
93. Tu SM, Bilen MA, Tannir NM. Personalised cancer care: promises and challenges of targeted therapy. *J R Soc Med* 109(3):98-105, 3/2016. e-Pub 3/2016. PMCID: PMC4794967.

94. Tu SM, Bilen MA, Hess KR, Broaddus RR, Kopetz S, Wei C, Pagliaro LC, Karam JA, Ward JF, Wood CG, Rao P, Tu ZH, General R, Chen AH, Nieto YL, Yeung SC, Lin SH, Logothetis CJ, Pisters LL. Intratumoral heterogeneity: Role of differentiation in a potentially lethal phenotype of testicular cancer. *Cancer* 122(12):1836-43, 6/2016. e-Pub 3/2016. PMCID: PMC5071733.
95. Bilen MA, Hess KR, Campbell MT, Wang J, Broaddus RR, Karam JA, Ward JF, Wood CG, Choi SL, Rao P, Zhang M, Naing A, General R, Cauley DH, Lin SH, Logothetis CJ, Pisters LL, Tu SM. Intratumoral heterogeneity and chemoresistance in nonseminomatous germ cell tumor of the testis. *Oncotarget* 7(52):86280-86289, 12/2016. PMCID: PMC5349913.
96. Guo Y, Fu JB, Guo H, Camp J, Shin KY, Tu SM, Palmer LJ, Yadav R. Postacute Care in Cancer Rehabilitation. *Phys Med Rehabil Clin N Am* 28(1):19-34, 2/2017. PMID: 27912997.
97. Msaouel P, Zhang M, Tu SM. Prolonged Remission of Upper Urinary Tract Urothelial Carcinoma With Prominent Choriocarcinomatous Differentiation: A Case Report. *Clin Genitourin Cancer* 15(1):e73-e77, 2/2017. e-Pub 9/2016. PMCID: PMC5292059.
98. Msaouel P, Bilen MA, Zhang M, Campbell M, Wang J, Tu SM. Recent developments in the management of germ cell tumors. *Curr Opin Oncol*. e-Pub 2/2017. PMCID: PMC5538942.
99. Bilen MA, Cauley DH, Atkinson BJ, Chen HC, Kaya DH, Wang X, Vikram R, Tu SM, Corn PG, Kim J. Safety of Same-day Pegfilgrastim Administration in Metastatic Castration-resistant Prostate Cancer Treated With Cabazitaxel With or Without Carboplatin. *Clin Genitourin Cancer* 15(3):e429-e435, 6/2017. e-Pub 12/2016. PMCID: PMC5446270.
100. Bilen MA, Hess KR, Subudhi SK, Aparicio A, Kim J, Zurita-Saavedra AJ, Araujo JC, Corn PG, Stover J, Lin SH, Logothetis CJ, Tu SM. Clinical predictors of survival in patients with castration-resistant prostate cancer receiving sipuleucel-T cellular immunotherapy. *Cancer Chemother Pharmacol* 80(3):583-589, 9/2017. e-Pub 7/2017. PMID: 28730293.
101. Chahoud J, Zhang M, Shah A, Lin SH, Pisters LL, Tu SM. Managing seminomatous and nonseminomatous germ cell tumors. *Curr Opin Oncol* 30(3):181-188, 5/2018. PMID: 29538040.
102. Chahoud J, Zhang M, Pisters LL, Lin SC, Lin SH, Tu SM. Identification of Glypican-3 (GPC3) Expression in a Lethal Subgroup of Refractory Cisplatin-Resistant Testicular Germ-Cell Tumors. *Clin Genitourin Cancer* 16(5):325-327, 10/2018. e-Pub 5/2018. PMID: 29807831.
103. Ting J, Bell D, Ahmed S, Ying A, Waguespack SG, Tu SM, Weber R, Zafereo M. Primary Malignant Thyroid Teratoma: An Institutional Experience. *Thyroid* 29(2):229-236, 2/2019. PMID: 30759052.
104. Li R, Duplisea JJ, Petros FG, González GMN, Tu SM, Karam JA, Huynh TT, Ward JF. Robotic Postchemotherapy Retroperitoneal Lymph Node Dissection for Testicular Cancer. *Eur Urol Oncol*. e-Pub 3/2019. PMID: 31412007.
105. Corn PG, Heath EI, Zurita A, Ramesh N, Xiao L, Sei E, Li-Ning-Tapia E, Tu SM, Subudhi SK, Wang J, Wang X, Efstathiou E, Thompson TC, Troncoso P, Navin N, Logothetis CJ, Aparicio AM. Cabazitaxel plus carboplatin for the treatment of men with metastatic castration-resistant prostate cancers: a randomised, open-label, phase 1-2 trial. *Lancet Oncol* 20(10):1432-1443, 10/2019. e-Pub 9/2019. PMCID: PMC6858999.
106. Ho L, Pisters L, Tu SM. Rapidly enlarging abdominal mass in a patient with recurrent germ cell tumor. *Clin Case Rep* 7(11):2285-2286, 11/2019. e-Pub 10/2019. PMCID: PMC6878095.
107. Corn PG, Zhang M, Nogueras-Gonzalez GM, Xiao L, Zurita AJ, Subudhi SK, Tu SM, Aparicio AM, Coarfa C, Rajapakshe K, Huang S, Navone NM, Lin SH, Wang G, Ramachandran S, Titus MA, Panaretakis T, Gallick GE, Efstathiou E, Troncoso P, Logothetis C. A Phase II Study of Cabozantinib and Androgen Ablation in Patients with Hormone-Naïve Metastatic Prostate Cancer. *Clin Cancer Res*. e-Pub 1/2020. PMID: 31941830.
108. Siddiqui BA, Zhang M, Pisters LL, Tu SM. Systemic therapy for primary and extragonadal germ cell tumors: prognosis and nuances of treatment. *Transl Androl Urol* 9(Suppl 1):S56-S65, 1/2020. PMCID: PMC6995840.
109. Boukovala M, Spetsieris N, Weldon JA, Tsikkinis A, Hoang A, Aparicio A, Tu SM, Araujo JC, Zurita AJ, Corn PG, Pagliaro L, Kim J, Wang J, Subudhi SK, Tannir NM, Logothetis CJ, Troncoso P, Wen S, Efstathiou E. A candidate androgen signalling signature predictive of response to abiraterone acetate in men with metastatic castration-resistant prostate cancer. *Eur J Cancer* 127:67-75, 3/2020. e-Pub 1/2020. PMID: 31986451.

110. Naing A, Meric-Bernstam F, Stephen B, Karp DD, Hajjar J, Rodon Ahnert J, Piha-Paul SA, Colen RR, Jimenez C, Raghav KP, Ferrarotto R, Tu SM, Campbell M, Wang L, Sabir SH, Tapia C, Bernatchez C, Frumovitz M, Tannir N, Ravi V, Khan S, Painter JM, Abonofal A, Gong J, Alshawwa A, McQuinn LM, Xu M, Ahmed S, Subbiah V, Hong DS, Pant S, Yap TA, Tsimberidou AM, Dumbrava EE, Janku F, Fu S, Simon RM, Hess KR, Varadhachary GR, Amir Habra M. Phase 2 study of pembrolizumab in patients with advanced rare cancers. *J Immunother Cancer* 8(1), 3/2020. PMCID: PMC7078933.
111. Spetsieris N, Boukvala M, Weldon JA, Tsikkinis A, Hoang A, Aparicio A, Tu SM, Araujo JC, Zurita AJ, Corn PG, Pagliaro L, Kim J, Wang J, Subudhi SK, Tannir NM, Logothetis CJ, Troncoso P, Wang X, Wen S, Efsthathiou E. A Phase 2 Trial of Abiraterone Followed by Randomization to Addition of Dasatinib or Sunitinib in Men With Metastatic Castration-Resistant Prostate Cancer. *Clin Genitourin Cancer*. e-Pub 5/2020. PMID: 32675015.
112. Chen B, Bathala TK, Xu G, Teyateeti A, Chapin BF, Tang C, Tu SM, Macapinlac HA, Lu Y. Comparison of Diagnostic Utility of Fluciclovine PET/CT Versus Pelvic Multiparametric MRI for Prostate Cancer in the Pelvis in the Setting of Rising PSA After Initial Treatment. *Clin Nucl Med* 45(5):349-355, 5/2020. e-Pub 1/2020. PMID: 31977495.
113. Pan T, Martinez M, Hubka KM, Song JH, Lin SC, Yu G, Lee YC, Gallick GE, Tu SM, Harrington DA, Farach-Carson MC, Lin SH, Satcher RL. Cabozantinib Reverses Renal Cell Carcinoma-mediated Osteoblast Inhibition in Three-dimensional Coculture In Vitro and Reduces Bone Osteolysis In Vivo. *Mol Cancer Ther* 19(6):1266-1278, 6/2020. e-Pub 3/2020. PMCID: PMC7272308.
114. McIntosh AG, Tu SM. Editorial Comment. *J Urol* 203(6):1154, 6/2020. e-Pub 3/2020. PMID: 32176596.
115. Ranasinghe WKB, Brooks NA, Elsheshtawi MA, Davis JW, Bathala TK, Tang C, Troncoso P, Aparicio A, Tu SM, Pisters LL, Chapin BF. Patterns of metastases of prostatic ductal adenocarcinoma. *Cancer* 126(16):3667-3673, 8/2020. e-Pub 5/2020. PMID: 32453443.
116. Umbreit EC, McIntosh AG, Suk-Ouichai C, Segarra LA, Holland LC, Fellman BM, Williams SB, Thomas AZ, Tu SM, Pettaway CA, Pisters LL, Ward JF, Wood CG, Karam JA. Intraoperative and early postoperative complications in postchemotherapy retroperitoneal lymphadenectomy among patients with germ cell tumors using validated grading classifications. *Cancer*. e-Pub 9/2020. PMID: 32940929.
117. Umbreit EC, Siddiqui BA, Hwang MJ, Joon AY, Maity T, Westerman ME, Merriman KW, Alhasson H, Uthup J, Guo T, Moore JA, Ward JF, Karam JA, Wood CG, Pisters LL, Zhang M, Tu SM. Origin of subsequent malignant neoplasms in patients with history of testicular germ cell tumor. *Cancers (Basel)* 12(12), 12/2020. e-Pub 12/2020. PMCID: PMC7764868.
118. Tsimberidou AM, Vo HH, Subbiah V, Janku F, Piha-Paul S, Yilmaz B, Gong J, Naqvi MF, Tu SM, Campbell M, Meric-Bernstam F, Naing A. Pembrolizumab in Patients with Advanced Metastatic Germ Cell Tumors. *Oncologist*. e-Pub 1/2021. PMID: 33491277.
119. Tu SM, Pisters LL. Curing Cancer: Lessons from a Prototype. *Cancers (Basel)* 13(4), 2/2021. e-Pub 2/2021. PMID: 33562202.
120. von Eyben FE, Parraga-Alava J, Tu SM. Testicular germ cell tumors type 2 have high RNA expression of LDHB, the gene for lactate dehydrogenase subunit B. *Asian J Androl*. e-Pub 2/2021. PMID: 33565425.
121. Tu SM. The Cancer Genome: Paradigm or Paradox? *Cancers (Basel)* 13(4), 2/2021. e-Pub 2/2021. PMID: 33567511.
122. Hahn AW, Chahoud J, Campbell MT, Karp DD, Wang J, Stephen B, Tu SM, Pettaway CA, Naing A. Pembrolizumab for advanced penile cancer: a case series from a phase II basket trial. *Invest New Drugs*. e-Pub 3/2021. PMID: 33770291.
123. Tsimberidou AM, Hong DS, Fu S, Karp DD, Piha-Paul S, Kies MS, Ravi V, Subbiah V, Patel SM, Tu SM, Janku F, Heymach J, Johnson A, Cartwright C, Zhao L, Zhang J, Berry DA, Vining DJ, Futreal A, Miller VA, Meric-Bernstam F. Precision medicine: preliminary results from the Initiative for Molecular Profiling and Advanced Cancer Therapy 2 (IMPACT2) study. *NPJ Precis Oncol* 5(1):21, 3/2021. e-Pub 3/2021. PMID: 33742104.

Invited Articles

1. Logothetis C, Tu SM, Navone N. Targeting prostate cancer bone metastases. *Cancer* 97(3 Suppl):785-8, 2/2003. PMID: 12548576.
2. Tu SM, Lin SH. Clinical Aspects of bone metastases in prostate cancer. *Cancer Treat Res* 118:23-46, 2004. PMID: 15043187.
3. Choueiri MB, Tu SM, Yu-Lee LY, Lin SH. The central role of osteoblasts in the metastasis of prostate cancer. *Cancer Metastasis Rev* 25(4):601-9, 12/2006. PMID: 17160554.
4. Ye XC, Choueiri M, Tu SM, Lin SH. Biology and clinical management of prostate cancer bone metastasis. *Front Biosci* 12:3273-86, 2007. PMID: 17485298.
5. Tu SM, Lin SH. Current trials using bone-targeting agents in prostate cancer. *Cancer J* 14(1):199, Jan-Feb, 1/2008. PMID: 18303481.
6. Tu SM, Lin SH, Podoloff DA, Logothetis CJ. Multimodality Therapy: Bone-Targeted Radioisotope Therapy of Prostate Cancer. *Clin Adv Hematol Oncol* 8(5):341-51, 5/2010. PMCID: PMC4993042.

Editorials

1. Tu SM. Origin of Cancers: Gene-Centric Versus Cell-Centric. *Chemotherapy* 1(3), 5/2012.

Other Articles

1. Bilen MA, Subudhi SK, Gao J, Tannir NM, Tu SM, Sharma P. Acute rhabdomyolysis with severe polymyositis following ipilimumab-nivolumab treatment in a cancer patient with elevated anti-striated muscle antibody. *J Immunother Cancer* 4:36, 2016. e-Pub 6/2016. PMCID: PMC4915058.

Abstracts

1. Siefker-Radtke AO, Thall PF, Tannir NM, Tu SM, Pagliaro, LC, Williams DL, Millikan, RE. Implementation of a novel statistical design to evaluate successive treatment courses for metastatic transitional cell carcinoma. A Phase II trial at the M D Anderson Cancer Center. *J Clin Oncol* (#4543), 2/2004.
2. Jonasch E, Tu S-M, Tannir NM, Pagliaro LC, Mathew P, Siefker-Radtke AO, Wen S, General R, Lin S-H, Logothetis CJ. Bone-targeted therapy consisting of zoledronate, thalidomide, and gamma interferon in renal cell carcinoma: A phase II study. *J Clin Oncol* (#4769), 6/2005.
3. Spiess PE, Brown GA, Liu P, Tannir NM, Tu S, Kamat AM, Pisters LL. Predictors of survival in patients undergoing post-chemotherapy retroperitoneal lymph node dissection. *J Clin Oncol* (#4593), 6/2006.
4. Mathew P, Pagliaro LC, Tannir NM, Tu S, Marcott V, Patterson L, Reed K, Bekele N, Logothetis CJ. Single-agent platelet-derived growth factor (PDGF) receptor inhibitor therapy for castration-resistant prostate cancer with bone metastases. *J Clin Oncol* (#5164), 5/2008.
5. Pagliaro LC, Zurita AJ, Araujo JC, Ward JF, Davis JW, Pettaway CA, Tu S, Kim J, Dieringer P, Logothetis C, Pister LL. Presurgical docetaxel (Doc) and androgen deprivation therapy (ADT) in lymph node-positive prostate cancer (PCa). *J Clin Oncol* (#4619), 2/2011.
6. Aparicio A, Harzstark L, Lin E, Corn P, Araujo J, Tu S, Pagliaro L, Millikan R, Arap W, Kim J, Ryan C, Zurita A, Tannir N, Lin A, Small J, Mathew P, Jones D, Troncso P, Thall P, Logothetis C. Characterization of the anaplastic prostate carcinomas: A prospective two-stage phase II trial of frontline carboplatin and docetaxel (CD) and salvage etoposide and cisplatin (EP). *J Clin Oncol* (#4666), 6/2011.
7. Nieto Y, Tannir NM, Tu S-M, Jones RB, Zurita AJ, Aparicio A, Bassett R, Margolin KA, Holmberg L, Champlin RE. Phase II trial of bevacizumab (BEV)/high-dose chemotherapy (HDC) for refractory germ-cell tumors. *J Clin Oncol* (#4533), 6/2012.
8. Corn PG, Varkaris A, Tapia EM, Araujo JC, Aparicio A, Tu SM, Zurita AJ, Efsthathiou E, Qiao W, Wen S, Gallick GE, Logothetis C. Modulation of soluble c-Met, bone turnover markers, angiogenic factors, and c-Met in men with mCRPC treated with cabozantinib. *J Clin Oncol*, 2/2013.
9. Bilen MA, Lin SH, General R, Pagliaro LC, Logothetis C, Gorlov I, Tu SM. Prediction of a potential lethal phenotype in testicular nonseminomatous germ cell tumor. *J Clin Oncol* (#e15575), 10/2013.
10. Corn PG, Tu SM, Zurita AJ, Araujo JC, Pagliaro LC, Logothetis C, Aparicio A. A randomized phase I/II study to examine the contribution of carboplatin to cabazitaxel for the treatment of

- men with metastatic castration-resistant prostate cancer (mCRPC) with and without anaplastic features. *J Clin Oncol* (#148), 2/2014.
11. Tu SM, Bilen MA, Tu ZH, General R, Ward JF, Pistors LL, General R, Chen AH, Nieto Y, Pagliaro LC, Yeung SJ, Logothetis C, Lin S-H, Gorlov I. Nonseminomatous germ cell tumor of the testis: Prognostic factors for a lethal phenotype. *J Clin Oncol* 32(suppl 4) (#390), 2014.
 12. Nieto Y, Tu SM, Jones RB, Tannir NM, Bassett RL, Margolin KA, Holmberg L, Champlin RE, Pagliaro LC. Phase 2 trial of bevacizumab (BEV)/high-dose chemotherapy (HDC) with autologous stem-cell transplant (ASCT) for refractory germ-cell tumors (GCT). *J Clin Oncol* 32:5s (#4517), 2014.
 13. Bilen MA, Hess KR, Aparicio A, Kim J, Zurita AJ, Pagliaro LC, Corn PG, Atkinson BJ, Tannir NM, Sharma P, Lin S-H, Logothetis C, Tu SM. Sipuleucel-T cellular immunotherapy: Clinical predictors of survival in patients with castration-resistant prostate cancer (CRPC). *J Clin Oncol* 32 (#e16046), 2014.
 14. Pagliaro LC, Tannir NM, Tu SM, Logothetis CJ. Management of Clinical Stage I Testicular Cancer: How Should We Define Success? *J Clin Oncol* 33(20):2321-2, 7/2015. e-Pub 6/2015. PMID: 26033805.
 15. Nieto Y, Tu SM, Campbell MT, Bassett R, Tannir NM, Ward JF, Hofstetter WL, Jones RB, Anderson B, Gulbis AM, Ledesma C, Timmons M, Trapp M, Champlin RE, Pagliaro LC. Infusional gemcitabine + docetaxel/melphalan/carboplatin (GemDMC) ± bevacizumab (BEV) as an effective high-dose chemotherapy (HDC) regimen for refractory of poor-risk relapsed germ-cell tumors (GCT). *J Clin Oncol* 35(suppl) (#4519), 6/2017.
 16. J. Chahoud, M. Zhang, S. Lin, SH. Lin, SM. Tu. Glypican 3 (GPC3) expression in a lethal subgroup of refractory cisplatin-resistant testicular germ cell tumor (TGCT). *J Clin Oncol* 36(suppl) (#559), 2/2018.
 17. E. Efsthathiou, X. Wang, A. Zurita, S. Tu, A. Aparicio, J. Wang, P. Corn, S. Subudhi, J. Araujo, L. Reece, L. Pruitt, M. Vanalstine, C. Logothetis. A randomized study of finite abiraterone acetate (AA) plus leuprolide (LHRHa) versus LHRHa in biochemically recurrent non metastatic hormone naïve prostate cancer (M0HNPC). *J Clin Oncol* 36(suppl) (#5002), 6/2018.
 18. Hwang MJ, Siddiqui BA, Merriman KW, Uthup J, Ward JF, Karam JA, Wood CG, Pistors LL, Zhang M, Tu SM. Origin of a second malignancy harboring isochromosome 12p [i(12p)] in patients with history of testicular germ cell tumor (TGCT). *J Clin Oncol* (#412), 2/2020.
 19. Umbreit E, Joon A, Westerman M, Vyas SG, Maity T, Uthup J, Hofstetter WL, Ward JF, Karam JA, Zhang M, Pistors LL, Wood CG, Tu SM. Origin of somatic transformation in germ cell tumor of testis (TGCT): Role of differentiation versus dedifferentiation in a mature teratoma. *J Clin Oncol* (#410), 2/2020.

Book Chapters

1. Tu SM, Kilbourn RG. A Comprehensive Review. Prostate Cancer In: Medical Oncology. In: Ed(s) R. Wittes PRR, Inc.: Huntington, NY, 283-94, 1993.
2. Moore J, Tu SM. Chapter 47 – Germ Cell Tumors. In: The MD Anderson Manual of Medical Oncology, 4. McGraw-Hill: New York. In Press.

Books (edited and written)

1. Tu SM. Origin of cancers. Clinical perspectives and implications of a stem-cell theory of cancer. In: *Cancer Treat Res.* 154, 2010. PMID: 20645140.
2. Tu, SM. Story of Hydra: Portrait of Cancer as a Stem-cell Disease. Nova: New York, 2019.
3. Tu, SM. Ed(s) Townsend, S. Wrestling with the Angels: Treatise on a Stem-Cell Origin of Cancer. Submitted.

Letters to the Editor

1. Tu SM, Lin SH, Logothetis C. Re: A randomized, placebo-controlled trial of zoledronic acid in patients with hormone-refractory metastatic prostate carcinoma. *J Natl Cancer Inst* 95(15):1174-5; author reply 1175, 8/2003. PMID: 12902452.
2. Shi-Ming Tu, Sue-Hwa Lin, Christopher Logothetis. A Randomized, Placebo-Controlled Trial of Zoledronic Acid in Patients with Hormone-Refractory Metastatic Prostate Carcinoma. *J Natl Cancer Inst*, 2003.

Manuals, Teaching Aids, Other Teaching Publications

1. Tu S. Disease Management of Advanced Prostate Cancer. Institute for Medical Students, 1997.

Other Publications

N/A

EDITORIAL AND REVIEW ACTIVITIES

Editor/Service on Editorial Board(s)

Editor, Oncology Report, 1998-2000

Member of Editorial Review Board

Executive Editor, Chemotherapy, OMICS Publishing Group, 2011

Journal Reviewer

Reviewer, Supportive Oncology, Radiotherapy & Oncology, 2004

Reviewer, Cancer, 2007

Reviewer, ISRN Oncology, 2011

Reviewer, Supportive Oncology, International Scholarly Research Network Oncology, 2011

Reviewer, EMBO Molecular Medicine, 2012-2013

Reviewer, Cancer, 2013

Reviewer, Annals of Oncology, 2014

Reviewer, International Journal of Molecular Sciences, 2015

Reviewer, Clinical Cancer Research, 2016

Reviewer, Current Stem Cell Research & Therapy, 2016

Reviewer, Oncotarget, 2016

Reviewer, BMC Urology, 2017

Reviewer, British Journal of Urology International, 2017

Reviewer, Journal of Radiology and Oncology, 2017

Reviewer, British Journal of Cancer, 2018

Reviewer, Internal Journal of Cancer, 2018

Reviewer, International Brazil Journal of Urology, 2018

Reviewer, Clinical GU Cancer, 2020

Other Editorial and Review Activities

Reviewer, MDACC Testicular Cancer Algorithm, MDACC Department of Clinical Effectiveness, 2019

Reviewer, NCCN Testicular Cancer Guidelines, NCCN, 2019

TEACHING

Teaching Within Current Institution - The University of Texas MD Anderson Cancer Center

Formal Teaching

Courses Taught

Lecturer, Androgen-independent Prostate Cancer, Course Hours: 1
7/2001

Lecturer, Bone Metastasis and Cancer Stem Cells
10/2009-6/2010

Training Programs

N/A

Other Formal Teaching

Board Review Course (Prostate Cancer), Course Hours: 1
1/2001-present

Lecturer, Prostate Cancer Variant
1/2004

Supervisory Teaching

Committees

Advisory Committees

Research Advisory Committee, Joseph Moore, 2019

Supervisory Committees

N/A

Examining Committees

N/A

Direct Supervision

Undergraduate and Allied Health Students

Direct Supervisor, Summer Research Programs, Deb Bhomick, 1998

Quianta Hodge, 2000

Director Supervisor, Summer Research Programs, April Maa, 2001

Director Supervisor, Summer Research Programs, Albert Lang, 2005

Direct Supervisor, Summer Research Programs, Cynthia Lee, 2005

Medical Students

Research Mentor, UTMDACC Research Program for Medical Students, UTMDACC,
Cheryl Gustafson, MD, 5/2006-7/2006

Research Mentor, UTMDACC Research Program for Medical Students, Mehmet Asim
Bilen, MD, 6/2006-8/2006

Research Mentor, Summer Research Programs in the Biomedical Sciences,
UTMDACC, Ferhat Evliyaoglu, MD, 6/2007-8/2007

Research Mentor, Medical Oncology, Brian Chapin, 1/2011-1/2012

Research Mentor, Medical Oncology, Rian Dickstein, 1/2011-1/2013

Graduate Students

N/A

Postdoctoral Research Fellows

Mentor, Reeves Huie, Ph.D., 1996-1998

Clinical Perspectives of Malignant Diseases, Johnny Shen, 1/2006-12/2006

Clinical Residents and Fellows

Clinical Mentor, Mohammad Qasim, 1994-1997

Clinical Mentor, Michael Slaughter, 1996-1998

Clinical Mentor, Everardo Saad, 1998-2000

Clinical Mentor, Anthony Ruggeri, 1/2002-12/2002

Clinical Mentor, Fan Zhang, 6/2002-12/2002

Clinical Mentor, Summer Research Programs, Shieva Molavi, 7/2002-12/2002

Medical Oncology Fellows-GU Continuity Clinics, Silwan Chedid, 2005

Clinical Mentor, Jeffery Turner, 1/2005-12/2005

Clinical Mentor, Tina Kosakyan, 8/2005-12/2005

Medical Oncology Fellows-GU Continuity Clinics, Charles Yang, 2006
Medical Oncology Fellows-GU Continuity Clinics, Sunil Patel, 2007
Direct Supervisor, Avik Som, 2008-present
Mentor, Internal Medicine Program, Michel Choueiri, MD, 2009-8/2009
Mentor, Medical Oncology Fellow, Jessica Masterson, 3/2009-6/2009
Research Mentor, Housam Hariri, MD, 2010-3/2010
Research Mentor, Medical Oncology, Heather Brooks, MD, 8/2010-11/2010
Abstract Mentor, Medical Oncology Fellow, Jad Chahoud, 9/2016-12/2017
Mentor, Medical Oncology Fellow, Bilal Siddiqui, 7/2018-present
Mentor, Pathology Fellow, Michael Hwang, 2019
Mentor, Pathology Fellow, Shiktar Vyas, 2019
Mentor, Medical Oncology Fellow, Joseph Moore, 2019-present
Mentor, Urology Fellow, Mary Beth Westerman, 2019-present
Mentor, Medical Oncology Fellow, Omar Allahabi, 2020
Mentor, Pathology Fellow, Tao Guo, 2020

Other Supervisory Teaching

Mentor, Internal Medicine-Intern, UTMB, George Manoukian, 1/2009-8/2009
Mentor, Urology, Luis Segarra, 9/2018-present

Teaching Outside Current Institution

Formal Teaching

Courses Taught

N/A

Training Programs

N/A

Other Formal Teaching

N/A

Supervisory Teaching

Committees

Advisory Committees

Research Mentor, Phd Advisory Committee, University Of Houston School of Pharmacy, Roland Ako, 2009-present

Member, Dissertation Committee, Pharmacological and Pharmaceutical Sciences, University of Houston College of Pharmacy, Tanay Samant, PhD, 6/2011-6/2014

Supervisory Committees

N/A

Examining Committees

N/A

Direct Supervision

Undergraduate and Allied Health Students

Mentor, Summer Research Experience Program, Emory University, Lauren Ho, 6/2020-8/2020

Medical Students

N/A

Graduate Students

N/A

Postdoctoral Research Fellows

Research Mentor, Phd Advisory Committee, UT Health Science Center, Alison Schwein, 1/2009-12/2010

Clinical Residents and Fellows

Research Mentor, Brazil, Lezario Cezario, 10/2009

High School, Avira Som, 2010

Research Mentor, Spain, Joaquin Mateo Valderramo, MD, 9/2010-10/2010

Other Supervisory Teaching

Visiting Oncologist Program, Slovenia, Simona Borstnar, 10/2006

Visiting Oncologist Program, North Korea, Jongin Ri, 4/2007

Summer Research Program, High School, Benjamin Tu, High School Students, 2010

Visiting Oncologists Program, Mayo Clinic, Brian Costello, 3/2011

Mentor, Medical Student, Jordan/Qatar, Hussam Alhasson, 2/2018-6/2018

CONFERENCES AND SYMPOSIA

Organization of Conferences/Symposia (Include chairing session)

Zometa Symposium of Management of Hormone-Refractory Prostate Cancer, 1/2005

Presentations at National or International Conferences

Invited

Optimizing Treatment Options for Androgen Independent Prostate Cancer, Prostate Advisory Board Meeting, Houston, TX, 9/23/2004

National Defense Medical Center Reunion Lecture, Los Angeles, CA, 11/1/2004

Small Molecule targeted therapy in prostate cancer, Chemoprevention of prostate cancer, Timing of Androgen deprivation therapy in metastatic prostate cancer, Treatment of Patients with metastatic prostate cancer, 1st Annual MDAPN Cancer Symposium, The University of Texas MD Anderson Cancer Center, Kauai, HI, 6/2/2005

Prostate Cancer and bone Metastasis, Symposium of Management of Hormone-Refractory Prostate Cancer 2005 Update, Taipei, 7/2/2005

Controversies in prostate Cancer detection and treatment, Hawaii, HI, 3/5/2006

Current Status and future of radioisotopes in prostate cancer bone metastases, IGR Meeting, The University of Texas MD Anderson Cancer Center, Paris, France, 9/27/2006

Keynote: Stem Cell Theory of Cancer, National Defense Medical Center Alumni Association of North America, 46th Annual Scientific Session, Houston, TX, 10/31/2009

Drug vs therapy development: tale of two cancers, University of Taiwan, Taipei, Taiwan, 9/2018

Keynote: Paradigm shift in treatment landscape of advanced prostate cancer, University of Hong Kong, Shenzhen, China, 9/2018

Intratumoral heterogeneity in germ cell tumor of the testis: cellular vs genetic origin of cancer, 8th Annual World Congress of Molecular and Cellular Biology (CMCB), Fukuoka, Japan, 10/2018

Structured case discussions in penile cancer, 13th Update on the Management of GU Malignancies, The University of Texas MD Anderson Cancer Center, Houston, TX, 11/2018

Variant prostate cancers: stem-cell origin and clinical implications, University of Zhejiang, Hangzhou, China, 4/2019

Other, Including Scientific Exhibitions

Phase I Treatment of Androgen-independent Prostate Cancer with Suramin and Adriamycin, NIH Suramin and Neurotoxicity Meeting, Bethesda, MD, 4/1/1996

Sequential Paclitaxel, Methotrexate, Cisplatin (TMP) and 5-Fluoro-Uracil, a-Interferon, Cisplatin (FAP) in the Treatment of Patients (PTS) with Refractory Urothelial Carcinoma, ASCO Annual Meeting, Los Angeles, CA, 1/1/1998

Advanced prostate cancer: proposed randomized trial of Strontium-89, CCOP Annual Meeting, Houston, TX, 9/16/2000

Phase II trial of gamma interferon in the treatment of androgen-independent prostate cancer, 11th International Prostate Cancer Update, Vail, CO, 2/4/2001

Advanced prostate cancer randomized trial of Strontium-89, CCOP Semi-Annual Meeting, San Francisco, CA, 5/13/2001

Bone-targeted therapy in prostate cancer, CCOP Semi Annual Meeting, CCOP, Houston, TX, 3/2/2006

Detection of Bone Metastasis in prostate Cancer: imaging Vs tumor markers, Clinical Nuclear Medicine Seminars, The University of Texas MD Anderson Cancer Center, Houston, TX, 10/18/2007

Optimal Therapies in Genitourinary Cancers Panel Session, Advances in Oncology, Sacramento, CA, 10/2019

Seminar Invitations from Other Institutions

N/A

Lectureships and Visiting Professorships

N/A

Other Presentations at State and Local Conferences

Apoptosis and Prostate Cancer, Science, Engineering and Technology Seminar, Association of American-Chinese Professionals, Houston, TX, 5/1/1994

Experimental Therapies in Prostate Cancer, Prostate Cancer Patient Support Group, Houston, TX, 7/1/1997

PROFESSIONAL MEMBERSHIPS/ACTIVITIES

Professional Society Activities, with Offices Held

National and International

American Association for Cancer Research (AACR)
Member, 1995-present

American Association for Clinical Oncology (ASCO)
Member, 1995-present

American Medical Association

Southwest Oncology Group

Local/State

Asian Health Fair, Houston, TX
Prostate Cancer Screener, 2005-2009

Harris County Medical Society

Texas Medical Association

UNIQUE ACTIVITIES

N/A

DATE OF LAST CV UPDATE

4/5/2021

APPENDIX C

Act 181

State of Arkansas

As Engrossed: S2/4/19

92nd General Assembly

A Bill

Regular Session, 2019

SENATE BILL 151

By: Senators Irvin, Bledsoe, B. Davis, J. English

By: Representatives M. Gray, Barker, Bentley, Brown, Capp, Cavanaugh, Crawford, Dalby, C. Fite,
Lundstrum, J. Mayberry, Petty, Rushing, Speaks, Vaught, Gazaway

For An Act To Be Entitled

AN ACT CONCERNING THE PURSUIT OF A NATIONAL CANCER
INSTITUTE-DESIGNATED CANCER CENTER AT THE WINTHROP P.
ROCKEFELLER CANCER INSTITUTE AT THE UNIVERSITY OF
ARKANSAS FOR MEDICAL SCIENCES; TO CREATE THE
UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES NATIONAL
CANCER INSTITUTE DESIGNATION *TRUST FUND*; AND FOR
OTHER PURPOSES.

Subtitle

CONCERNING THE PURSUIT OF A NATIONAL
CANCER INSTITUTE-DESIGNATED CANCER CENTER
AT THE WINTHROP P. ROCKEFELLER CANCER
INSTITUTE AT THE UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. DO NOT CODIFY. Legislative findings.

The General Assembly finds that:

(1) In 2018, approximately sixteen thousand (16,000) Arkansans
were diagnosed with cancer in 2018, which means that forty-four (44)
Arkansans were diagnosed with cancer per day;

(2) Of those sixteen thousand (16,000) Arkansans diagnosed with
cancer, six thousand nine hundred ten (6,910) will die of the disease;

(3) The four (4) types of cancer with significantly high annual

1 diagnosis rates in Arkansas are:

2 (A) Lung and bronchus cancer, with two thousand seven
3 hundred twenty (2,720) diagnoses;

4 (B) Breast cancer, with two thousand one hundred sixty
5 (2,160) diagnoses;

6 (C) Prostate cancer, with one thousand two hundred sixty
7 (1,260) diagnoses; and

8 (D) Colon and rectal cancer, with one thousand three
9 hundred seventy diagnoses (1,370);

10 (4) Over the past twenty-eight (28) years, nationwide cancer-
11 related deaths have decreased by five percent (5%), but in Arkansas the rate
12 of cancer-related deaths has increased by nine percent (9%);

13 (5) Only Kentucky, Mississippi, and Oklahoma had higher cancer-
14 related death rates in the past twenty-eight (28) years than Arkansas;

15 (6) Cancer is the second-leading cause of death in Arkansas and
16 may become the leading cause of death within the next decade, surpassing the
17 current leading cause, cardiovascular disease, based on the diagnosis trends
18 in the state;

19 (7) There are currently seventy (70) National Cancer Institute-
20 Designated Cancer Centers, located in thirty-six (36) states and the District
21 of Columbia, including National Cancer Institute-Designated Cancer Centers in
22 Texas, Missouri, Oklahoma, and Tennessee;

23 (8) There are no National Cancer Institute-Designated Cancer
24 Centers in Arkansas, Mississippi, or Louisiana;

25 (9) In 2018, the State of Oklahoma received the seventieth
26 National Cancer Institute-Designated Cancer Center;

27 (10) Having a National Cancer Institute-Designated Cancer Center
28 in Arkansas will improve and expand access to clinical trials, cancer
29 treatment, cancer prevention, cancer screening, and education in Arkansas;

30 (11) A National Cancer Institute-Designated Cancer Center in
31 Arkansas would act as a hub of groundbreaking treatments and care for the
32 communities around the state;

33 (12) Arkansas cancer patients often times are required to leave
34 the state to receive treatment at a National Cancer Institute-Designated
35 Cancer Center;

36 (13) National Cancer Institute-Designated Cancer Centers have

1 expanded treatment options due to research grant funds and experimental
2 trials, and hundreds of research studies are underway at these centers,
3 ranging from basic laboratory research to clinical assessments of new
4 treatments not currently available in Arkansas;

5 (14) Having a National Cancer Institute-Designated Cancer Center
6 in the state would save the lives of thousands of Arkansans through expanded
7 treatment opportunities, including opportunities to participate in
8 experimental cancer treatments;

9 (15) Being a National Cancer Institute-Designated Cancer Center
10 would allow the Winthrop P. Rockefeller Cancer Institute at the University of
11 Arkansas for Medical Sciences to be awarded more research funds, which will
12 provide additional experimental cancer treatments in the state;

13 (16) A National Cancer Institute-Designated Cancer Center will
14 provide support for cancer treatment providers, clinics, and hospitals in
15 Arkansas;

16 (17) In addition to the human suffering caused by cancer, there
17 are economic costs that result from the disease, including medical costs and
18 the impact on the productivity of the cancer patient and his or her family;

19 (18) The Winthrop P. Rockefeller Cancer Institute at the
20 University of Arkansas for Medical Sciences is pursuing designation as a
21 National Cancer Institute-Designated Cancer Center for the benefit of the
22 more than three million (3,000,000) citizens of Arkansas;

23 (19) The National Cancer Institute recommends that a cancer
24 center have at least twenty million dollars (\$20,000,000) in National Cancer
25 Institute-funded research;

26 (20) The Winthrop P. Rockefeller Cancer Institute at the
27 University of Arkansas for Medical Sciences currently has approximately ten
28 million dollars (\$10,000,000) in National Cancer Institute-funded research;

29 (21) The Winthrop P. Rockefeller Cancer Institute at the
30 University of Arkansas for Medical Sciences can apply for only a limited
31 number of National Cancer Institute grant funds because over sixty percent
32 (60%) of the National Cancer Institute's grant applications require that the
33 cancer center be a National Cancer Institute-Designated Cancer Center in
34 order to apply for the grant funds;

35 (22) In order to achieve status as a National Cancer Institute-
36 Designated Cancer Center, the Winthrop P. Rockefeller Cancer Institute at the

1 University of Arkansas for Medical Sciences will need to recruit:

2 (A) A renowned expert in cancer research to serve as the
3 Director of the Winthrop P. Rockefeller Cancer Institute at the University of
4 Arkansas for Medical Sciences; and

5 (B) Nationally recognized National Cancer Institute-funded
6 medical professionals;

7 (23) To be successful in gaining status as a National Cancer
8 Institute-Designated Cancer Center, ongoing, dedicated financial support from
9 the State of Arkansas is critical;

10 (24) The Winthrop P. Rockefeller Cancer Institute at the
11 University of Arkansas for Medical Sciences will need a stream of funding
12 between ten million dollars (\$10,000,000) and twenty million dollars
13 (\$20,000,000) per year to establish and maintain a National Cancer Institute-
14 Designated Cancer Center;

15 (25) Like other states that have been successful in securing
16 status as a National Cancer Institute-Designated Cancer Center for their
17 cancer centers, it is incumbent that the State of Arkansas invest in this
18 initiative;

19 (26) It is a strategic goal of the Winthrop P. Rockefeller
20 Cancer Institute at the University of Arkansas for Medical Sciences to
21 becomes a National Cancer Institute-Designated Cancer Center;

22 (27) State government funds will assist the Winthrop P.
23 Rockefeller Cancer Institute at the University of Arkansas for Medical
24 Sciences secure vital investments from other public and private sources;

25 (28) The Winthrop P. Rockefeller Cancer Institute at the
26 University of Arkansas for Medical Sciences is committed to raising at least
27 thirty million dollars (\$30,000,000) in private funds to support the pursuit
28 of achieving status as a National Cancer Institute-Designated Cancer Center;

29 (29) The private resources pursued by the Winthrop P.
30 Rockefeller Cancer Institute at the University of Arkansas for Medical
31 Sciences are a part of a cohesive and focused plan that will forever change
32 the state;

33 (30) It is estimated that having a National Cancer Institute-
34 Designated Cancer Center will bring in an additional seventy million dollars
35 (\$70,000,000) annually to Arkansas's economy and will create one thousand
36 five hundred eighty-four (1,584) new jobs over five (5) years;

1 (31) The state should establish a fund solely for the purpose of
2 pursuing and maintaining status as a National Cancer Institute-Designated
3 Cancer Center for the Winthrop P. Rockefeller Cancer Institute at the
4 University of Arkansas for Medical Sciences;

5 (32) If upon June 30, 2027, the Winthrop P. Rockefeller Cancer
6 Institute at the University of Arkansas for Medical Sciences has not achieved
7 status as a National Cancer Institute-Designated Cancer Center, then the fund
8 created in this act should sunset; and

9 (33) Future General Assemblies will have the authority and
10 responsibility to evaluate the progress of the Winthrop P. Rockefeller Cancer
11 Institute at the University of Arkansas for Medical Sciences toward achieving
12 status as a National Cancer Institute-Designed Cancer Center and adjust this
13 act accordingly.

14
15 SECTION 2. Arkansas Code Title 19, Chapter 5, *Subchapter 11*, is
16 amended to add an additional section to read as follows:

17 19-5-1149. University of Arkansas for Medical Sciences National Cancer
18 Institute Designation Trust Fund – Report.

19 (a) There is created on the books of the Treasurer of State, the
20 Auditor of State, and the Chief Fiscal Officer of the State a trust fund to
21 be known as the “University of Arkansas for Medical Sciences National Cancer
22 Institute Designation Trust Fund”.

23 (b) The fund shall consist of:

24 (1) Moneys obtained from private grants or other sources that
25 are designated to be credited to the fund; and

26 (2) Any other funds authorized or provided by law.

27 (c) The fund shall be used by the Winthrop P. Rockefeller Cancer
28 Institute at the University of Arkansas for Medical Sciences solely to
29 achieve and maintain status as a National Cancer Institute-Designated Cancer
30 Center.

31 (d) The Treasurer of State shall invest the moneys available in the
32 fund.

33 (e)(1) The investment of funds under this section is exempt from § 19-
34 3-518(a)(2)(B)(i)(b) and (c).

35 (2) Moneys in the fund may be invested in any instrument:

36 (A) Listed in § 19-3-518(b)(1)(B); and

1 (B) Approved by the guidelines established by the State
2 Treasury investment policy approved by the State Board of Finance.

3 (f) Moneys remaining in the fund at the end of each fiscal year shall
4 carry forward and be made available for the purposes stated in this section
5 in the next fiscal year.

6 (g)(1) The Winthrop P. Rockefeller Cancer Institute at the University
7 of Arkansas for Medical Sciences shall submit a semiannual report containing
8 the following information to the Governor; the Legislative Council or, if the
9 General Assembly is in session, the Joint Budget Committee; the Senate
10 Committee on Public Health, Welfare and Labor; and the House Committee on
11 Public Health, Welfare, and Labor:

12 (A) The balance of the fund as of the reporting date;

13 (B) A list of the administrative costs paid for from the
14 fund, including without limitation salaries, pensions, and packages;

15 (C) The total revenue received by the fund during the
16 reporting period; and

17 (D) A detailed description of the steps taken and the
18 progress made toward achieving status as a National Cancer Institute-
19 Designated Cancer Center during the reporting period.

20 (2) The semiannual report required under this subsection shall
21 be submitted by January 1 and July 1 of each year.

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23
24 /s/Irvin

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27 APPROVED: 2/19/19