# CURRICULUM VITAE FOR ACADEMIC PROMOTION The Johns Hopkins University School of Medicine

(Signature): Charning Palles

Channing J. Paller

1/24/2017

## DEMOGRAPHIC AND PE RSONAL INFORMATION

## **Current Appointments**

- 07/12 Present Assistant Professor of Oncology, Department of Oncology, Johns Hopkins University School of Medicine, Baltimore, MD
- 07/12 Present Assistant Professor of Oncology, Department of Oncology, Sidney Kimmel Comprehensive Cancer Center at Sibley Memorial Hospital, Washington, DC
- 12/12 Present Faculty Director, Specimen Accessioning Core, Sidney Kimmel Comprehensive Cancer Center at Sibley Memorial Hospital, Washington, DC
- 06/15 Present Co-Director, Sibley Prostate Cancer Multidisciplinary Clinic, Sidney Kimmel Comprehensive Cancer Center at Sibley Memorial Hospital, Washington, DC
- 01/16 Present Director, Medical Oncology Fellowship Clinical Rotation Education Program

## Hospital Appointments

07/12 - Present Sibley Memorial Hospital, Washington, DC

### **Education and Training**

## **Undergraduate**

2001 A.B., Biochemistry and Neuroscience, Bowdoin College, Brunswick, ME

### Doctoral/graduate

2005 M.D., Harvard Medical School, Boston, MA

## **Postdoctoral**

2005 - 2006	Intern, Johns Hopkins University, Baltimore, MD
2006 - 2008	Resident, Johns Hopkins University, Baltimore, MD
2008 - 2009	Hematology Fellow, Johns Hopkins University, Baltimore, MD
2009 - 2012	Oncology Fellow, Johns Hopkins University, Baltimore, MD

# **Professional Experience**

- 2012 Present Assistant Professor, Oncology, Johns Hopkins University School of Medicine, Baltimore, MD
- 2012 Present Assistant Professor, Oncology, Sibley Memorial Hospital, Washington, DC
- 2012 Present Faculty Director, Specimen Accessioning Core, Sidney Kimmel Comprehensive Cancer Center at Sibley Memorial Hospital, Washington, DC

### RESEARCH ACTIVITIES

## **Peer-Reviewed Original Science Research Publications**

1. Somjen, D., **Paller**, C., Gayer, B., Kohen, F., Knoll, E. and Stern, N. High glucose blocks estradiol's effects on human vascular cell growth: differential interaction with estradiol and raloxifene. *Journal of Steroid Biochemistry and Molecular Biology*, 2004, 88:101-110. PMID: 3638755.

- 2. **Paller C.**, Shiels M., Rohrmann S., Basaria S., Rifai N., Nelson W., Platz E., Dobs A. Relationship of sex steroid hormones with bone mineral density (BMD) in a nationally rePresentative sample of men. *Clin Endocrinol* (Oxf), 2008, 70(1):26-34. PMCID: PMC3494466
- 3. **Paller CJ**, Ye X, Wozniak PJ, Gillespie BK, Sieber PR, Greengold RH, Stockton BR, Hertzman BL, Efros MD, Roper RP, Liker HR, Carducci MA. A randomized phase II study of pomegranate extract for men with rising PSA following initial therapy for localized prostate cancer. *Prostate Cancer Prostatic Dis.* 2013 Mar;16(1):50-5. doi: 10.1038/pcan.2012.20. Epub 2012 Jun 12. PMCID: PMC3549301.
- 4. **Paller, C.**, Shiels, M., Rohrmann, S., Menke, A., Rifai, N., Nelson, W., Platz, E., Dobs, A. Association between Sex Steroid Hormones and Hematocrit in a Nationally-RePresentative Sample of Men. *J of Andrology*. 2012 Nov-Dec; 33(6): 1332-41. PMCID: PMC3774012.
- 5. **Paller CJ**, Antonarakis ES. Management of biochemically recurrent prostate cancer after local therapy: evolving standards of care and new directions. *Clin Adv Hematol Oncol*. 2013 Jan;11(1):14-23. PMCID: PMC3624708.
- 6. **Paller, C.**, Ye, X, Wozniak, P., Gillespie, B., Sieber, P., Greengold, R., Stockton, B., Hertzman, B., Efros, M., Roper, R., Liker, H., Carducci, M. A phase II study of pomegranate extract for men with rising prostate specific antigen following primary therapy. *Prostate Cancer and Prostatic Diseases*. 2013 Mar; 16(1):50-5. PMCID: PMC3549301.
- 7. **Paller CJ**, Olatoye D, Xie S, Zhou X, Denmeade SR, Eisenberger MA, Antonarakis ES, Carducci MA, Rosner GL. The effect of the frequency and duration of PSA measurement on PSA doubling time calculations in men with biochemically recurrent prostate cancer. *Prostate Cancer Prostatic Dis.* 2014 Mar;17(1):28-33. doi: 10.1038/pcan.2013.40. Epub 2013 Oct 8. PMCID: PMC3945997.
- 8. **Paller, C.**, Olatoye, D., Xie, S., Zhou, X., Denmeade, S.R., Eisenberger, M.A., Antonarakis, E.S., Carducci, M.A., Rosner, G.L. The effect of the frequency and duration of prostate specific antigen (PSA) measurement on PSA doubling time calculations in men with biochemically recurrent prostate cancer. *Prostate Cancer and Prostatic Diseases*. 2014 June; 17(2):28-33. PMCID: PMC3945997.
- 9. Antonarakis ES, Lu C, Wang H, Luber B, Nakazawa M, Roeser JC, Chen Y, Mohammad TA, Chen Y, Fedor HL, Lotan TL, Zheng Q, De Marzo AM, Isaacs JT, Isaacs WB, Nadal R, **Paller CJ**, Denmeade SR, Carducci MA, Eisenberger MA, Luo J. AR-V7 and resistance to enzalutamide and abiraterone in prostate cancer. *N Engl J Med.* 2014 Sep 11;371(11):1028-38. doi: 10.1056/NEJMoa1315815. Epub 2014 Sep 3. PMCID: PMC4201502.
- 10. Nadal R, Zhang Z, Rahman H, Schweizer MT, Denmeade SR, **Paller CJ**, Carducci MA, Eisenberger MA, Antonarakis ES. Clinical activity of enzalutamide in Docetaxel-naïve and Docetaxel-pretreated patients with metastatic castration-resistant prostate cancer. *Prostate*. 2014 Nov;74(15):1560-8. PMCID: PMC4176523.
- 11. **Paller, C.**, Wissing, M., Mendonca, J., Kim, E., Kortenhorst, M., Gerber, S., Rosen, M., Shaikh, F., Zahurak, M., Rudek, M., Hammers, H., Rudin, C., Carducci, M., Kachhap, S. Combining the pan-aurora kinase inhibitor AMG 900 with histone deacetylase inhibitors enhances anti-tumor activity in prostate cancer in vitro and in vivo. *Cancer Med.* 2014 Oct;3(5):1322-35. PMCID: PMC4302682.
- 12. **Paller CJ**, Kanaan YM, Beyene DA, Naab TJ, Copeland RL, Tsai HL, Kanarek NF, Hudson TS. Risk of Prostate Cancer in African American Men: Evidence of Mixed Effects of Dietary Quercetin by Serum Vitamin D Status. *Prostate*. 2015 Sep;75(13):1376-83. PMCID: PMC4536082.
- 13. **Paller CJ**, Rudek MA, Zhou XC, Wagner WD, Hudson TS, Anders N, Hammers HJ, Dowling D, King S, Antonarakis ES, Drake CG, Eisenberger MA, Denmeade SR, Rosner GL, Carducci MA. A Phase I Study of Muscadine Grape Skin Extract in Men with Biochemically Recurrent Prostate Cancer: Safety, Tolerability, and Dose Determination. *Prostate*. 2015 Oct;75(14):1518-25. PMCID: NIHMS689473.
- 14. Antonarakis ES, Changxue Lu, Brandon Luber, Hao Wang, Yan Chen, Mary Nakazawa, Nadal R, **Paller CJ**, Denmeade SR, Carducci MA, Eisenberger MA, Jun Luo. Androgen Receptor Splice Variant 7 and Efficacy of Taxane Chemotherapy in Patients With Metastatic Castration-Resistant Prostate Cancer. *JAMA Oncology*. 2015 Aug;1(5):582-91. PCMID: PMC4537351.
- 15. Markowski M, Eisenberger M, Zahurak M, Epstein JI, and **Paller CJ.** Sarcomatoid Carcinoma of the Prostate: Retrospective Review of a Case Series from Johns Hopkins Hospital. *Urology*. 2015 Sep;86(3):539-43. PMCID: PMC456951.
- 16. Nakazawa M, Lu C, Chen Y, **Paller CJ**, Carducci MA, Eisenberger MA, Luo J, Antonarakis ES. Serial blood-based analysis of AR-V7 in men with advanced prostate cancer. Ann Oncol. 2015 Sep;26(9):1859-65. PMCID: PMC4551160.
- 17. Nadal R, Tsai HL, Sinibaldi VJ, **Paller CJ**, Antonarakis ES, Denmeade SR, Carducci MA, Eisenberger MA. Prognostic factors for clinical outcomes in patients with metastatic castration resistant prostate cancer

- treated with sequential novel androgen receptor-directed therapies. Prostate. 2016 Apr;76(5):512-20. doi: 10.1002/pros.23141. Epub 2015 Dec 22.
- 18. Schweizer MT, Wang H, Luber B, Nadal R, Spitz A, Rosen DM, Cao H, Antonarakis ES, Eisenberger MA, Carducci MA, Paller C, Denmeade SR. Bipolar Androgen Therapy for Men With Androgen Ablation Naïve Prostate Cancer: Results From the Phase II BATMAN Study. Prostate. 2016 Sep;76(13):1218-26. PMID: 27338150
- 19. Ball MW, Gorin MA, Guner G, Pierorazio PM, Netto G, **Paller CJ**, Hammers HJ, Diaz LA, Allaf ME. Circulating Tumor DNA as a Marker of Therapeutic Response in Patients With Renal Cell Carcinoma: A Pilot Study. Clin Genitourin Cancer. 2016 Oct;14(5):e515-e520. PMCID: PMC5035558
- 20. Goldstein A, Valda Toro P, Lee J, Silberstein JL, Nakazawa M, Waters I, Cravero K, Chu D, Cochran RL, Kim M, Shinn D, Torquato S, Hughes RM, Pallavajjala A, Carducci MA, Paller CJ, Denmeade SR, Kressel B, Trock BJ, Eisenberger MA, Antonarakis ES, Park BH, Hurley PJ. Detection fidelity of AR mutations in plasma derived cell-free DNA. Oncotarget. 2017 Jan 31. doi: 10.18632/oncotarget.14926. [Epub ahead of print] PMID:28152506
- 21. Maughan BL, Suzman DL, Luber B, Wang H, Glavaris S, Hughes R, Sullivan R, Harb R, Boudadi K, **Paller C,** Eisenberger M, Demarzo A, Ross A, Antonarakis ES. Pharmacodynamic study of the oral hedgehog pathway inhibitor, vismodegib, in patients with metastatic castration-resistant prostate cancer. Cancer Chemother Pharmacol. 2016 Dec;78(6):1297-1304. PMID:27826729

## **Inventions, Patents, Copyrights**

3/30/12

Paller CJ, Carducci M, Kachhap S. Patent submission: USE OF N-(4-((3-(2-AMINO-4-PYRIMIDINYL)-2-PYRIDINYL)OXY)PHENYL)-4-(4-METHYL-2-THIENYL)-1-PHTHALAZINAMINE IN COMBINATION WITH HISTONE DEACETYLASE INHIBITORS FOR TREATMENT OF CANCER

# **Extramural Funding**

### Current

03/08/16 - 03/01/19

The role of TGF-beta inhibition in overcoming drug resistance in metastatic castration resistant prostate cancer

Grant: K23CA197526-01A1 National Institutes of Health

\$164,000 Role: PI, 75%

#### Pending

09/01/16 - 08/31/19

Supporting Cancer Genomics Projects with the Bionimbus Protected Data Cloud.

National Institutes of Health – U24

\$50,000, Robert Grossman, University of Chicago, is PI

Role: Co-Investigator, 3%

### Previous

7/01/09 - 6/30/11

Investigating the effects of HDACIs and other agents with spindle checkpoint inhibitors (Aurora kinase inhibitor AMG900 and PLK1 inhibitors BI2536 and BI6727) in combination

in lung cancer and prostate cancer cell lines

5T32CA009071

NIH \$472,728 PI: Nelson W Role: Trainee

7/01/13 - 6/30/14 Race as a risk factor for metastatic prostate cancer: a sentinel event series

FH B33 CRF Maryland Cigarette Restitution Fund \$50,000

Role: PI, 25%

## Research Program Building/Leadership

12/12 – Present Faculty Director, Specimen Accessioning Core, Sidney Kimmel Comprehensive Cancer

Center at Sibley Memorial Hospital, Washington, DC

## **EDUCATIONAL ACTIVITIES**

### **Educational Publications**

## Peer-Reviewed, Original, Educational Publications

- 1. Paller, C., Bradbury, P.A., Ivy, P., Seymour, L., LoRusso, P., Baker, L., Rubinstein, L., Huang, E., Collyar, D., Groshen, S., Reeves, S., Ellis, L.M., Sargent, D., Rosner, G.L., LeBlanc, M., Ratain, M.J. The Design of Phase 1 Combination Trials: Consensus Recommendations from the Clinical Trial Design Task Force of the National Cancer Institute Investigational Drug Steering Committee. *Clinical Cancer Research*. 2014, 20(16): 4210–4217. PMCID: PMC4135521.
- 2. van Die MD, Bone KM, Emery J, Williams SG, Pirotta MV, Paller CJ. Phytotherapeutic interventions in the management of biochemically recurrent prostate cancer: a systematic review of randomised trials. BJU Int. 2016 Feb 22
- **3.** Nakazawa M, **Paller C**, Kyprianou N. Mechanisms of Therapeutic Resistance in Prostate Cancer. Curr Oncol Rep. 2017 Feb;19(2):13. doi: 10.1007/s11912-017-0568-7.

## **Invited Review Articles**

- 1. **Paller C**, Campbell C, Edwards R, Dobs A. Sex-based differences in pain perception and treatment. *Pain Medicine*. 2009, 10(2):289-299. PMCID: PMC2745644.
- 2. **Paller C,** Antonarakis E. Cabazitaxel: a second-line treatment for metastatic castration-resistant prostate cancer. *Drug Des Devel Ther.* 2011 Mar 10;5:117-24. PMCID: PMC3063116.
- 3. **Paller C,** Antonarakis E. Sipuleucel-T for the treatment of prostate cancer: the promise and the challenge. *Human Vaccines*. 2012 Apr;8(4):509-19. PMID: PMC22336881.
- 4. **Paller** C, Carducci M, Philips G. Management of Bone Metastases in Refractory Prostate Cancer Role of Denosumab. *Journal Clinical Interventions in Aging*. 2012; 7:363–372. PMCID: PMC3459574.
- 5. **Paller** C, Antonarakis A. Management of biochemically-recurrent prostate cancer after local therapy: evolving standards of care and new directions. *Clinical Advances in Hematology & Oncology:* 2013 Jan; 11(1):14-23. PMCID: PMC3624708.
- 6. **Paller C**, Antonarakis E, Eisenberger M, Carducci M. Management of patients with biochemical recurrence after local therapy for prostate cancer. *Hematology/Oncology Clinics of North America*; 2013 Dec; 27(6):1205-19. PMCID: PMC3818691.
- 7. **Paller C,** Denmeade S, Carducci M. Challenges of Conducting Clinical Trials of Natural Products in Cancer. Clinical Advances in Hematology & Oncology. Submitted in 2/2016.
- 8. Paller CJ, Denmeade SR, Carducci MA. Challenges of conducting clinical trials of natural products to combat cancer. Clin Adv Hematol Oncol. 2016 Jun;14(6):447-55. Review. PMID: 27379814
- 9. Paller C, Pantuck A, Carducci M. Pomegranate in Prostate Cancer: A Review, PCAN Accepted 2/22/2017.

### **Editorials**

- 1. **Paller, C.** and Rudin, C. Youth has no age: cancer treatment for older Americans. Oncology. 2010 Nov 15;24(12):1114, 1118, 1120. PMCID: PMC3482117.
- 2. **Paller, C.** and Smith, T. Finasteride and Prostate Cancer: A Commentary. Oncologist. 2012;17(7):888-90. Epub 2012 Jun 20. PMCID: PMC3399642.

## Case Reports

- 1. Rowe SP, Deville C, **Paller CJ**, Cho SY, Fishman EK, Pomper MJ, Ross AE, Gorin MA, "Uptake of 18F-DCFPyL in Paget's Disease of Bone, an Important Potential Pitfall in Clinical Interpretation of PSMA PET Studies," Tomography, 2015 Dec;1(2):81-84.
- 2. Markowski M, Imus P, Wright J, Schottenstein D, **Paller C.** Long term control of oligometastatic prostate cancer following stereotactic radiation therapy in the absence of ADT: A Case report. Clinical Genitourinary Cancer, Accepted 2/20/17.
- 3. Rowe SP, Deville C, **Paller C**, Cho SY, Fishman EK, Pomper MG, Ross AE, Gorin MA. Uptake of 18F-DCFPyL in Pagets Disease of Bone, an Important Potential Pitfall in Clinical Interpretation of PSMA PET Studies. Tomography. 2015 Dec;1(2):81-84.

## **Book Chapters**

- 1. Movsas, B., Brahmer, J., **Paller, C.**, and Kernstine, K. Non-small-cell lung cancer in 13th Edition of Cancer Management Handbook: A Multidisciplinary Approach Medical, Surgical & Radiation Oncology (Pazdur, R., Camphausen, K., Hoskins, W., Wagman, L., Eds.) UBM Medica, London. 2010-2011.
- 2. Movsas, B., Brahmer, J., **Paller, C.**, and Kernstine, K. Non-small-cell lung cancer in 14th Edition of Cancer Management Handbook: A Multidisciplinary Approach Medical, Surgical & Radiation Oncology (Pazdur, R., Camphausen, K., Hoskins, W., Wagman, L., Eds.) UBM Medica, London. 2012.
- 3. **Paller, C.**, Smith, T. Strategies Addressing Quality of Life: Patient Reported Outcomes and Symptoms Management in Management of Castration Resistant Prostate Cancer (Saad, F., Eisenberger, M., Eds.) Springer Dordrecht Heidelberg London New York, 2014.

## **Teaching**

### Classroom Instruction

2010-2014 Spring or Fall, Small Group Courses: Palliative and End of Life Care Intersession "Genes to Society," Small group leader (20-30 medical students), Johns Hopkins University School of Medicine, Baltimore, MD

#### Clinical Instruction

2015- present Residents and Fellows attending MultiDisciplinary Prostate Clinic
1/2016- present Medical Oncology Education Director for rotating medical oncology fellows (NIH, Howard, Hopkins)

### CME Instruction

04/15	"Prostate Cancer Survivorship: Improving Outcomes, Enhancing Care," Cancer Survivorship
	Symposium, (CME), Johns Hopkins Hospital, Baltimore, MD.
07/15	NCCN Sponsored Grand Rounds, "Caring for Patients with Castrate Resistant Prostate Cancer:
	Redefining Roles of Urologists and Oncologists," Hampton VA Medical Center, Hampton, VA.
4/16	Keynote: "Integrated Care for Cancer Patients", 12th International VHL Symposium, Massachusetts
	General Hospital, Boston, MA.

#### Workshops/Seminars

workshops/sei	ititui S
05/10	Southeastern Fellows Research Skills Retreat, Invited Participant, Duck, NC
08/10	AACR Vail Methods in Clinical Cancer Research Workshop, Invited Participant, Vail, CO
05/12	Molecular and Translational Oncology Workshop, Invited Participant, Fort Myers, FL
10/12	Merrill J. Egorin Workshop in Cancer Pharmacology, Invited Participant, Leesburg, VA
10/12	19th Annual Scientific Retreat of the Prostate Cancer Foundation, Invited Participant, Carlsbad, CA
03/13	Multi-Institutional Prostate Cancer Program Retreat, Invited Participant, Ft. Lauderdale, FL
10/13	20th Annual Scientific Retreat of the Prostate Cancer Foundation, Invited Participant, National
	Harbor, MD
10/13	Ninth International Workshop on Anti-Cancer Agents, Invited Participant, Northumberland, UK
10/14	21st Annual Scientific Retreat of the Prostate Cancer Foundation, Invited Participant, National Harbor,
	MD

10/15 22<sup>nd</sup> Annual Scientific Retreat of the Prostate Cancer Foundation, Invited Participant, National

Harbor, MD

# **Mentoring**

Advisees

Faraz Shaikh, Medical Student, currently Resident in Internal Medicine, Wake Forest School of

Medicine, Raleigh, NC Eastern Virginia Medical School

Dare Olatoye, Medical Student, Johns Hopkins University, Baltimore, MD, currently resident in

internal medicine, Mayo Clinic, Rochester, MN

2011- 2012 Sherlly Xie, Masters Student of Biostatistics, Johns Hopkins University, Baltimore, MD currently

staff statistician, Medical College of New Jersey, Newark, NJ

2012- Present Mark Markowski, Oncology Fellow, Johns Hopkins University, Baltimore, MD

Alex Cole, M.D. 2014, Johns Hopkins University School of Medicine, Baltimore, MD, currently

clinical resident in urology, Brigham & Women's, Harvard Medical School, Boston, MA

Francesca Courtinho, MPH (2014), Johns Hopkins Bloomberg School of Public Health, Baltimore,

MD Currently postdoctoral position in Canada

2014 Summer Savannah Windham, undergraduate at University of Wisconsin, Madison WI

2014- Present Laura Hendricks Jackson, Registered Nurse, DNP Candidate, Drexel and Hopkins Student,

Baltimore, MD.

2015- Present Thomas Luechtefeld, Hopkins PhD Candidate

2016- Present Hogan Tang, PhD Research Associate, Bloomberg School of Public Health

2016- Present Jianqiang Lin, Associate Professor, GW

2016- Present Valerie Lee, Assistant Professor, Johns Hopkins

#### Thesis Committees

2016 Thomas Luechtefeld

2016 Laura Hendricks Jackson

## **Training Grant Participation**

None

## **Educational Program Building / Leadership**

Sibley Oncology Fellowship Program for Howard and NIH Fellows

## **Educational Extramural Funding**

None

## **CLINICAL ACTIVITIES**

#### Certification

# Medical, other state/government licensure

2008-Present Maryland Medical License # D0067713

2008-Present Maryland Controlled Substances Registration # M65874

2008-Present United States Drug Enforcement Agency Registration #FP1047073

2013-Present District of Columbia Medical License # MD040576

## Boards, other specialty certifications

2008 National Board of Medical Examiners

2008 American Board of Internal Medicine - Internal Medicine

2011 American Board of Internal Medicine - Oncology

## Clinical (Service) Responsibilities

2012 - Present Prostate Cancer Multidisciplinary Clinic, Assistant Professor, monthly staffing/weekly

participation, Baltimore and Washington, DC sites.

2012 - Present Sidney Kimmel Comprehensive Cancer Center / Sibley Memorial Hospital, Outpatient

Clinic, 1.5 days/week

## **Investigational New Drug Applications**

3/12 Muscadine Plus (MPX) In Men Following Initial Therapy For Prostate Cancer.

IND 109605. Approved to proceed on 3/8/2012. Michael Carducci Sponsor.

3/15 Overcoming drug resistance in metastatic castration-resistant prostate cancer with novel combination

of TGF-β receptor inhibitor LY2157299 and enzalutamide: a randomized multi-site phase II study.

IND 125694. Approved to proceed on 3/3/15.

6/15 A Randomized Phase 2 Trial of Ascorbic Acid in Combination with Docetaxel in Men with

Metastatic Prostate Cancer.

IND 126543. Approved to proceed on 6/3/15.

12/15 IV Mistletoe Extract in Patients with Advanced Solid Tumors.

IND 128726. Luis Diaz Sponsor.

## **Clinical Protocols**

4/11	Phase I/II Study Of Safety And Efficacy Of Muscadine Plus (MPX) In Men With Prostate Cancer: A
	Randomized Dose-Finding Study Of The Effects Of Two Doses Of MPX Capsules On Rising
	Prostate-Specific Antigen Levels In Men Following Initial Therapy For Prostate Cancer.
	Protocol J1161. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

1/13 Retrospective Review of Sarcomatoid Carcinoma of the Prostate.

Protocol Z1279. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

Race as a Risk Factor for Metastatic Prostate Cancer: A Sentinel Event Case Series. 10/13

Protocol J1336. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

1/15 Personalized medicine research trial: tissue analysis, biospecimen collection, whole-genome

sequencing and molecular pathological analyses of a single patient to provide a deeper understanding

of prostate cancer.

Protocol J14169. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

6/15Overcoming drug resistance in metastatic castration-resistant prostate cancer with novel combination

of TGF-β receptor inhibitor LY2157299 and enzalutamide: a randomized multi-site phase II study.

Protocol J1557. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

10/15 A Randomized Phase 2 Trial of Ascorbic Acid in Combination with Docetaxel in Men with

Metastatic Prostate Cancer.

Protocol J15106. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

12/15 A Phase I Dose-Escalating Trial of Mistletoe Extract in Patients with Advanced Solid Tumors.

Investigator Initiated.

A Phase III Randomized Trial Comparing Androgen Deprivation Therapy TAK-700 With Androgen Deprivation Therapy Bicalutamide in Patients With Newly Diagnosed Metastatic Hormone Sensitive Prostate Cancer.

Principal Investigator –Local, Hopkins multi-site.

Protocol S1216. ECOG Initiated. Approved by JHU Clinical Research Review Committee.

12/13 Race as a Risk Factor for Metastatic Prostate Cancer: A Sentinel Event Case Series.

Principal Investigator. Local, Hopkins multi-site.

Protocol J1336. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

6/14 Immune Evaluation Study of Sipuleucel-T in African American and non-African American Men with Castrate Resistant Prostate Cancer.

Principal Investigator –Local, Hopkins multi-site.

Protocol 2013-108. Karmanos Initiated. Approved by JHU Clinical Research Review Committee.

4/15 Personalized medicine research trial: tissue analysis, biospecimen collection, whole-genome sequencing and molecular pathological analyses of a single patient to provide a deeper understanding of prostate cancer.

Principal Investigator, Local.

Protocol J14169. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

1/16 Overcoming drug resistance in metastatic castration-resistant prostate cancer with novel combination of TGF-β receptor inhibitor LY2157299 and enzalutamide: a randomized multi-site phase II study. Principal Investigator – National, 3 Sites

Protocol J1557. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

2/16 A Randomized Phase 2 Trial of Ascorbic Acid in Combination with Docetaxel in Men with

Metastatic Prostate Cancer.

Principal Investigator – National, 3 Sites.

Protocol J15106. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

3/2017 IV Mistletoe Extract in Patients with Advanced Solid Tumors. Principal Investigator. Protocol J1681, Investigator Initiated. Approved by JHU Clinical Research Review Committee.

## **Clinical Trials Completed**

Phase I/II Study Of Safety And Efficacy Of Muscadine Plus (MPX) In Men With Prostate Cancer: A Randomized Dose-Finding Study Of The Effects Of Two Doses Of MPX Capsules On Rising Prostate-Specific Antigen Levels In Men Following Initial Therapy For Prostate Cancer. Principal Investigator – National, 6 Sites

Protocol J1161. Investigator Initiated. Approved by JHU Clinical Research Review Committee.

1/16 A Randomized Phase II Trial of Sunitinib/Gemcitabine or Sunitinib in Advanced Renal Cell Carcinoma with Sarcomatoid Features.

Principal Investigator –Local, Hopkins multi-site

Protocol E1808. ECOG Initiated. Approved by JHU Clinical Research Review Committee.

10/16 Phase I/II Study Of Safety And Efficacy Of Muscadine Plus (MPX) In Men With Prostate Cancer: A Randomized Dose-Finding Study Of The Effects Of Two Doses Of MPX Capsules On Rising Prostate-Specific Antigen Levels In Men Following Initial Therapy For Prostate Cancer.

06/15 – Present Co-Director, Sibley Prostate Cancer Multidisciplinary Clinic, Sidney Kimmel Comprehensive Cancer Center at Sibley Memorial Hospital, Washington, DC

## **Clinical Extramural Funding (current, pending, previous)**

### Current

07/01/15-06/30/18 Non-invasive detection of AR-FL/AR-V7 as a predictive biomarker for therapeutic resistance

in men with metastatic castration-resistant prostate cancer

PC141019 DOD/CDMRP \$1,049,250

Role: Co-investigator, 5%

07/01/15-06/30/18 A Phase I Dose-Escalating Trial of Mistletoe Extract in Patients with Advanced Solid

Tumors.

BelieveBig.Org \$300,000 Role: PI, 1%

04/01/12 – 3/31/16 Muscadine Grape Skin Extract: Laboratory and Pilot Clinical Evaluation in Prostate

Cancer: Phase I/II Trial

90050278

The Community Foundation for the National Capital Region

\$973,451 Role: PI, 1%

12/01/14 – 12/30/17 A Randomized Phase 2 Trial of Intravenous Ascorbate (Vitamin C) in Combination with

Docetaxel in Men with Metastatic Castration Resistant Prostate Cancer

90061347

Billi Marcus Foundation

\$796,253 Role: PI, 4%

11/01/14 - 10/31/18 Overcoming drug resistance in metastatic castration resistant prostate cancer

15003789

The Community Foundation for the National Capital Region

\$884,956 Role: PI, 1%

5/01/14 – 4/30/17 Immune Evaluation Study of Sipuleucel-T in African American and European American

Men with Castrate Resistant Prostate Cancer

2013-108

Dendreon Prime/ Karmanos Cancer Institute subcontract

\$10,000 Role: PI, 5%

02/16/16 – 02/15/18 Overcoming drug resistance in metastatic castration-resistant prostate cancer with novel

combination of TGF-b receptor inhibitor LY2157299 and enzalutamide: a randomized multi-

site phase II study

90066219 Lilly \$249,999

### **Pending**

### **Previous**

01/01/15-3/01/16 Passano Physician Scientist Award for Phase II Trial of TGFB in mPCa

Clinician Scientist Award Johns Hopkins University

\$160,000 PI: 50%

03/01/15 – 02/20/16 Factors Affecting Combination Trial Success (FACTS)

5UM1CA186691 Supplement

Cancer Therapy Evaluation Program (CTEP), NCI

\$50,000 Role: PI, 12%

01/01/14 – 12/31/16 What Went Wrong: Eliminating Mistakes in Diagnosis and Treatment of Prostate Cancer

90057062 Start a Cure \$8,113 Role: PI, 1%

7/01/10 – 6/30/13 Investigator initiated Phase I/II Clinical Trial of MPX: FDA-required safety studies and

correlative analyses Grant number N/A

Community Foundation for the National Capital Region

\$260,000 Role: PI, 12%

1/01/11 – 12/31/12 Animal studies of AMG 900 in combination with histone deacetylase inhibitors for prostate

cancer

Grant number N/A

Community Foundation for the National Capital Region

\$50,000 Role: PI, 10%

7/01/11 - 6/30/12 Investigator initiated evaluation of muscadine grape skin powder as a novel antitumor agent

in men with rising PSA after primary therapy for prostate cancer: Phase I/II study

Grant number N/A

**Conquer Cancer Foundation** 

\$50,000 Role: PI, 65%

7/01/11 - 6/30/12 Exploring MPX as a potential prevention agent in men with prostate cancer

ECOG Paul Carbone (MD Fellowship Award)

Grant number N/A

\$25,000 Role: PI, 35%

## SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

**System Innovation and Quality Improvement Publications** 

None

## System Innovation and Quality Improvement efforts within JHM

2014 - Present Physician leader of Comprehensive Unit-Based Safety Program (CUSP) for Oncology Infusion and clinic at Sibley Memorial Hospital.

## System Innovation and Quality Improvement efforts outside of JHM

5/13/15 – present President, Genitourinary Multidisciplinary DC Regional Oncology Program

(www.gumdroptrials.org). Led development of public database and web site for

physicians and patients to identify local clinical trials.

## Production of guidelines and/or protocols

8/2014 "The Design of Phase 1 Combination Trials: Consensus Recommendations from the

Clinical Trial Design Task Force of the National Cancer Institute Investigational Drug Steering

Committee." Co-Author.

### System Innovation and Quality Improvement Program Building/Leadership

2014-Present Development of Specimen Accessioning Core at Sibley Memorial Hospital for SKCCC

## **System Innovation and Quality Improvement Extramural Funding**

None

## **Extramural Funding**

None

#### ORGANIZATIONAL ACTIVITIES

### **Institutional Administrative Appointments**

2012 - Present Faculty Director of Specimen Accessioning Core lab at Sibley Memorial Hospital

2015 - Present Co-Director, Sibley Prostate Cancer Multidisciplinary Clinic, Sidney Kimmel Comprehensive Cancer

Center at Sibley Memorial Hospital, Washington, DC

### **Editorial Activities**

## **Editorial Board Appointments**

2013- Present PDQ Cancer Complementary Alternative Medicine Editorial Board, NIH

#### Journal Peer Review Activities

06/10	Invited Reviewer, The Prostate
02/12	Invited Reviewer, Prostate Cancer and Prostatic Diseases
10/12	Invited Reviewer, Journal of Oncology
12/12	Invited Reviewer, Evidence Based Complementary and Alternative Medicine
02/13	Invited Reviewer, Cancer
04/13	Invited Reviewer, Expert Review of Endocrinology and Metabolism
04/13	Invited Reviewer, Clinical Genitourinary Cancer
05/13	Invited Reviewer, Cancer Epigenetics
06/13	Invited Reviewer, Prostate Cancer
10/13	Invited Reviewer, Prostate Cancer and Prostatic Diseases
10/13	Invited Reviewer, Molecules
07/14	Invited Reviewer, Annals of Oncology
11/14	Invited Reviewer, ASCO Educational Book expert panel
02/15	Invited Reviewer, British Journal of Urology
03/15	Invited Reviewer, The Prostate
05/15	Invited Reviewer, The Prostate

05/15	Invited Reviewer, Urology
07/15	Invited Reviewer, Expert Opinion On Therapeutic Patents
3/16	Invited Reviewer, The Prostate
3/16	Invited Reviewer, Prostate Cancer and Prostatic Diseases
3/16	Invited Reviewer, PLOS One
8/16	Invited Reviewer, PLOS One
8/16	Invited Reviewer, ONCO Target
10/16	Invited Reviewer, BMC Complementary and Alternative Medicine
1/17	Invited Reviewer, BMC Urology

### **Invited Grant Review**

2016- Present Fund for Innovation in Cancer Informatics, Advisory Committee

# Advisory Committees, Review Groups/Study Sections

2009 - 2010	Member, Provider Order En	ry (POE) Committee	Johns Hopkins University

2012 – Present Member, NCI/CTEP/IDB Longitudinal project for the Clinical Trial Design Task Force of the

Investigational Drug Steering Committee (IDSC)

2012 - Present Member, Faculty Selection Committee, Sibley Memorial Hospital

#### **Professional Societies**

2002 - 2004	Member, American College of Physicians			
2002 - 2004	Student Representative, Massachusetts Medical Society			
2009-	Member, American Society of Clinical Oncology			
2010-	Member, American Association for Cancer Research			

## **Conference Organizer, Session Chair**

5/31/15 ASCO 2015 Session co-Chair, Genitourinary (Prostate) Cancer. Oral Abstract Session

10/08/15 Moderator, Ascorbic Acid in Prostate Cancer Treatment," Prostate Cancer Foundation Annual

Scientific Retreat, Washington, DC.

## **Consultantships**

05/14 Sipulecel T, Dendreon

## RECOGNITION

## Awards, Honors

2011	Clinical Research Honorable Mention for Research Day, Sidney Kimmel Comprehensive			
	Cancer Center			
2011	Merit Ward to attend 2011 ASCO Annual Conference			
2011 - 2012	ASCO Conquer Cancer Foundation Young Investigators Award			
2011 - 2012	Paul Carbone ECOG Fellowship			
2012	Patients' Choice Award from American Registry			
2012	Most Compassionate Doctor Award from American Registry			
2012	Merit Award to attend 2012 ASCO Annual Conference			
2015	Passano Clinician Scientist Award			
2016	NIH K23 Mentored Patient-Oriented Research Career Development Award			

### **Invited Talks, Panels**

(	09/21/11	Presenter, Bench to Bedside: Novel Approaches in treating prostate cancer, University Hospital
		Seidman Cancer Center, Cleveland, OH
1	10/11/11	Presenter, "Bench to Bedside: Novel approaches in treating prostate cancer," University of Michigan,
		Ann Arbor, MI
1	10/25/11	Presenter, "Bench to Bedside: Novel approaches in treating prostate cancer"

	Barbara Ann Karmanos Cancer Center, Detroit, MI
10/27/11	Presenter, "Bench to Bedside: Novel approaches in treating prostate cancer"
	UT Southwestern, Dallas, TX
11/01/11	Presenter, "Bench to Bedside: Novel approaches in treating prostate cancer"
	Vanderbilt-Ingram Cancer Center, Nashville, TN
06/18/12	"Finding Suitable Trials as a Doctor Or A Patient In A User-Friendly, Intuitive Fashion"
	Genitourinary Multi-disciplinary Regional Oncology Program, Washington, DC
07/17/13	Presenter, "Region-Wide Poster and Website For Informing Patients and Physicians About Suitable
	GU-Oncology Clinical Trials," Genitourinary Multi-disciplinary Regional Oncology Program,
	Washington, DC
09/19/13	Presenter, "What Went Wrong: Eliminating Mistakes in Diagnosis and Treatment of Prostate
	Cancer," 9th Annual African American Prostate Cancer Disparity Summit, Washington, DC.
09/23/13	Presenter, "Knowledge is Power Rising PSA after Treatment for Prostate Cancer: The Treatment
	Dilemma," 8th Annual Prostate Cancer Symposium, Bethesda, MD.
10/23/13	Presenter, "Challenges of Natural Product Drug Development," Translational Research Conference at
	the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD.
04/16/14	Presenter, "Novel Therapies for Prostate Cancer," George Washington University Hospital Grand
	Rounds, Washington, DC.
04/30/14	Presenter, "What's New in Prostate Cancer?" Suburban Hospital, Bethesda, MD.
06/13/14	Presenter, "Novel Therapies for Metastatic Prostate Cancer," Harbor Hospital Grand Rounds,
	Baltimore, MD.
04/17/15	Presenter, "Prostate Cancer Survivorship: Improving Outcomes, Enhancing Care," Cancer
	Survivorship Symposium, (CME), Johns Hopkins Hospital, Baltimore, MD.
04/20/15	Presenter, "Hereditary Risk and Prostate Cancer," Suburban Hospital, Bethesda, MD
06/9/15	Presenter, "Prostate Cancer Survivorship: What Does It Mean For You?" Sibley Memorial Hospital
	Knowledge Is Power Series, Washington, DC
06/19/15	Grand Rounds, "TKIs in Metastatic RCC: Treatment Choices in an Intricate Landscape," Johns
	Hopkins Kimmel Cancer Center Grand Rounds, Baltimore, MD.
07/01/15	Grand Rounds, "Caring for Patients with Castrate Resistant Prostate Cancer: Redefining Roles of
40/0/4 5	Urologists and Oncologists," Hampton VA Medical Center, Hampton, VA.
10/8/15	Presentation, "Rigorous Assessment of IV Ascorbate in Combination with Docetaxel in mCRPC
2/2/16	Prostate Cancer," Prostate Cancer Foundation Annual Scientific Retreat, Washington, DC.
3/2/16	Presentation, "FACTS: Factors Affecting Combination Trial Success." NIH/CTEP, Rockville, MD.
3/9/16	Presentation, "Rigorous placebo-controlled clinical trial of ascorbate in combination with docetaxel in
	CRPC." Marcus Foundation Integrative Health Workshop, Thomas Jefferson University,
4/5/16	Philadelphia. PA.
4/5/16	Presentation: "Trends and Recent Developments in Cancer Research and Treatment", Osher Lifelong
4/6/16	Learning Institute, Rockville, MD.  Presentation: "A randomized phase 2 trial of ascorbic acid in combination with Docetaxel in men
4/0/10	•
4/8/16	with metastatic prostate cancer", International Cancer Study & Therapy Conference, Baltimore, MD. Keynote: "Integrated Care for Cancer Patients", 12 <sup>th</sup> International VHL Symposium, Massachusetts
4/0/10	General Hospital, Boston, MA.
4/12/16	Presentation: "Is There a Clinical Trial In Your Future? How To Find the Right One", Us Too:
4/12/10	International Prostate Cancer Education & Support Network, Fairfax-Falls Church, VA, Support
5/11/16	Group. Fairfax, VA. Mistletoe and Cancer: Promises and Challenges, National Cancer Institute Strategic Workshop.
3/11/10	Bethesda, DC.
2/15/17	A Randomized Dose-Finding Placebo Controlled Phase II Study of Muscadine Grape Skin in Men
4/13/1/	with Rising PSA following Local Therapy. PCCTC Meeting, GU-ASCO, Orlando, FL
	with rights 1 5/1 following Local Thorapy. I Core Mouning, 00-A5CO, Orlando, I L

# OTHER PROFESSIONAL ACCOMPLISHMENTS

5/13/15 – present President, Genitourinary Multidisciplinary DC Regional Oncology Program (www.gumdroptrials.org)