

Ryan Suk

Postdoctoral Research Fellow

Department of Management, Policy and Community Health

The University of Texas Health Science Center at Houston, School of Public Health

1200 Pressler St. RAS Room E-331, Houston TX 77030

Email: ryan.suk@uth.tmc.edu

Website: www.ryansuk.com

EDUCATION

- PhD Health Economics (Minor: Biostatistics)
Department of Management, Policy and Community Health
The University of Texas Health Science Center (HSC) at Houston, School of Public Health (Houston, TX, US), 2018 - 2020
Dissertation: Human Papillomavirus-Associated Cancers in Inflammatory Bowel Disease (Chair: Dr. Ashish A. Deshmukh)
- PhD Health Services Research, Management and Policy (Concentration: Health Economics)
University of Florida, School of Public Health (Gainesville, FL US),
2016 – 2018 (Transferred due to advisor's transition to the University of Texas HSC at Houston, School of Public Health)
- MS Economics
The University of Utah, Department of Economics, College of Social & Behavioral Science (Salt Lake City, UT, US), 2013 – 2016
Thesis: The Impact of Apology Law on Adverse Medical Events (Chair: Dr. Norman J. Waitzman)
- BBA Business Administration
Korea University, Business School (Seoul, Korea) 2000 – 2006

EMPLOYMENTS

- Jan 2021 – Present The University of Texas HSC at Houston (Houston, TX, US)
Postdoctoral Research Fellow,
Department of Management Policy and Community Health
- Aug 2018 – Dec 2020 The University of Texas HSC at Houston (Houston, TX, US)
Graduate Research Assistant,
Department of Management Policy and Community Health

Aug 2016 – Jul 2018	University of Florida (Gainesville, FL, US) Graduate Assistant, Department of Health Services Research, Management and Policy
Nov 2010 – Jun 2013	Freelance Translator/ Interpreter (English <=> Korean; Los Angeles, CA, US and Seoul, Korea)
Feb 2008 – Jun 2010	Learn2 Consulting (Seoul, Korea) Human Resource Development Researcher/ Project Designer
Mar 2004 – Jun 2010	The Korean Society of Law and Medicine (Seoul, Korea) Conference Coordinator (national and international)
Mar 2003 – Jun 2010	The Korean Society of Law and Medicine (Seoul, Korea) Research Assistant

RESEARCH AND TEACHING INTERESTS

- Cost-Effectiveness Analysis (CEA)/ Decision Model (Markov Cohort, Microsimulation, etc.)
- Spatio-temporal Statistics
- Population-based Large Scale Data Analysis
- Econometrics/ Health Economic Theories and Frameworks
- HPV-associated Cancers and Prevention (HPV Vaccination and Cancer Screening)
- Social Determinants of Health and Barriers to Evidence-Based Medicine
- HPV-associated Cancers among HIV/AIDS, IBD patients, and LGBTQ+ Population
- Modeling Cancer and Prevention
- Distributional CEA and Targeted Intervention for Reducing Health Disparities
- School-Based/Community-Based Interventions
- Personalized Medicine and Risk-Stratified Screening and Management

HONORS AND AWARDS

- SPHSA Research Day 2020, 3rd Place Award, The University of Texas HSC, 2020
(Title: *Risks of Suicidal Deaths after a Cancer Diagnosis by County-level socioeconomic and Metropolitan Status in the US, 1992-2016*)
- People with AIDS Public Health in the Americas Scholarship, The University of Texas HSC, 2019
- Department of Management, Policy and Community Health Scholarship, The University of Texas HSC, 2019
- School of Public Health Travel Fund, The University of Texas HSC, 2019
- Grinter Fellowship, University of Florida, 2016-2019
- Graduate Student Council Travel Grant, University of Florida, Spring 2018
- Thesis Grant, Department of Economics, University of Utah, 2015

PEER-REVIEWED PUBLICATIONS

*** Authors contributed equally to this work**

1. Hong YR*, Yadav S*, **Suk R**, Khanijahani A, Erim D, Turner K. Patient-Provider Discussion about Emotional and Social Needs, Mental Health Outcomes and Benefit Finding among US Adults Living with Cancer. **Cancer Medicine**. 2021;10(11):3622-3634. doi:10.1002/cam4.3918
2. Deshmukh AA, **Suk R**, Shiels MS, Damagacioglu H, Lin Y, Stier EA, Nyitray AG, Chhatwal J, Nemutlu GS, Chiao EY, Schmeler K, Sigel K*, Sonawane K*. Incidence Trends and Burden of Human Papillomavirus-Associated Cancers among Women in the United States, 2001-2017. **J Natl Cancer Inst**. 2020;112(8):829-838. doi:10.1093/jnci/djaa128
3. Deshmukh AA*, **Suk R***, Shiels MS, Sonawane K, Nyitray AG, Liu Y, Gaisa MM, Palefsky JM, Sigel K. Recent Trends in Squamous Cell Carcinoma of the Anus Incidence and Mortality in the United States, 2001-2015. **J Natl Cancer Inst**. 2020;112(8):829-838. doi:10.1093/jnci/djz219
4. **Suk R**, Montealegre JR, Nemutlu GS, Nyitray AG, Schmeler KM, Sonawane K*, Deshmukh AA*. Public Knowledge of Human Papillomavirus (HPV) and Receipt of Vaccination Recommendations. **JAMA Pediatrics**. 2019;173(11):1099-1102. doi:10.1001/jamapediatrics.2019.3105
5. Sonawane K, Zhu Y, Balkrishnan R, **Suk R**, Deshmukh AA, Aguilar D. Antihypertensive Drug Use and Blood Pressure Control among Stroke Survivors in the US: NHANES 2003-2014. **The Journal of Clinical Hypertension**. 2019;00:1-8. doi: 10.1111/jch.13553
6. Hong YR, Cardel M, **Suk R**, Vaughn I, Deshmukh AA, Fisher C, Pavela G, Sonawane K. Teach-Back Experience and Hospitalization Risk among Patients with Ambulatory Care Sensitive Condition: A Matched-Cohort Study. **Journal of General Internal Medicine**. 2019;34, 2176-284. doi: 10.1007/s11606-019-05135-y
7. **Suk R**, Mahale P, Sonawane K, Sikora A, Chhatwal J, Schmeler K, Sigel K, Cantor SB, Chiao EY*, Deshmukh AA*. Trends in Risks for Second Primary Cancers Associated with Index Human Papillomavirus Associated Cancers. **JAMA Network Open**. 2018;1(5):e181999. doi:10.1001/jamanetworkopen.2018.1999
8. Sonawane K, **Suk R**, Chiao EY, Chhatwal J, Qiu P, Wilkin T, Nyitray AG, Sikora A, Deshmukh AA. Oral Human Papillomavirus Infection: Differences in Prevalence Between Sexes and Concordance with Genital Human Papillomavirus Infection, NHANES 2011 to 2014. **Annals of Internal Medicine**. 2017;167:714–724. doi: 10.7326/M17-1363
9. **Suk R**. Health Economic Approach to End-of-Life Care in US: Based on Medicare. **Korean Journal of Law and Medicine**. 2014; 15(1): 335-373

MANUSCRIPTS UNDER REVIEW

*** Authors contributed equally to this work**

1. **Suk R**, Suk H, Song J, Deshmukh AA, Huo J. Racial Differences in Myelosuppression-Related Hospitalizations among Inflammatory Bowel Disease Patients: Nationwide Analysis of US 2003-2016.
2. Sonawane K*, **Suk R***, Chiao EY, Schmeler K, Montealegre J, Fernandez M, Deshmukh AA. Low Cervical Cancer Screening Uptake and Adherence among HPV Unvaccinated women in the United States: NHIS 2019.
3. Sun SX, **Suk R**, Kuerer HM, Cantor SB, Raber BM, Deshmukh AA. No Treatment Versus Partial Mastectomy Plus Radiation for Ductal Carcinoma In Situ.
4. Damgacioglu H, Sonawane K, Zhu Y, Li R, Balasubramanian BA, **Suk R**, Lairson DR, Giuliano AR, Deshmukh AA. Recent National and State-Specific Trends in Incidence and Mortality of Oropharyngeal Cancer in the United States, 2001-2017.
5. Song J, Fogarty K, **Suk R**, Gillen M. Behavioral/Mental Health Problems in Adolescents with ADHD: Family Resilience as a Protective Factor.

SELECTED ABSTRACTS AND PRESENTATIONS

*** Authors contributed equally to this work**

1. Deshmukh AA, Damgacioglu H, **Suk R**, Georges D, Sonawane K, Ferlay J, Bray F, Clifford GM. Global Burden of Squamous Cell Carcinoma of the Anus and HIV-Attributable Cases in 2020. **International Anal Neoplasia Society Rapid Research Update Meeting 2021**. To be held virtually in June 2021 [oral presentation].
2. Clarke MA, Deshmukh AA, **Suk R**, Roberts J, Gilson R, Jay N, Stier EA, Wentzensen N. A Systematic Review and Meta-Analysis of Cytology and Biomarkers for Anal Cancer Screening. **EUROGIN 2021**. To be held virtually in May 2021 [oral presentation].
3. **Suk R**, Sonawane K, Bauer CX, Lairson DR, Deshmukh AA. Risk of Anal Cancer in Inflammatory Bowel Disease Patients in the US: A Population-Based Study 2008-2018. **Crohn's and Colitis Congress 2021**. January 2021, Virtual meeting.
4. **Suk R**, Swint JM, Hong YR, Sonawane K, Deshmukh AA. Risks and Patterns of Suicidal Deaths after Cancer Diagnosis By County-Level Socioeconomic and Metropolitan Status in the US, 1992-2016. **The 42nd Annual Meeting of the Society for Medical Decision Making (SMDM)**. October 2020. (Finalist for the Lee. B. Lusted best student presentation award) (Top-rated Abstracts) Virtual meeting.
5. **Suk R**, Sonawane K, Deshmukh AA. Risks of Suicidal Deaths after a Cancer Diagnosis by County-level Socioeconomic and Metropolitan Status in the US, 1992-2016. **UTHealth SPHSA Research Day 2020**. April 2020, Houston, TX. (3rd Place Award winner)
6. **Suk R**, Suk H, Sigel K, Sonawane K, Deshmukh AA. Population-Level HPV Vaccination Coverage among US Adult IBD Patients: Still Not Enough. **Crohn's and Colitis Congress 2020**. January 2020, Austin, TX. (citation: **Gastroenterology** 158(3):S106. doi:10.1053/j.gastro.2019.11.250)

7. **Suk R**, Suk H, Sonawane K, Deshmukh AA. E-Cigarette and Cigarette Use among US Adult IBD Patients: Population-Level Survey. **Crohn's and Colitis Congress 2020**. January 2020, Austin, TX. (citation: **Gastroenterology** 158(3):S102. doi:10.1053/j.gastro.2019.11.242)
8. Nemutlu GS, **Suk R**, Chhatwal J, Deshmukh AA. Scaling Up HPV Vaccination to Reduce HPV-associated Anal Cancer Incidence: Model-based Predictions, **INFORMS Annual Meeting 2019**. October 2019, Seattle, WA.
9. Sun SX, **Suk R**, Kuerer HM, Cantor SB, Deshmukh AA. Cost-effectiveness Analysis of Active Surveillance Compared to Partial Mastectomy Plus Radiation for Ductal Carcinoma In Situ: Is Non-operative management a viable option? **2019 Society of Surgical Oncology Annual Cancer Symposium** [oral presentation]. March 2019, San Diego, CA.
10. **Suk R**, Deshmukh AA, Sonawane K, Song J, Huo JH. Racial Variation in Myelosuppression Hospitalizations among Inflammatory Bowel Disease Patients. **Crohn's and Colitis Congress 2019**. February 2019, Las Vegas, NV. (citation: **Gastroenterology**. Volume 156, Issue 3, S41. doi:10.1053/j.gastro.2019.01.116)
11. **Suk R**, Huo J, Sonawane K*, Deshmukh AA*. Gender Difference in the Knowledge Regarding Human Papillomavirus (HPV) and Associated Cancers: HINTS-5. **HINTS Data Users Conference**. September 2018. Bethesda, MD.
12. **Suk R**, Mahale P, Sonawane K, Sikora AG, Chhatwal J, Schmeler K, Sigel K, Cantor SB, Chiao EY*, Deshmukh AA*. Risk of Second Primary HPV-associated Cancers after Index HPV-associated Cancers. **Panel discussion** in addition to a poster session at **American Society of Clinical Oncology (ASCO) Annual Meeting 2018**. Chicago IL, June 2018. (citation: **Journal of Clinical Oncology**. 2018;36(15_suppl):1520-1520. doi: 10.1200/JCO.2018.36.15_suppl.1520)
13. **Suk R**, Sonawane K, Chiao EY, Chhatwal J, Sikora AG, Sigel K, Deshmukh AA. Association between HPV- related Cancers and Inflammatory Bowel Disease. **American Society of Clinical Oncology (ASCO) Annual Meeting 2018**. Chicago IL, June 2018. (citation: **Journal of Clinical Oncology** 36, no.15_suppl - published online before print. doi: 10.1200/JCO.2018.36.15_suppl.e13576)
14. **Suk R**, Chen Q, Sikora A, Deshmukh AA. Predicting the Impact of Continued Tobacco Use among Head and Neck Cancer Patients in the US. **The 39th Annual Meeting of the Society for Medical Decision Making (SMDM)**. Pittsburgh, PA, October 2017. (Finalist for the Lee. B. Lusted best student presentation award)
15. Deshmukh AA, **Suk R**, Sahgal A, Neupane B, Chang E, Brown P, Likhacheva A. Determining Age-specific Optimal Management for Patients Diagnosed with 1 to 4 Brain Metastases. **The 39th Annual Meeting of the Society for Medical Decision Making (SMDM)**. Pittsburgh, PA, October 2017.

REPORTS AND OTHERS

- Mainous III A, Kates FR, Luetke M, Tanner R, **Suk R**, Laberge M. Service Needs of People Living with HIV/AIDS in Florida: Results from the 2016 Florida Needs Assessment for People Living with HIV/AIDS. **Florida Department of Health**.

GUEST LECTURES & COURSES

2021	Guest Lecture, “Parameter Estimation” The University of Texas HSC at Houston; <i>PHD3998: Decision Analysis in Public Health and Medicine</i>
2021	Guest Lecture, “Statistical Methods in Health Economics” The University of Texas HSC at Houston; <i>PH3910: Health Economics</i>
2020	Methodology seminar course “Practical Cancer Registry Research Methods” for PhD students and postdoctoral fellows, Spring 2020
2020	Guest Lecture, “Statistical Methods in Health Economics” The University of Texas HSC at Houston; <i>PH3910: Health Economics</i>
2018	Guest Lecture, “Applied Cost-Effectiveness Analysis” University of Florida; <i>HSA 6436: Health Economics</i>
2004	Legal Status of Hospital in South Korea and the US. The 2 nd Korea-China Joint Conference on Medicine and Law, Chinese Hospital Association. June 2004, Shenzhen, China

ACADEMIC RESEARCH & TEACHING EXPERIENCE

The University of Texas Health Science Center at Houston

<i>Postdoctoral Fellow</i>	Mathematical modeling and cost-effectiveness analyses; registry data analyses, Jan 2021 – Present <i>NCI R01 “Determining the Accuracy of Self- and Partner Anal Exams for Detecting Anal Abnormalities”</i> <i>PI: Ashish A. Deshmukh, PhD, MPH</i> <i>NIMHD R01 “A Randomized Controlled Trial of Mail-Self Stamped HPV Testing to Increase Cervical Cancer Screening Participation among Minority/Underserved Women in an Integrated Safety Net Healthcare System”</i> <i>PI: Jane R Montealegre, PhD</i> <i>UTHealth PI: Ashish A. Deshmukh, PhD, MPH</i>
<i>Research Assistant</i>	Mathematical modeling and cost-effectiveness analyses; cancer screenings and treatments, Sep 2018 – Dec 2020 <i>NCI R01 “Determining the Accuracy of Self- and Partner Anal Exams for Detecting Anal Abnormalities” (Sep 2018 – Aug 2019)</i> <i>PI: Alan G. Nyitray, PhD</i> <i>UTHealth PI: Ashish A. Deshmukh, PhD, MPH</i> <i>NCI R01 “Optimizing Age-based Anal Cancer Screening among People Living with HIV using Decision Analytic Modelling (Mar 2019 – Feb 2020)</i> <i>PI: Ashish A. Deshmukh, PhD, MPH</i>

NCI U54 “UPR/MDACC Partnership for Excellence in Cancer Research” (Sep 2019 – Aug 2020)

PI: Ashish A. Deshmukh, PhD, MPH

Teaching

Methodology seminar session “Practical Cancer Registry Research Methods” for PhD students and postdoctoral fellows, Spring 2020

University of Florida, Department of Health Services Research, Management, and Policy

Research Assistant

Assessing the needs for people with HIV/AIDS; Mathematical modeling and cost-effectiveness analyses; epidemiologic researches of HPV and HPV-associated cancers, Aug 2016 – Jun 2018

Florida Department of Health “Needs Assessment for People with HIV or AIDS in Florida” (Aug 2016 – Apr 2017)

PI: Arch G. Mainous III, PhD

Teaching

Guided one PhD student for Microsimulation using TreeAge, under Dr. Ashish A. Deshmukh’s supervision. Advanced Economics (Spring 2018)

Teaching Assistant

Healthcare Operations Concepts (Spring 2018)
Intro to Management in HSOs (Fall 2017)

The Korean Society of Law and Medicine & Korea University

Research Assistant

Research projects in end-of-life care, death with dignity, and informed consent (Mar 2003 – June 2010)

PI: Bup-Young Ahn, PhD LLM

MEDIA COVERAGE RELATED TO RESEARCH WORK

- CNN: “Anal cancer rates and deaths are climbing in the US, study says”
- NBC/Today: “What are the symptoms of anal cancer? Disease is on the rise in the US.”
- New York Post: “Study shows ‘concerning’ spike in anal cancer among Americans”
- Fox: “Anal cancer cases and deaths are rising significantly in the US, study finds”
- NBC: “Most adults unaware of link between HPV and oral, penile, and anal cancers”
- The Philadelphia Inquirer (also via Chicago Tribune): “Americans continue to be ignorant or indifferent about the cancer-preventing HPV vaccine”
- US News and World Report: “Most Americans in the dark about cancer-causing HPV, survey finds”
- Popular Science: “Most people don’t know the true dangers of HPV”
- Healio: “More than 70% of US adults are not aware of HPV cancer risks”
- MEDPAGE: “Incidence of second primary HPV-associated cancers found significant: persistent HPV infection at multiple sites may be responsible”
- MDedge: “Racial disparities uncovered in IBD-related myelosuppressive hospitalizations”

- CNN: “One in nine American men has oral HPV, study finds”
- CNN: “1 in 9 men have oral HPV, but we fix this”
- New York Times: “7 million American men carry cancer-causing HPV virus”
- TIME: “1 in 9 men have oral HPV”
- Forbes: “Men found six times more likely than women to have highest risk HPV infection”
- CBS News: “1 in 9 American men are infected with oral HPV”
- NBC Nightly News: “A silent epidemic of cancer is spreading among men”
- The Philadelphia Inquirer: “HPV is causing an oral cancer epidemic in men by outwitting natural defenses”

SOCIETY MEMBERSHIPS & SERVICES

Member, The Global Burden of Disease (GBD) Collaborator Network, 2021 – Present

Member, Interdisciplinary Association for Population Health Science (IAPHS), 2021 – Present

Member, Society for Epidemiologic Research (SER), 2020 – Present

Member, American Gastroenterological Association (AGA), 2018 – Present

Member, Society of Medical Decision Making (SMDM), 2017 – Present

Member, American Society of Clinical Oncology (ASCO), 2017 – Present

Member, The American Society of Law, Medicine & Ethics, 2016 – Present

Member, The Korean Society of Law and Medicine, 2002 – Present

Reviewer

Ad-hoc manuscript reviewer:

- Annals of Internal Medicine
- The American Journal of Gastroenterology
- Journal of the National Comprehensive Cancer Network
- European Journal of Cancer Care
- Korean Journal of Law and Medicine

Abstract reviewer:

- Interdisciplinary Association for Population Health Science (IAPHS) 2021 Annual Meeting
- Society for Epidemiologic Research (SER) 2021 Annual Meeting
- Society of Medical Decision Making (SMDM) 39th, 40th, 41st Annual North American Meeting, 2017-2020
- Society of Medical Decision Making (SMDM) 17th, 18th Biennial European Conference, 2018-2020

Professional/Academic volunteer

- Hosting writing retreats and writing support in a global academic community dedicated to diversity and inclusion, “I Should be Thriving: Advancing Gender/Ethnic/Class Minorities in Academia”, April 2020-Present.

- Translating COVID-19 prevention messages for Great Houston Area, The University of Texas HSC at Houston, 2020.

SKILLS

Statistical & Modeling Programs

Proficient: R, SAS, STATA, TreeAge, SEER*Stat

Basic: NetLogo

Languages

English and Korean (Native bilingual proficiency)