Travis A Gerke, ScD
Curriculum Vitae
Prepared March 16, 2020

Current Position

Assistant Member, Department of Cancer Epidemiology
Scientific Director, Collaborative Data Services

Moffitt Cancer Center
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Current Academic Appointments

2014– Visiting Scientist, Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA
2016– Assistant Member, Department of Genitourinary Oncology, Moffitt Cancer Center, Tampa, FL
2016– Assistant Professor, Department of Oncologic Sciences, Morsani College of Medicine, University of South Florida, Tampa, FL

Education

2007–2009 B.A. (Mathematics), University of Florida, Gainesville, FL
2007–2009 B.S. (Statistics), University of Florida, Gainesville, FL
2009–2011 A.M. (Biostatistics), Harvard University, Cambridge, MA
2012–2014 Sc.D. (Epidemiology), Harvard School of Public Health, Boston, MA

Previous Academic Appointments and Employment

2008–2009 Research Assistant, Rehabilitation Outcomes Research Center, Department of Veterans Affairs, Gainesville, FL
2011–2012 Statistician I, Department of Epidemiology, Harvard School of Public Health, Boston, MA
2012–2013 Graduate Research Assistant in Biostatistics, Dana-Farber Cancer Institute, Boston, MA
2012–2014 Graduate Research Assistant in Cancer Epidemiology, Harvard School of Public Health, Boston, MA
2014–2016 Assistant Professor (Tenure Track), Department of Epidemiology, College of Medicine and College of Public Health and Health Professions, University of Florida, Gainesville, FL

Teaching

University Courses

2008–2009 Teaching Assistant, Statistics 2023: Introduction to Statistics, Department of Statistics, University of Florida
2011 Lab Instructor, Biostatistics 210: The Analysis of Rates and Proportions, Department of Biostatistics, Harvard School of Public Health

2013 Instructor, Introduction to Biostatistics and Statistical Programming, Summer Program in Epidemiology, Department of Epidemiology, Harvard School of Public Health

2015 Instructor, Epidemiology Methods II (PHC 6011), Department of Epidemiology, University of Florida

2016 Instructor, Measurement in Epidemiology and Outcomes Research (PHC 6711), Department of Epidemiology, University of Florida

Other Courses

2017–2019 Faculty/Instructor, AACR Integrative Molecular Epidemiology Workshop: Bridging Cancer Biology and Precision Medicine, Boston, MA. Sections taught: Publicly Available Online Genomics and 'Omics Resources; Bioinformatics Toolkits for Functional Analysis; Precision Medicine: Predictive Modeling from High-Throughput Results

Invited Lectures

2016 Leveraging big data resources to understand public health disparities. Translational Research and Therapeutics: Bench, Bedside, Community, & Policy; University of Florida course GMS 7593.

2017 Fundamentals of integrative molecular epidemiology. Quantitative Genomics and Genetics; University of South Florida course PHC 6934.

2018 Prostate cancer epidemiology. Cancer Epidemiology; University of South Florida course PHC 6007.

Training Experience

Doctoral dissertation committee membership

2014–2017 Molly Buchanan, Department of Sociology and Criminology & Law, University of Florida

2015 Zahra Shekarkhar, Department of Sociology and Criminology & Law, University of Florida

2015–2016 Abenaa Acheampong, Department of Epidemiology, University of Florida

2015–2017 Yuanfang Ren, Department of Computer & Information Science & Engineering, University of Florida

Master's thesis committee membership

2014–2015 Fangyu Su, Department of Epidemiology, University of Florida (Chair)

2014–2015 Chelsea Lutz, Department of Epidemiology, University of Florida (Chair)

2014–2015 Chi Wang, Department of Epidemiology, University of Florida (Chair)

2014–2015 Danmeng Li, Department of Epidemiology, University of Florida

Honors and awards

2016 William R. Jones Most Valuable Mentor Award, Florida Education Fund McKnight Doctoral Fellowship Program

Research support

Current

External grants

Grant #:	PC181013
Name of PI:	Yamoah/Park/Rounbehler

Dates:	08/01/2019 – 07/31/2022
Funding Source:	Department of Defense Health Disparities Research Award
Title:	Characterize the immune-oncologic profile of lethal prostate cancer in African American men and develop new therapeutic avenues of therapy for this patient population
Funded Effort:	5%
Role in Study:	Co-I: Lead biostatistician and data scientist, overseeing data management, quality control, and biostatistical analyses of gene expression and other biomarker data
Direct Costs:	$999,963
Award Amount:	$1,719,936

Grant #:	R21 CA234787
Name of PI:	Enderling/Gatenby
Dates:	07/01/2019 – 06/30/2021
Funding Source:	NIH/NCI – R21
Title:	Predicting patient-specific responses to personalize androgen deprivation therapy for prostate cancer
Funded Effort:	5%
Role in Study:	Co-I: Lead biostatistician guiding appropriate design strategies for and implementation of prediction model development and validation
Direct Costs:	$265,786
Award Amount:	$422,386

Grant #:	T2017-017
Name of PI:	Park/Yamoah
Dates:	12/19/2017 – 11/01/2020
Funding Source:	V Foundation for Cancer Research
Title:	Genomic predictors of aggressive and lethal prostate cancer in African American men.
Funded Effort:	5%
Role in Study:	Co-I: Quantitative epidemiologist providing direction on design and implementation strategies for biomarker discovery and validation
Direct Costs:	$545,454
Award Amount:	$600,000

Grant #:	P30 CA076292
Name of PI:	Sellers
Dates:	02/18/1998 – 01/31/2022 (Gerke start date: 01/01/2018)
Funding Source:	National Cancer Institute
Title:	Moffitt Cancer Center Support Grant: Years 17–23
Funded Effort:	10%
Role in Study:	Co-I: Scientific Director of the Collaborative Data Services Core shared resource
Direct Costs:	$7,999,091
Award Amount:	$13,757,890

Internal grants

Grant #:	19011601
Name of PI:	Gerke/Aden-Buie
Dates:	05/01/2019 – 04/30/2020
Funding Source:	DPR Innovative Core Project

Title:	DV^3: A customer-driven framework for data spoke creation, access, and governance.
Funded Effort:	3%
Role in Study:	PI
Direct Costs:	$50,000
Award Amount:	$50,000

Contracts

Grant #:	W81XWH-18-1-0199
Name of PI:	Kantoff
Dates:	09/30/2018 – 09/29/2021
Funding Source:	DoD/Memorial Sloan Kettering Cancer Center
Title:	Mutational landscape of the Y chromosome and prostate cancer.
Funded Effort:	10%
Role in Study:	PI, Subcontract: Lead epidemiologist and biostatistician towards biomarker discovery and validation
Direct Costs:	$45,964
Award Amount:	$79,058

Pending

External grants

Grant #:	12904679
Name of PI:	Penney/Gerke/Cook (Partnering PIs)
Dates:	04/01/2020 – 03/31/2024
Funding Source:	Department of Defense Synergistic Population and Data Science Award
Title:	Pooling US Cohort Studies to Predict Lethal Prostate Cancer
Funded Effort:	20%
Role in Study:	PI
Direct Costs:	$1,464,574; $508,624 (Moffitt)
Award Amount:	$874,834 (Moffitt)

Grant #:	19071803
Name of PI:	Freedland/Yamoah/Den/Rayford (Partnering PIs)
Dates:	09/01/2020 – 08/31/2023
Funding Source:	Department of Defense Synergistic Population and Data Science Award
Title:	Deconvolution of bulk tumor gene expression to identify novel immune-targets in prostate cancer in African-American Men
Funded Effort:	15%
Role in Study:	Co-I: Lead data scientist for multi-site data coordination and epidemiologic methods guidance
Direct Costs:	$546,521
Award Amount:	$940,016

Grant #:	19072402
Name of PI:	Sellers/Mitchell
Dates:	05/01/2020 – 04/03/2022
Funding Source:	Department of Defense Investigator-Initiated Research Award
Title:	An integrated GWAS-based deep learning approach to improve ovarian cancer risk prediction

Funded Effort:	10%
Role in Study:	Co-I: Provide epidemiologic methods support towards prediction model development and validation
Direct Costs:	$449,997
Award Amount:	$773,995

Grant #:	19061804
Name of PI:	Schmit
Dates:	04/01/2020 – 03/31/2025
Funding Source:	NIH/NCI – R01
Title:	Variation in tumor-associated immune profiles and colorectal cancer outcomes across populations of diverse ancestral origins
Funded Effort:	8%
Role in Study:	Co-I: Co-lead biostatistics team for analysis and prediction model development and validation from genetic and imaging data
Direct Costs:	$2,854,881
Award Amount:	$4,320,198

Contracts

Grant #:	R21CA24167 (Resubmission)
Name of PI:	Tyekucheva
Dates:	04/01/2020 – 03/31/2022
Funding Source:	NIH/NCI – R21, Dana Farber Cancer Institute
Title:	Curated prostate cancer data for novel and reproducible prognostic modeling.
Funded Effort:	10%
Role in Study:	Site PI: Lead data scientist for data coordination and quality control, as well as epidemiologic methods guidance
Direct Costs:	$89,864
Award Amount:	$154,566

Completed funding

Internal grants

Name of PI:	Gerke, Kahveci (co-PI)
Dates:	02/15/2015 – 02/14/2016
Funding Source:	UF Health Cancer Center Pilot Project Award
Title:	Inferring the genetic architecture of gene expression in prostate cancer.
Funded Effort:	0%
Role in Study:	Co-PI
Direct Costs:	$60,000
Award Amount:	$60,000

Name of PI:	Gerke, Rollison (co-PI)
Dates:	12/01/16 – 06/30/17
Funding Source:	Moffitt Innovation Award
Title:	Machine learning approaches to identifying cancer recurrence from EMR data.
Funded Effort:	0%
Role in Study:	PI
Direct Costs:	$40,000
Award Amount:	$40,000

Name of PI:	Monteiro
Dates:	07/01/2017 – 06/30/2018
Funding Source:	Moffitt Cancer Center, Miles for Moffitt Award
Title:	Scaffold/Matrix Attachment Regions: structural genomic elements modulating cancer susceptibility.
Funded Effort:	5%
Role in Study:	Co-I
Direct Costs:	$100,000
Award Amount:	$100,000

Name of PI:	Chung/Anderson/Gerke
Dates:	04/01/2018 – 01/31/2019
Funding Source:	Moffitt Cancer Center Team Science Award
Title:	Precision medicine for thyroid nodules with indeterminate cytology.
Funded Effort:	2%
Role in Study:	co-PI
Direct Costs:	$100,000
Award Amount:	$100,000

Name of PI:	Berglund, Carvajal (co-PI)
Dates:	04/01/2018 – 03/31/2019
Funding Source:	Moffitt Cancer Center, Innovative Core Project Award
Title:	Complex cohort identification based on patient's timeline (CCIPT-View): an integrated view of a cancer patient.
Funded Effort:	1%
Role in Study:	Co-I
Direct Costs:	$50,000
Award Amount:	$50,000

Name of PI:	Gerke
Dates:	09/01/2018 – 08/31/2019
Funding Source:	American Cancer Society - Institutional Research Grant
Title:	Leveraging big data towards an improved understanding of racial disparities in prostate cancer outcomes.
Funded Effort:	5% (cost-shared)
Role in Study:	PI
Direct Costs:	$30,000
Award Amount:	$30,000

Contracts

Name of PI:	Gerke/Bird/Manini/Prosperi
Dates:	01/01/2016 – 12/31/2017
Funding Source:	UF Cancer-Aging Collaborative Team Grant
Title:	Endotype discovery in prostate cancer and multi-domain analysis of age-related comorbidities.
Funded Effort:	0%
Role in Study:	Co-PI
Direct Costs:	$40,000
Award Amount:	$40,000

Patents

2017 Huttenhower C, **Gerke TA**, Sweeney C, Mucci L, Lee G, Börnigen D, Wang X, Tyekucheva S, Jordahl K. Compositions and methods for screening and identifying clinically aggressive prostate cancer. PCT/US2017/014362; WO2017127696A1.

Dissertation

Title: Discovering and validating prognostic biomarkers in prostate cancer by focusing on population impact.
Defended: November 12, 2014, Harvard School of Public Health, Boston, MA
Committee: Lorelei Mucci (chair), Giovanni Parmigiani, Meir Stampfer, Christopher Sweeney

Service at Moffitt Cancer Center

Administrative appointments

2018– Scientific Director, Collaborative Data Services Core. 10% FTE.

Committees

2016–2017 Member, Data Documentation and Management Best Practices Task Force. Monthly meetings; 4 hr/month commitment, 10 months term.
2017 Chair, Cancer Epidemiology Research Data Analyst Task Force. Monthly meetings; 5 hr/month commitment, 4 months term.
2017 Member, Unstructured Data Mining Advisory Group. Monthly meetings; 2 hr/month commitment, 5 months term.
2018 Member, Department of Cancer Epidemiology Website Redesign Task Force, Monthly meetings; 1 hr/month commitment, 3 months term.
2017– Member, High Performance Computing Steering Committee. Monthly meetings; 1 hr/month commitment.
2017– Planning Committee Member, The Biology of Cancer Health Disparities Seminar Series, Monthly meetings; 1 hr/month commitment.
2018– Member, Total Cancer Care Strategic Operations Committee (TCC-SOC), Quarterly meetings; 1 hr/month commitment.
2018– Member, Health and Research Informatics (HRI) Governance Committee, Biweekly meetings; 2 hr/month commitment.
2018– Member, Data Sharing & Management Task Force, Monthly meetings; 2 hr/month commitment.
2019 Member, HRI Molecular Data Training Task Force, Monthly meetings; 2 hr/month commitment, 3 months term.
2019– Member, Shared Resource Advisory Committee for the PRISM Core, 2–3 meetings per year + periodic scientific input and guidance; 1 hr/month commitment.

Service at University of Florida

2015–2016 Co-chair, Graduate Admissions Committee, Department of Epidemiology
2015–2016 Member, Epidemiology Faculty Committee, Department of Epidemiology
2015–2016 Member, Seminar Committee, Department of Epidemiology
2015–2016 Member, Cancer Recruitment Committee, Department of Epidemiology
2015–2016 Member, Fundraising Committee, Department of Epidemiology
2015–2016 Member, TL1 Advisory Committee, Clinical and Translational Science Institute

2015–2016 Consultant, Biostatistics, Epidemiology and Research Design Program (BERD), Clinical and Translational Science Institute

Service to the Profession

2011–2013 IRB panel member, Brigham and Women's Hospital, Boston, MA
2014 Ad-hoc reviewer (1 manuscript): Cancer Medicine
2016 Ad-hoc reviewer (2 manuscripts): Cancer Epidemiology, Biomarkers & Prevention; IEEE/ACM Transactions on Computational Biology and Bioinformatics
2016 Member, Scientific Review Committee, The Science of Global Prostate Cancer Disparities Conference, Nov 9-12; Orlando, FL.
2016 Session moderator, Personalized Medicine: From Bench to Bedside to Community; The Science of Global Prostate Cancer Disparities Conference, Nov 9-12; Orlando, FL.
2017 Ad-hoc reviewer (10 manuscripts): Cancer Medicine (4); BMC Urology; Cancer Causes & Control; Cancer Research; Cancer Epidemiology, Biomarkers & Prevention; IEEE/ACM Transactions on Computational Biology and Bioinformatics (2)
2017 Ad-hoc grant reviewer, Genesis Oncology Trust, Research Project Grants Mechanism
2015–2017 Co-leader, Computational Patho-Epidemiology Working Group, Transdisciplinary Prostate Cancer Partnership (ToPCaP), Boston, MA
2018 Ad-hoc reviewer (10 manuscripts): Cancer Research; JNCI; JAMA Oncology (2); European Urology; IEEE/ACM Transactions on Computational Biology and Bioinformatics; Journal of Open Source Software (2); International Journal of Cancer; PeerJ
2018 Ad-hoc grant reviewer: Cancer Research UK, Population Research Postdoctoral Fellowship Mechanism; University of Florida Informatics Institute (UFII) and Clinical Translational Institute (CTSI), Pilot Project Program
2019 Ad-hoc reviewer (16 manuscripts): PeerJ; Cancer Epidemiology, Biomarkers & Prevention (4); Cancer Research; JNCI, CHEST (9)
2019– Member, Flatiron Health Academic Research Oversight Committee, Quarterly meetings; 1 hr/month commitment.
2019– Member, Statistical Review Panel, CHEST Journal; 2–4 articles per month
2019– Executive Board Member, Florida Interdisciplinary Data Sciences Consortium (IDSC)
2020 Ad-hoc reviewer (2 manuscripts): Cancer Epidemiology, Biomarkers & Prevention; CHEST

Service to the Community

2017– Founding organizer, Tampa Bay R Users Group, Tampa, FL

Professional association memberships

2011– Active member, Transdisciplinary Prostate Cancer Partnership (ToPCaP), Boston, MA
2014– Active member, Prostate Cancer Transatlantic Consortium (CaPTC), Gainesville, FL
2015– Active member, American Association for Cancer Research (AACR)
2017– Active member, Molecular Epidemiology Working Group of the AACR (MEG/AACR)
2019– Active member, Cancer Informatics for Cancer Centers (Ci4CC)
2019– Active member, Society for Epidemiologic Research (SER)

Peer-reviewed publications

Underline denotes first/co-first and senior/co-senior

1. **Gerke TA**, Randles RH. A method for resolving ties in asymptotic relative efficiency. Stat Probabil Lett 2010; 80:1065–1069.

2. Kachouie NN, **Gerke TA**, Huybers P, Schwartzman A. Nonparametric regression for estimation of spatiotemporal mountain glacier retreat from satellite images. IEEE Trans Geosci Remote Sens 2014; 53(3): 1135–1149.

3. Shui IM, Lindström S, Berndt SI, Campa D, **Gerke TA**, Penney KL, Albanes D, Berg C, Bueno-de-Mesquita HB, Chanock S, Crawford ED, Diver WR, Gapstur SM, Gaziano JM, Hoover R, Johansson M, Ma J, Navarro C, Overvad K, Siddiq A, Stampfer MJ, Stevens VL, Travis R, Trichopoulos D, Vineis P, Mucci LA, Yaeger M, Giovannucci EL, Kraft P. Prostate Cancer (PCa) Risk Variants and Risk of Fatal PCa in the National Cancer Institute Breast and Prostate Cancer Cohort Consortium. Eur Urol 2014; 65(6): 1069–1075. PMID: 24411283. PMCID: PMC4006298.

4. Bismar TA, Alshalalfa M, Petersen LF, Teng LH, **Gerke TA**, Bakkar A, Al-Mami A, Liu S, Dolph M, Mucci LA, Alhajj R. Interrogation of ERG gene rearrangements in prostate cancer identifies a prognostic 10-gene signature with relevant implication to patients' clinical outcome. Brit J Urol Int 2014; 113(2): 309–319. PMID: 24006850.

5. Penney KL, Sinnott JA, Tyekucheva S, **Gerke TA**, Shui IM, Kraft P, Sesso HD, Freedman M, Loda MF, Mucci LA, Stampfer MJ. Association of prostate cancer risk variants with gene expression in normal and tumor tissue. Cancer Epidemiol Biomarkers Prev 2015; 24(1): 255–260. PMID: 25371445. PMCID: PMC4294966.

6. Shui IM, Mondul AM, Lindström S, Tsilidis KK, Travis RC, **Gerke TA**, Albanes D, Black A, Berg CD, Bueno-de-Mesquita HB, Gapstur SM, Haiman C, Henderson B, Hoover R, Hunter DJ, Johansson M, Key TJ, Khaw K, Marchand L, Ma J, McCullough ML, Siddiq A, Stampfer M, Stram DO, Stevens VL, Trichopoulos D, Tumino R, Willett W, Ziegler RG, Kühn T, Barricarte A, Tjønneland A, Mucci LA, Giovannucci E, Kraft P. Circulating vitamin D, vitamin D-related genetic variation, and risk of fatal prostate cancer in the National Cancer Institute Breast and Prostate Cancer Cohort Consortium. Cancer 2015; 121(12): 1949–1956. PMID: 25731953. PMCID: PMC4457645.

7. Sinnott JA, Rider JR, Carlsson J, **Gerke TA**, Tyekucheva S, Penney K, Sesso HD, Loda M, Parmigiani G, Fall K, Stampfer MJ, Mucci LA, Pawitan Y, Andersson S, Andrén O. Molecular Differences in Transition Zone and Peripheral Zone Prostate Tumors. Carcinogenesis 2015; 36(6): 632–638. PMID: 25870172. PMCID: PMC4572920.

8. Rider JR, Fiorentino M, Kelly R, **Gerke TA**, Jordahl K, Sinnott JA, Giovannucci EL, Loda MF, Mucci LA, Finn S. Tumor expression of Adiponectin Receptor 2 and lethal prostate cancer. Carcinogenesis 2015; 36(6): 639–647. PMID: 25863129. PMCID: PMC4481603.

9. Terry RS, **Gerke TA**, Mason JB, Sorenson MD, Joseph JP, Dahm P, Su L. Postoperative rhabdomyolysis following robotic renal and adrenal surgery: a cautionary tale of compounding risk factors. J Robotic Surg 2015; 9(3): 195–200. PMID: 26531199.

10. Martin NE, **Gerke TA**, Sinnott JA, Stack EC, Andrén O, Andersson S, Johansson J, Fiorentino M, Finn S, Fedele G, Stampfer MJ, Kantoff PW, Mucci LA, Loda MF. Measuring PI3K activation: Clinicopathologic, immunohistochemical, and RNA expression analysis in prostate cancer. Mol Cancer Res 2015; 13(10): 1431–1440. PMID: 26124442. PMCID: PMC4618038.

11. **Gerke TA***, Martin NE*, Ding Z, Nuttall E, Stack EC, Giovannucci EL, Lis RT, Stampfer MJ, Kantoff PW, Parmigiani G, Loda MF, Mucci LA. Evaluating a 4-marker signature of aggressive prostate cancer using time-dependent AUC. Prostate 2015; 75(16): 1926–1933. PMID: 26469352. PMCID: PMC4738177.

12. Ahearn T, Pettersson A, Ebot EM, **Gerke TA**, Graff R, Morais CL, Hicks J, Wilson KM, Rider JR, Sesso HD, Fiorentino M, Flavin R, Finn S, Giovannucci EL, Loda M, Stampfer

MJ, De Marzo AM, Mucci LA, Lotan TL. A prospective investigation of PTEN loss and ERG expression in lethal prostate cancer. JNCI 2015; 108(2): pii djv346. PMID: 26615022 PMCID: PMC4862436.

13. Conboy L, **Gerke TA**, Hsu KY, St John M, Goldstein M, Schnyer R. The effectiveness of individualized acupuncture protocols in the treatment of Gulf War Illness: A pragmatic randomized clinical trial. PLoS One 2016; 11(3): e0149161. PMID: 27031099. PMCID: PMC4816551.

14. Lu D, Sinnott JA, Valdimarsdóttir U, Fang F, **Gerke TA**, Tyekucheva S, Fiorentino M, Lambe M, Sesso HD, Sweeney CJ, Wilson KM, Giovannucci EL, Loda M, Mucci LA, Fall K. Stress-related signaling pathways in lethal and non-lethal prostate cancer. Clin Cancer Res 2016; 22(3): 765–772. PMID: 26490316. PMCID: PMC4738177.

15. Stopsack KH, **Gerke TA**, Sinnott JA, Penney KL, Tyekucheva S, Sesso HD, Andersson S, Andrén O, Cerhan JR, Giovannucci EL, Mucci LA, Rider JR. Cholesterol metabolism and lethal prostate cancer. Cancer Res 2016; 76(16): 4785–4790. PMID: 27325648. PMCID: PMC4987257.

16. Preston MA, Batista JL, Carlsson SV, **Gerke TA**, Sjoberg DD, Dahl DM, Sesso H, Feldman AS, Gann PH, Vickers AJ, Mucci LA. Baseline prostate-specific antigen (PSA) levels in midlife predict lethal prostate cancer. J Clin Oncol 2016; 34(23): 2705–2711. PMID: 27298404. PMCID: PMC5019757.

17. Moore II RA, **Gerke TA**, Bourgoine D, Eamranond PP. Transition coach program implementation associated with thirty-day readmission rates in a community hospital setting. Arch Community Med Public Health 2016; 2(1): 022-026. DOI: 10.17352/2455-5479.000012.

18. Waniga HM, **Gerke TA**, Shoemaker A, Bourgoine D, Eamranond P. The impact of revised discharge instructions on patient satisfaction. J Patient Experience 2016; 3(3): 64–68.

19. Kelly RS, Sinnott JA, Rider JR, Ebot E, **Gerke TA**, Bowden M, Pettersson A, Loda M, Sesso H, Kantoff PW, Martin NE, Giovannucci EL, Tyekucheva S, Vander Heiden M, Mucci LA. The role of tumor metabolism as a driver of prostate cancer progression and lethal disease: Results from a nested case-control study. Cancer Metab 2016; 4(22): DOI 10.1186/s40170-016-0161-9. PMID: 27980733. PMCID: PMC5142400.

20. Sinnott JA, Peisch S, Tyekucheva S, **Gerke TA**, Lis RT, Rider JR, Fiorentino M, Stampfer MJ, Mucci LA, Loda M, Penney KL. Prognostic utility of a new mRNA expression signature of Gleason score. Clin Cancer Res 2017; 23(1): 81–87. PMID: 27663590. PMCID: PMC5215643.

21. Fankhauser CD, Mucci LA, **Gerke TA**. Re: New prostate cancer grading system predicts long-term survival following surgery for Gleason score 8-10 prostate cancer. Eur Urol 2017; 72(1): e9–e10. PMID: 28108146.

22. Pettersson A*, **Gerke TA***, Fall K, Pawitan Y, Holmberg L, Giovannucci EL, Kantoff PW, Adami H, Rider JR, Mucci LA. The ABC model of prostate cancer: a conceptual framework for the design and interpretation of prognostic studies. Cancer 2017; 123(9): 1490–1496. PMID: 28152172. PMCID: PMC5716345.

23. Zareba P, Flavin R, Isikbay M, Rider JR, **Gerke TA**, Finn S, Pettersson A, Giunchi F, Unger RH, Andersson SO, Giovannucci EL, Andrén O, Fall K, Fiorentino M, Mucci LA. Perineural invasion and risk of lethal prostate cancer. Cancer Epidemiol Biomarkers Prev 2017; 26(5): 719–726. PMID: 28062398. PMCID: PMC5413395.

24. Chen Z, **Gerke TA**, Bird V, Prosperi M. Trends in gene expression profiling for prostate cancer risk assessment: a systematic review. Biomed Hub 2017; 2:472146.

25. Ebot E, **Gerke TA**, Labbé D, Sinnott J, Zadra G, Rider J, Tyekucheva S, Wilson K, Kelly R, Shui I, Loda M, Kantoff P, Finn S, Vander Heiden M, Giovannucci E, Brown M, Mucci LA. Gene expression profiling of prostate tissue identifies chromatin regulation as a potential link between obesity and lethal prostate cancer. Cancer 2017; 123(21): 4130–4138. PMID: 28700821. PMCID: PMC5802874.

26. Mucci LA, Pernar CH, Peisch S, **Gerke TA**, Wilson KM. Prostate cancer incidence as an iceberg. Eur J Epidemiol 2017; 32(6): 477–479. PMID: 28560536. PMCID: PMC5709244.

27. Stopsack KH, **Gerke TA**, Andrén O, Andersson S, Giovannucci EL, Mucci LA, Rider JR. Cholesterol uptake and regulation in high-grade and lethal prostate cancers. Carcinogenesis 2017; 38(8): 806–811. PMID: 28595267. PMCID: PMC6074871.

28. Wang K, Chen X, Bird VY, **Gerke TA**, Manini TM, Prosperi M. Association between age-related reductions in testosterone and risk of prostate cancer – an analysis of patients' data with prostatic diseases. Int J Cancer 2017; 141(9): 1783–1793. PMID: 28699177. PMCID: PMC6169522.

29. Li D, Mai V, **Gerke TA**, Pinney SM, Yaghjyan L. Interactions of family history of breast cancer with radiotherapy in relation to the risk of breast cancer recurrence. J Breast Cancer 2017; 20(4): 333–339. PMID: 29285037 PMCID: PMC5743992.

30. Pettersson A*, **Gerke TA***, Penney KL, Lis R, Stack EC, Pértega-Gomes N, Zadra G, Tyekucheva S, Giovannucci EL, Mucci LA, Loda M. MYC overexpression at the protein and mRNA level and cancer outcomes among men treated with radical prostatectomy for prostate cancer. Cancer Epidemiol Biomarkers Prev 2018; 27(2): 201–207. PMID: 29141848 PMCID: PMC5831163.

31. Graff RE, Ahearn TU, Pettersson A, Ebot EM, **Gerke TA**, Penney KL, Wilson KM, Markt S, Pernar CH, Gonzalez-Feliciano AG, Song M, Lis R, Schmidt DR, Vander Heiden MG, Fiorentino M, Giovannucci EL, Loda M, Mucci LA. Height, obesity, and the risk of TMPRSS2:ERG-defined prostate cancer. Cancer Epidemiol Biomarkers Prev 2018; 27(2): 193–200. PMID: 29167279 PMCID: PMC5809280.

32. Jones AA, **Gerke TA**, Striley CW, Whitehead N, Osborne V, Cottler LB. One step at a time: A latent transitional analysis on changes in substance use, exposure to violence, and HIV/AIDS risk behaviors among female offenders. Am J Crim Just 2018; 43(3): 471–485. PMID: 30220837.

33. Jones AA, O'Leary CC, Striley CW, **Gerke TA**, Striley CW, Crecelius R, Sullivan J, Cottler LB. Substance use, victimization, HIV/AIDS risk, and recidivism among females in a therapeutic justice program. J Subst Use 2018; 23(4): 415–421.

34. Williams V, Awasthi S, Fink A, Pow-Sang J, Park J, **Gerke TA**, Yamoah K. African American Men and prostate cancer specific mortality: A competing risk analysis of a large institutional cohort, 1989–2015. Cancer Med 2018; 7(5): 2160–2171. PMID: 29601662. PMCID: PMC5943433.

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– Awasthi S, Creed JH, Williams V, **Gerke TA**, Yamoah K. Treatment related race disparities in long term survival among very low risk prostate cancer patients. In: 43rd Annual Society of Preventive Oncology Conference: 2019 Mar 10–12; Tampa, FL.

– Creed JH, Awasthi S, Yamoah KJ, **Gerke TA**. Gleason grade progresses in a race-dependent manner. In: 43rd Annual Society of Preventive Oncology Conference: 2019 Mar 10–12; Tampa, FL.

– Berger A, Aden-Buie G, Kibel AS, Mucci LA, Penney K, Wilson K, **Gerke TA**, Preston M. Prostate-specific antigen (PSA) levels in men 60 to 70 years of age predict aggressive prostate cancer in the PLCO cancer screening trial: Implications for risk-stratified screening. In: European Association of Urology Congress: 2019 Mar 15–19; Barcelona, Spain.

– Yamoah K, Awasthi S, Lal P, Naghavi AO, Mahajan S, Park JY, Rounbehler R, **Gerke TA**, Berglund A, Pow-Sang J, Dhillon J, Rebbeck TR. Clinical implications of tmprss2-erg fusion and tumor location in prostate cancer. In: AACR Annual Meeting: 2019 Mar 29–Apr 3; Atlanta, GA.

– Markt SC, Ebot E, Cheng I, Wilkens L, Shafi A, Knudsen K, Penney K, Mucci L, **Gerke TA**. Circadian clock gene expression and lethal prostate cancer outcomes. In: AACR Annual Meeting: 2019 Mar 29–Apr 3; Atlanta, GA.

* Stopsack KH, Whittaker CA, **Gerke TA**, Loda M, Kantoff PW, Mucci LA, Amon A. Aneuploidy drives lethal progression in prostate cancer. In: AACR Annual Meeting: 2019 Mar 29–Apr 3; Atlanta, GA.

* Creed JH, Berglund AE, Rounbehler RJ, Awasthi S, Cleveland JL, Park JY, **Gerke TA**. Commercial gene expression tests for prostate cancer prognosis provide paradoxical estimates of

race-specific risk. In: AACR Annual Meeting: 2019 Mar 29–Apr 3; Atlanta, GA.

– Aden-Buie G, Creed JH, **Gerke TA**. A web application and software package for analysis and exploration of the FCDS Florida Cancer Registry Data. In: Moffitt Scientific Symposium: 2019 May 1–2; Tampa, FL.

* Creed JH, **Gerke TA**. Global ancestry estimation and data repository for the TCGA pan-cancer resource. In: Moffitt Scientific Symposium: 2019 May 1–2; Tampa, FL.

* **Gerke TA**, Genkinger J, Zheng W. Data integration and availability through CCSG cores (panel discussion). In: Cancer Informatics for Cancer Centers (Ci4CC) Fall Workshop and Symposium: 2019 Oct 14–16; Napa, CA.

– Carvajal R, Gonzalez-Calderon G, Betin-Montes M, Gai-Cherry M, Creed JH, **Gerke TA**, Eschrich S, Berglund A. Patient timelines for research-oriented exploration of longitudinal cancer patient data: PT Explorer. In: American Medical Informatics Association (AMIA) Annual Symposium: 2019 Nov 16–20; Washington, DC. Award: Distinguished poster.

* **Gerke TA**. UnicoRns are real. In: rstudio::conf 2020 Jan 27–28; San Francisco, CA.

– Ceraolo C, **Gerke TA**, Zareba P, Pettersson A, Stopsack KH, Chowdhury D, Ebot EM, Flavin R, Finn SP, Kantoff PW, Stampfer MJ, Loda M, Fiorentino M, Mucci LA. Tumor protein expression of BRCA1 and development of lethal prostate cancer. In: Genitourinary Cancers Symposium: 2020 Feb 13–15; San Francisco, CA.

* Creed JH, **Gerke TA**. `mediator`: An R package for causal mediation analysis. In: 2020 Statistical Practice in Cancer Conference: 2020 February 28; Tampa, FL.

Invited seminars

2009 A method for resolving ties in asymptotic relative efficiency. Undergraduate Research Symposium, University of Florida.

2010 Spatial design and geometry with applications in environmental statistics. Department of Biostatistics Summer Project Presentation Series, Harvard School of Public Health.

2011 Estimation of mountain glacier retreat via analysis of satellite imagery. Environmental Statistics Seminar Series, Harvard School of Public Health.

2012 Gene expression data management and analysis pipeline: an applied example. Bioinformatics Working Group, Channing Division of Network Medicine.

2012, 2013 IRB panels and ethics in human subjects research. Undergraduate Seminar in Ethics, Values, and Diversity, Northeastern University.

2013 Epidemiologic methods for case-control studies of gene expression. Cancer Epidemiology Fellows Seminar, Harvard School of Public Health.

2015 Understanding molecular cancer research. Alachua County Prostate Cancer Alliance.

2015 Handling big data in R. Gainesville R Users Group; Gainesville, FL.

2015 Building clinically useful prognostic models from high-dimensional feature spaces by focusing on partial AUC. University of Florida Department of Statistics Seminar Series.

2015 Computational approaches to the challenge of molecular discovery in prostate cancer. University of Florida Health Cancer Center Seminar Series.

2016 Designing molecular epidemiology studies. University of Florida Biostatistics, Epidemiology and Research Design (BERD) Studio.

2017 Confounding. Moffitt Cancer Center Population Science Seminar Series for Research Staff.

2018 Estimating the effectiveness of non-randomized treatment regimes with the parametric g-formula. Integrated Mathematical Oncology / Physical Sciences in Oncology Center Seminar Series;

Moffitt Cancer Center.

2018 Data acquisition, management, sharing, and ownership. Responsible Conduct of Research Series; Moffitt Cancer Center.

2019 Tired::wired – R workflow lessons from rstudio::conf 2019. Tampa R Users Group; Tampa, FL.

2019 Overcooked models: mixing prediction, explanation, confounders, and mediators. Interdisciplinary Data Sciences Consortium Seminar Series; University of South Florida.

2020 Job market analysis for the R data scientist. Tampa R Users Group; Tampa, FL.

Software development

Barr CD, **Gerke TA**, Diez DM. `voronoi`: Methods and applications related to Voronoi tessellations. R package 2011; version 1.0.

Creed JH, Aden-Buie G, Monteiro AN, **Gerke TA**. `epiTAD`: A web application for visualizing high throughput chromosome conformation capture data in the context of genetic epidemiology, https://apps.gerkelab.com/epiTAD/. R Shiny Application 2019; latest development version https://www.gerkelab.com/project/epitad/.

Creed JH, **Gerke TA**, Berglund AE. `MatSurv`: Survival analysis and visualization in Matlab. MatLab package 2019; latest development version https://github.com/aebergl/MatSurv.

Creed JH, Aden-Buie G, **Gerke TA**. `ShinyDAG`: A web application for building, analyzing, and visualizing directed acyclic graphs (DAGs), https://apps.gerkelab.com/shinyDAG/. R Shiny Application 2019; latest development version https://github.com/GerkeLab/ShinyDAG.

Creed JH, Aden-Buie G, **Gerke TA**. `mediator`: An R package for implementing causal mediation analyses. R Package 2019; latest development version https://github.com/GerkeLab/mediator.

Other education

Frontiers in Causal Inference Workshop: 2012 March 23-24; Harvard University, Cambridge, MA.

AACR Workshop on Integrative Molecular Epidemiology: 2016 August 5-9; Boston, MA.

What They Forgot to Teach You About R Workshop: rstudio::conf 2019 January 15-16; Austin, TX.

Flatiron Academic Scholars Program: 2020 December 9; New York, NY.

Deep Learning with Keras and TensorFlow in R Workshop: rstudio::conf 2020 January 27-28; San Francisco, CA.