



## Zhengyi Deng

- Instructor, Urology
- Instructor, Epidemiology and Population Health

### Bio

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#### ACADEMIC APPOINTMENTS

- Instructor, Urology
- Instructor, Epidemiology and Population Health

#### PROFESSIONAL EDUCATION

- PhD, Johns Hopkins Bloomberg School of Public Health , Epidemiology (2022)
- SM, Harvard T.H.Chan School of Public Health , Environmental Health (2017)
- Bachelor of Medicine, Shandong University (2015)

### Publications

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#### PUBLICATIONS

- **Metabolic syndrome and risk of kidney cancer in the United States.** *Cancer*  
Jung, M., Wang, X., Jeon, S. Y., Graff, R. E., Deng, Z., L'Espérance, K., Li, M., Langston, M. E., Chung, B. I.  
2026; 132 (9): e70435
- **Renal cell carcinoma incidence and mortality in California: a population-based study of sociodemographic patterns and temporal trends from 1988 through 2019.** *Lancet regional health. Americas*  
L'Espérance, K., Lin, K., Lichtensztajn, D., Christoph Soerensen, S. J., Gulati, S., Deng, Z., Leppert, J. T., Oh, D. Y., Sakoda, L. C., Washington, S. L., Meng, M. V., Chan, J. M., Langston, et al  
2026; 56: 101430
- **A Cross-Sectional Study Assessing Association of Renal Cell Carcinoma Pathological Grade and Stage With Body Mass Index and Obesity Related Factors.** *Cancer control : journal of the Moffitt Cancer Center*  
Shrivastava, S., Kauffman, E. C., Wightman, P., Kwan, M. L., Tang, L., Langston, M. E., Deng, Z., Lee, B. R., Chipollini, J., Batai, K.  
2026; 33: 10732748251413330
- **Associations Between Joint Air Pollution Exposure, Mental Health, and Physical Health and Dementia Incidence in an Aging U.S. Cohort.** *The journals of gerontology. Series B, Psychological sciences and social sciences*  
Clarke, K., Deng, Z., Dickerson, A. S.  
2025
- **Longitudinal Patterns of Cardiovascular Disease and Cancer Mortality in Renal Cell Carcinoma Patients by Tumor Stage** *JACC: CARDIOONCOLOGY*  
Deng, Z., Jung, M., Li, M., Li, J., Langston, M. E., Chung, B. I.  
2025; 7 (5): 627-640
- **Incidence of Depression and Anxiety in Kidney Cancer Survivors: A Nationwide Population-Based Cohort Study.** *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*

- Jung, M., Li, M., Choo, E., Lee, S., Spiegel, D., Baiocchi, M., Deng, Z., Li, J., Langston, M. E., Bondy, M. L., Chung, B. I.  
2025: OF1-OF9
- **Associations between CAHPS scores of patient care experiences and breast cancer survival among senior female survivors: a SEER-CAHPS analysis.** *Women & health*  
Dibble, K. E., Jin, M., Deng, Z., Connor, A. E.  
2025: 1-12
  - **Lifetime body weight patterns, weight loss, and renal cell carcinoma subtypes.** *Cancer*  
Deng, Z., Zhang, C. A., Moore, J. X., Khan, S., Graff, R. E., Batai, K., Bondy, M. L., Chung, B. I., Langston, M. E.  
2025; 131 (7): e35763
  - **Disparities in Cancer and Cardiovascular Disease Mortality Among Asian Americans Diagnosed with Urologic Cancer** *JOURNAL OF RACIAL AND ETHNIC HEALTH DISPARITIES*  
Deng, Z., Li, M., Li, J., Jung, M., Batai, K., Moore, J. X., Langston, M. E., Chung, B. I.  
2025
  - **The impact of cardiovascular risk factors on cancer progression: a prospective study in female breast cancer survivors.** *Breast cancer research and treatment*  
Feng, X., Deng, Z., McCullough, M. S., May, B. J., Selznick, E., Sheng, J. Y., Connor, A. E., Armstrong, D. K., Visvanathan, K.  
2025
  - **Investigations of Long-Acting Formulations in Children, Adolescents, and Pregnant Women: A Systematic Review.** *Pharmaceutics*  
Bertagnolli, L., Deng, Z., Davy-Rothwell, M., Abrams, E. J., Flexner, C., Weld, E. D.  
2025; 17 (1)
  - **Patterns of subsequent cancer incidence over time in patients with breast cancer.** *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*  
Deng, Z., Visvanathan, K.  
2024
  - **Calcium Channel Blocker Versus Renin-Angiotensin System Inhibitor in Risk of Kidney Cancer Among Patients With Hypertension: A Propensity Score-Matched Cohort Study.** *Cancer medicine*  
Jung, M., Li, S., Deng, Z., Li, J., Li, M., Basran, S., Langston, M. E., Chung, B. I.  
2024; 13 (22): e70429
  - **Longitudinal Trends of Comorbidities and Survival Among Kidney Cancer Patients in Asian Population.** *Cancer medicine*  
Jung, M., Choo, E., Li, J., Deng, Z., Langston, M. E., Lee, S., Chung, B. I.  
2024; 13 (22): e70421
  - **Polygenic score for body mass index in relation to mortality among patients with renal cell cancer.** *International journal of obesity (2005)*  
Deng, Z., Graff, R. E., Batai, K., Chung, B. I., Langston, M. E., Kachuri, L.  
2024
  - **Social cohesion as a modifier of joint air pollution exposure and incident dementia.** *The Science of the total environment*  
Frndak, S., Cudjoe, T., Thorpe, R. J., Deng, Z., Ward-Caviness, C. K., Clarke, K. A., Dickerson, A. S.  
2024; 949: 175149
  - **Increased risk of cardiovascular disease among kidney cancer survivors: a nationwide population-based cohort study.** *Frontiers in oncology*  
Jung, M., Choo, E., Li, S., Deng, Z., Li, J., Li, M., Basran, S., Lee, S., Langston, M. E., Chung, B. I.  
2024; 14: 1420333
  - **Ambient air pollution and urological cancer risk: A systematic review and meta-analysis of epidemiological evidence.** *Nature communications*  
Li, J., Deng, Z., Soerensen, S. J., Kachuri, L., Cardenas, A., Graff, R. E., Leppert, J. T., Langston, M. E., Chung, B. I.  
2024; 15 (1): 5116
  - **Air pollution mixture associated with oxidative stress exacerbation and symptoms deterioration in allergic rhinitis patients: Evidence from a panel study.** *The Science of the total environment*  
Li, J., Wu, H., Xing, W., Li, X., Han, Z., Ji, R., Deng, Z., Jung, M., Sun, S., Chung, B. I., Cardenas, A., Langston, M. E.

2024: 172688

- **Risk of dementia due to Co-exposure to air pollution and neighborhood disadvantage.** *Environmental research*  
Frndak, S., Deng, Z., Ward-Caviness, C. K., Gorski-Steiner, I., Thorpe, R. J., Dickerson, A. S.  
2024: 118709
- **Evaluation of PREDICT: a prognostic risk tool, after diagnosis of a second breast cancer.** *JNCI cancer spectrum*  
Deng, Z., Jones, M. R., Wolff, A. C., Visvanathan, K.  
2023
- **Associations between race/ethnicity and SEER-CAHPS patient care experiences among female Medicare beneficiaries with breast cancer.** *Journal of geriatric oncology*  
Dibble, K. E., Deng, Z., Jin, M., Connor, A. E.  
2023; 14 (8): 101633
- **Lifetime body weight trajectories and risk of renal cell cancer: a large US prospective cohort study.** *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*  
Deng, Z., Hajihosseini, M., Moore, J. X., Khan, S., Graff, R. E., Bondy, M. L., Chung, B. I., Langston, M. E.  
2023
- **Outdoor Air Pollution, Environmental Injustice, and Cognitive Decline: a Review** *CURRENT EPIDEMIOLOGY REPORTS*  
Dickerson, A. S., Frndak, S., Gorski-Steiner, I., Deng, Z., Jenson, T. E., Mohan, A., Kim, J., Boerner, V., Thorpe Jr, R. J.  
2023
- **Differences in survivorship care experiences among older breast cancer survivors by clinical cancer characteristics, race/ethnicity, and socioeconomic factors: A SEER-CAHPS study** *BREAST CANCER RESEARCH AND TREATMENT*  
Dibble, K. E., Deng, Z., Connor, A. E.  
2023: 565-582
- **The impact of multimorbidity on the relationship between breast cancer tumor characteristics and survivorship care experiences among older women: A SEER-CAHPS analysis**  
Dibble, K. E., Deng, Z., Connor, A. E.  
AMER ASSOC CANCER RESEARCH.2023
- **The Impact of Cardiovascular Disease Risk on Cancer Progression among Female Breast Cancer Survivors: A Longitudinal Study within The Boss Cohort**  
Feng, X., Deng, Z., McCollough, M., May, B., Selznick, E., Connor, A., Armstrong, D. K., Visvanathan, K.  
AMER ASSOC CANCER RESEARCH.2023
- **Racial/ethnic disparities in perceived quality of breast cancer survivorship care among older women by general health status: A SEER-CAHPS study**  
Dibble, K. E., Deng, Z., Connor, A. E.  
AMER ASSOC CANCER RESEARCH.2023: 313
- **Racial and ethnic disparities in mortality among breast cancer survivors after a second malignancy** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*  
Deng, Z., Jones, M. R., Wang, M., Wolff, A. C., Visvanathan, K.  
2022: 279-287
- **Mortality after second malignancy in breast cancer survivors compared to a first primary cancer: a nationwide longitudinal cohort study** *NPJ BREAST CANCER*  
Deng, Z., Jones, M. R., Wang, M., Visvanathan, K.  
2022; 8 (1): 82
- **Validation of the PREDICT breast cancer tool in a multiethnic population of US women after a second primary breast cancer.**  
Deng, Z., Jones, M. R., Wang, M., Visvanathan, K.  
LIPPINCOTT WILLIAMS & WILKINS.2022
- **Racial/ethnic disparities in cancer mortality after a second breast cancer**  
Deng, Z., Jones, M. R., Wang, M., Visvanathan, K.  
AMER ASSOC CANCER RESEARCH.2022

- **Associations of prenatal exposure to mixtures of organochlorine pesticides and smoking and drinking behaviors in adolescence** *ENVIRONMENTAL RESEARCH*  
Dickerson, A. S., Deng, Z., Ransome, Y., Factor-Litvak, P., Karlsson, O.  
2022; 206: 112431
- **Increased cancer mortality after second primary malignancy among breast cancer survivors**  
Deng, Z., Jones, M. R., Visvanathan, K.  
AMER ASSOC CANCER RESEARCH.2021
- **Shorter survival and later stage at diagnosis among unmarried patients with cutaneous melanoma: A US national and tertiary care center study** *JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY*  
Rachidi, S., Deng, Z., Sullivan, D. Y., Lipson, E. J.  
2020; 83 (4): 1012-1020
- **Performance of Breast Cancer Risk-Assessment Models in a Large Mammography Cohort** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*  
McCarthy, A., Guan, Z., Welch, M., Griffin, M. E., Sippo, D. A., Deng, Z., Coopey, S. B., Acar, A., Semine, A., Parmigiani, G., Braun, D., Hughes, K. S.  
2020; 112 (5): 489-497
- **Using Machine Learning and Natural Language Processing to Review and Classify the Medical Literature on Cancer Susceptibility Genes** *JCO CLINICAL CANCER INFORMATICS*  
Bao, Y., Deng, Z., Wang, Y., Kim, H., Armengol, V., Acevedo, F., Ouardaoui, N., Wang, C., Parmigiani, G., Barzilay, R., Braun, D., Hughes, K. S.  
2019; 3: 1-9
- **Validation of a Semiautomated Natural Language Processing-Based Procedure for Meta-Analysis of Cancer Susceptibility Gene Penetrance.** *JCO clinical cancer informatics*  
Deng, Z., Yin, K., Bao, Y., Armengol, V. D., Wang, C., Tiwari, A., Barzilay, R., Parmigiani, G., Braun, D., Hughes, K. S.  
2019; 3: 1-9
- **Incidental atypical hyperplasia/LCIS in mastoplasty specimens and subsequent risk of breast cancer**  
Acevedo, F., Armengol, V., Deng, Z., Tang, R., Coopey, S., Mazzola, E., Lanahan, C., Braun, D., Yala, A., Barzilay, R., Li, C., Santus, E., Colwell, et al  
AMER SOC CLINICAL ONCOLOGY.2019
- **Pathologic findings in reduction mastoplasty specimens: a surrogate for the population prevalence of breast cancer and high-risk lesions** *BREAST CANCER RESEARCH AND TREATMENT*  
Acevedo, F., Armengol, V., Deng, Z., Tang, R., Coopey, S. B., Braun, D., Yala, A., Barzilay, R., Li, C., Colwell, A., Guidi, A., Cetrulo, C. L., Garber, et al  
2019; 173 (1): 201-207
- **Managing Patient with Mutations in PALB2, CHEK2, or ATM** *CURRENT BREAST CANCER REPORTS*  
Acevedo, F., Deng, Z., Armengol, V. D., Hughes, K.  
2018; 10 (2): 74-82
- **Using Twitter to Better Understand the Spatiotemporal Patterns of Public Sentiment: A Case Study in Massachusetts, USA** *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*  
Cao, X., MacNaughton, P., Deng, Z., Yin, J., Zhang, X., Allen, J. G.  
2018; 15 (2)
- **Proportions and Risk Factors of Developing Multidrug Resistance Among Patients with Tuberculosis in China: A Population-Based Case-Control Study** *MICROBIAL DRUG RESISTANCE*  
Huai, P., Huang, X., Cheng, J., Zhang, C., Wang, K., Wang, X., Yang, L., Deng, Z., Ma, W.  
2016; 22 (8): 717-726
- **Impacts of Tropical Cyclones and Accompanying Precipitation on Infectious Diarrhea in Cyclone Landing Areas of Zhejiang Province, China** *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*  
Deng, Z., Xun, H., Zhou, M., Jiang, B., Wang, S., Guo, Q., Wang, W., Kang, R., Wang, X., Marley, G., Ma, W.  
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