BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES**.

NAME: Carter-Bawa, Lisa

eRA COMMONS USERNAME (credential, e.g., agency login): LCARTERHARRIS

POSITION TITLE: Director, Cancer Prevention Precision Control Institute

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Spalding University, Louisville, Kentucky	BSN	06/1999	Nursing
University of Louisville, Kentucky	MSN	06/2004	Adult Nurse Practitioner
University of Louisville, Kentucky	PhD	05/2013	Nursing Science
Indiana University, Indianapolis	Postdoctoral	05/2015	Behavioral Oncology
Yale University, New Haven, Connecticut	MPH	05/2023	Health Informatics

A. Personal Statement

My program of research is focused on understanding and intervening to enhance patient-clinician communication among individuals at risk for, and diagnosed with, tobacco-related diseases. I am a behavioral scientist, clinician, and implementation scientist with a strong track record of independent research funding and mentorship. I am the Director of the Cancer Prevention Precision Control Institute at the Center for Discovery & Innovation (CDI) leading a multidisciplinary team devoted to population science and improving health outcomes. I am also the Co-Director of Community Outreach & Engagement at Georgetown Lombardi Comprehensive Cancer Center and Co-Leader of the Cancer Prevention & Control Program. For the past decade, I have maintained a strong program of funded research examining foundational components of lung cancer screening behavior, including conceptual model and instrument development as well as designing and testing interventions to promote shared decision-making in complex cancer screening decisions, with the primary emphasis being on lung cancer. I am currently leading two R01-funded studies related to lung cancer screening participation (R01 CA263662; R01 CA222090) and serving as co-investigator on two other R01funded studies focused on adherence to lung cancer screening (R01 CA262015) and empathic communication training to address lung cancer stigma (R01CA255522), respectively. I have a broad complementary background in health behavior, cancer screening research, behavioral oncology, implementation science, and tailored intervention development. With NIH and foundation funding, I have led and am leading interdisciplinary research teams in developing and testing measures of lung cancer screening-specific health beliefs and tailored interventions to promote shared decision-making in lung cancer screening via interactive computer media. In addition, I am a practicing clinician, and my clinical lens frequently informs the research questions of greatest interest.

Ongoing and recently completed projects that I would like to highlight include: R01 CA263662 Carter-Bawa (PI) 09/01/22-08/31/27 Leveraging Social Media to Increase Lung Cancer Screening Awareness, Knowledge, and Uptake in High-Risk Populations

R01 CA222090 Carter-Bawa (PI) 09/28/18-08/31/23

R01 CA262015 Wernli (PI); Role: Co-Investigator 07/15/21-06/30/26 *Multilevel Interventions to Increase Adherence to Lung Cancer Screening*

R15 CA208543 Carter-Harris (PI) 04/05/17-03/31/20 Identifying Factors Associated with Lung Cancer Screening Participation

Of significance, my area of expertise related to cancer prevention and control research is highlighted in 4 key published papers:

Citations:

- 1. **Carter-Harris L**, Walsh L, Schofield E, Williamson T, Hamann H, Ostroff JS. (2022). Lung cancer screening knowledge, attitudes and practice patterns among primary and pulmonary care clinicians. *Nursing Research (in press)*
- Carter-Harris L, Comer RS, Slaven II JE, Monahan PO, Vode E, Hanna NH, Ceppa DP, Rawl SM. (2020). Computer-Tailored Decision Support Tool for Lung Cancer Screening: Community-Based Pilot Randomized Controlled Trial. *Journal of Medical Internet Research*. 2020;22(11):e17050. Epub 2020/11/04. doi: 10.2196/17050. PubMed PMID: 33141096; PMCID: PMC7671845.
- Draucker CB, Rawl SM, Vode E, Carter-Harris L. (2019). Understanding the decision to screen for lung cancer or not: A qualitative analysis. *Health Expect.* 2019 Dec;22(6):1314-1321. Epub 2019 Sep 27. PMID: 31560837 PMCID: PMC6882261
- Carter-Harris L, Slaven JE Jr, Monahan PO, Draucker CB, Rawl SM. (2019). Understanding lung cancer screening behaviour using path analysis. *Journal of Medical Screening*. 2019;27(2):105-112. Epub 2019 Sep 24. PMID: 31550991

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

2022 – Present	Director, Cancer Prevention Precision Control Institute, Center for Discovery & Innovation at Hackensack Meridian Health, Nutley, NJ
2022 – Present	Co-Leader, Cancer Prevention & Control, Georgetown Lombardi Comprehensive Cancer Center – Hackensack Consortium
2022 – Present	Co-Director, Community Outreach & Engagement, Georgetown Lombardi Comprehensive Cancer Center – Hackensack Consortium
2022 – Present	Full Member, John Theurer Cancer Center, Hackensack, NJ
2022 – Present	Professor of Medicine, Hackensack Meridian School of Medicine, Nutley, NJ
2022 – Present	Professor of Oncology, Georgetown University School of Medicine, Washington, D.C.
2016 – Present	Affiliate Investigator, Kaiser Permanente Washington Health Research Institute, Seattle, WA
2018 – 2022	Associate Attending Behavioral Scientist, Memorial Sloan Kettering Cancer Center, NY
2018 – 2022	Associate Member, Memorial Hospital, New York, NY
2018 – 2022	Associate Research Director, Tobacco Treatment Research & Training Lab, Memorial Sloan Kettering Cancer Center, New York, NY
2019 – 2022	Associate Professor of Medicine, Department of Population Health Sciences, Weill Cornell Medical College, New York, NY
2015 – 2018	Assistant Professor, School of Nursing, Indiana University, Indianapolis
2016 – 2018	Full Member, Indiana University Simon Cancer Center, Cancer Prevention & Control
2015 – 2017	Scholar, Cancer Research Network Scholars Program (U24 CA171524-05)
2020 – Present	Vice Chair, American Cancer Society National Lung Cancer Round Table, Survivorship, Stigma & Nihilism Task Group
2020 – Present	Board Member, National Cancer Institute Centralized Institutional Review Board,

	Cancer Prevention & Control Board			
2018 – Present	Fellow, American Academy of Nursing			
2021 – Present	NIH Peer Review Committee: Fellowships, ad hoc reviewer			
2013 – Present	Member, Society of Behavioral Medicine			
2013 – Present	Member, Oncology Nursing Society			
Honors				
2021	NINR-ONS-NCI Mid-Career Scientist Award, Washington, DC			
2019	Oncology Nursing Society Victoria Mock New Investigator Award, Anaheim, CA			
2018	Distinguished Wilson Wyatt Alumni Fellow Award, University of Louisville, Kentucky			
2016	Emerging Scholar Award, Decision Making RIG, Midwest Research Nursing			
	Society, Milwaukee, WI			
2015	Meritorious Student Abstract Award, Society of Behavioral Medicine, San Antonio, TX			
2014	Midwest Nursing Research Society Health Promoting Behaviors Dissertation Award			

C. Contributions to Science

- 1. Setting the foundation to understand factors influencing behavior among patients with and at risk for lung cancer. Lung cancer screening is a 2013 recommendation supported by the USPSTF. Unlike other types of cancer screening that target patients by age alone, lung cancer screening targets long-term smokers and this lifestyle choice has implications for engaging patients in a new cancer screening option. To understand variables that influence people at risk for the development of lung cancer, understanding important patient-level variables in the pathway toward a lung cancer diagnosis has been invaluable. During my PhD program, I examined how lung cancer stigma, medical mistrust, and smoking status influenced the timeline in medical help-seeking behavior in symptomatic individuals who were later diagnosed with lung cancer. Specifically, perceived smoking-related stigma was found to be a key variable that influence of the individual at risk for the development of lung cancer, in understanding the perspective of the individual at risk for the development of lung cancer, in understanding the influence of stigma on people living with lung cancer and translating research to clinical practice. Four manuscripts were disseminated from these studies.
 - a. **Carter-Harris L**, Hermann CP, Schreiber J, Weaver MT, Rawl SM. (2013). Lung cancer stigma predicts timing of medical help-seeking in individuals with lung cancer. Oncology Nursing Forum, 41(3), E203-E210. PMCID: PMC4160058.
 - b. **Carter-Harris L**, Hall LA. (2014). Development of a short version of the Cataldo Lung Cancer Stigma Scale. Journal of Psychosocial Oncology, 32(6), 665-677. PMCID: PMC4224672.
 - c. **Carter-Harris L**, Hermann CP, Draucker CB. (2015). Pathways to a lung cancer diagnosis. Journal of the American Academy of Nurse Practitioners, 27(10), 576-583. PMCID: PMC4567975.
 - d. **Carter-Harris L**. (2015). Lung cancer stigma as a barrier to medical help-seeking behavior: Practice implications. Journal of the American Academy of Nurse Practitioners, 27(5), 240-245. PMCID: PMC4414901.
- 2. Understanding lung cancer screening participation from the patient perspective. It is well-known that some screening-eligible patients choose to screen for lung cancer and others choose not to screen. My research trajectory also included foundational work conducted to understand this disparity. Through focus groups with long-term smokers, we conducted a qualitative study exploring the knowledge and beliefs about lung cancer risk and screening among patients who had recently participated in screening and individuals who were naïve to screening. Findings from this qualitative work identified key variables of importance, from the perspective of the individual considering screening, and informed the development of a new conceptual model to guide research in this emerging area as well as four new scales to measure individual health beliefs in lung cancer screening. The findings from these studies have been published as 4 papers.
 - a. Carter-Harris L., Ceppa D.P., Hanna N. & Rawl S.M. (2015). Lung cancer screening: What do long-term smokers know and believe? Health Expectations: An International Journal of Public Participation in Health Care and Health Policy, 20, 59-68. PMCID: PMC4919238.
 - b. Carter-Harris L, Davis LL, Rawl SM. (2016). Lung cancer screening participation: Developing a conceptual model to guide research. Research and Theory for Nursing Practice: An International Journal, 30(4), 333-352. PMCID: PMC5553010.

- c. **Carter-Harris L**, Slaven JE, Monahan PO, Rawl SM. (2017). Development and psychometric evaluation of the lung cancer screening health belief scales. Cancer Nursing, 40(3), 237-244. PMCID: PMC4890636.
- d. Carter-Harris L, Slaven JE Jr, Monahan PO, Shedd-Steele R, Hanna N, Rawl SM. (2018). Understanding lung cancer screening behavior: Racial, gender, and geographic differences among Indiana long-term smokers. *Preventive Medicine Reports, 10, 49-54*. doi:10.1016/j.pmedr.2018.01.018. eCollection 2018 Jun. PMID: 29552458. PMCID: PMC5852404.
- 3. <u>Advancing patient-clinician communication in lung cancer screening</u>. Understanding patient-clinician communication in the setting of a healthcare encounter is vital to advance the science in shared decision-making in the context of lung cancer screening. Aspects such as national cancer screening guideline release, the decision to opt out of screening, and patient motivations to screen are critical to understanding screening behavior more robustly. From a national perspective, our team used data from the Health Information National Trends Survey to examine predictors of patient-clinician conversations about lung screening hypothesizing that conversations would increase after the national guidelines were released. However, we found a slight decrease, but noted anecdotally that national media coverage related to impending guideline release was more widespread perhaps influencing more individuals to raise the topic with their clinician. Our team also led the first study exploring the patient decision to opt out of lung cancer screening after engaging in a discussion with, and receiving a recommendation from, their clinician. Reasons reflected key barriers to screening supported by our previous research to develop the conceptual model mentioned above. Worry about false positive results, perceived low value, practical barriers such as time and logistics, and not wanting to know were key.
 - a. **Carter-Harris L,** Tan AS, Salloum RG, Young-Wolff KC. (2016). Patient-provider conversations about lung cancer screening pre- and post-guidelines: Health Information National Trends Survey (HINTS). *Patient Education & Counseling*, 99(11), 1772-1777. PMCID: PMC5069116
 - b. Carter-Harris L, <u>Vode E</u>, Comer RS, <u>Goyal A</u>, Hanna N, Ceppa DP, Rawl SM. (2017). Development and usability testing of a computer-tailored decision support tool for lung cancer screening: A study protocol. *JMIR Research Protocols.* 2017;6(11):e225. PMID 29146565. doi:10.2196/resprot.8694
 - c. **Carter-Harris L,** Brandzel S, Wernli KJ, Roth JA, Buist DSM. (2017). A qualitative study exploring why patients opt out of lung cancer screening. Family Practice, 34(2), 239-244. PMID: 28122849.
 - d. Roth JA, **Carter-Harris L,** Brandzel S, Buist DSM, Wernli KJ. (2018). Patient motivations for pursuing low-dose CT lung cancer screening in an integrated healthcare system: A qualitative evaluation. *PLoS One*, 13(7):e0196758.
- 4. <u>Tobacco treatment and training in cancer care.</u> As an extension of my work to reduce lung cancer stigma, I have collaborated on several projects demonstrating my interest and commitment to improving tobacco treatment delivery. For example, I am currently collaborating with Dr. Ostroff and Banerjee on a newly funded clinical trial develop and test an empathic communication skills intervention for oncology care providers to reduce stigma when taking a smoking history during routine cancer care.
 - Hamann HA, Ver Hoeve ES, Carter-Harris L, Studts JL, Ostroff JS. Multilevel opportunities to address lung cancer stigma across the cancer control continuum. *Journal of Thoracic Oncology*. 2018; 13(8): 1062-1075. PMCID: PMC6417494
 - b. Williamson TJ, Riley KE, Carter-Harris L, Ostroff JS. (2020). Changing the language of how we measure and report smoking status: Implications for reducing stigma, restoring dignity, and improving the precision of scientific communication. *Nicotine Tobacco & Research*. 2020. Epub 2020/08/07. doi: 10.1093/ntr/ntaa141. PubMed PMID: 32756966.
 - c. Kotsen C, Dilip D, Carter-Harris L, O'Brien M, Whitlock CW, de Leon-Sanchez S, Ostroff JS. (2020). Rapid Scaling Up of Telehealth Treatment for Tobacco-Dependent Cancer Patients During the COVID-19 Outbreak in New York City. *Telemedicine and e-Health*. 2020:1-10. Epub 2020/07/11. doi: 10.1089/tmj.2020.0194. PubMed PMID: 32649266.
 - d. Ostroff JS, Bolutayo, K, O'Brien M, DeLeon-Sanchez S, Whitlock CW, Kotsen C, **Carter-Harris L**, Banerjee, SC, Schofield E. Training oncology care providers in the assessment and treatment of tobacco use and dependence. *Cancer*. 2021 Aug 15;127(16):3010-3018. PMID: 33914922.

5. <u>Qualitative research methods in cancer prevention and control.</u> I have expertise in design, collection, analysis and dissemination of qualitative data focusing on advancing understanding of underlying determinants of health and health decision making.

a. **Carter-Harris L,** Brandzel S, Wernli KJ, Roth JA, Buist DSM. (2017). A qualitative study exploring why individuals opt out of lung cancer screening. *Family Practice*, *34*(2):239-244. doi:10.1093/fampra/cmw146. PMID: 28122849.

b. Roth JA, **Carter-Harris L,** Brandzel S, Buist DSM, Wernli KJ. (2018). A qualitative study exploring patient motivations for screening for lung cancer. *PLoS ONE 13*(7): e0196758.

c. Draucker CB, Rawl SM, Vode E, **Carter-Harris L.** (2019). Understanding the decision to screen for lung cancer or not: A qualitative analysis. *Health Expect.* 2019 Dec;22(6):1314-1321. Epub 2019 Sep 27. PMID: 31560837 PMCID: PMC6882261

d. Draucker CB, Rawl SM, Vode E, **Carter-Harris L**. (2020). Integration through connecting in explanatory sequential mixed methods studies. *Western Journal of Nursing Research*. 2020;42(12):1137-47. Epub 2020/05/12. doi: 10.1177/0193945920914647. PubMed PMID: 32389099.

Complete List of Published Work in MyBibliography:

https://www.ncbi.nlm.nih.gov/myncbi/lisa.carter-harris.1/bibliography/public/