BIOGRAPHICAL SKETCH

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NAME: Chaya S. Moskowitz

eRA COMMONS USER NAME: MOSKOWIC

POSITION TITLE: Member, Attending Biostatistician

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	COMPLETION DATE	FIELD OF STUDY
Rutgers College	B.A.	05/1994	Interdisciplinary Statistics/ Mathematics
University of Washington	M.S.	12/1999	Biostatistics
University of Washington	Ph.D.	08/2002	Biostatistics

A. Personal Statement

I am an Attending Biostatistician in the Department of Epidemiology and Biostatistics at Memorial Sloan Kettering Cancer Center (MSKCC). I have been working with members of the Department of Radiology at MSK since joining the institution in 2002 and have assisted radiologists with many studies from inception and design stages through the statistical analysis and publication of the results. I also have a long track record of participating in multiple studies of long-term survivors of childhood cancer, both directing studies and serving in a collaborative role.

1. **Moskowitz CS**, Pepe MS. Quantifying and comparing the accuracy of binary biomarkers when predicting a failure time outcome. Stat Med. 2004 May 30;23(10):1555-70. PMID: 15122736
2. Oeffinger KC, Ford JS, **Moskowitz CS**, Diller LR, Hudson MM, Chou JF, Smith SM, Mertens AC, Henderson TO, Friedman DL, Leisenring WM, Robison LL. Breast cancer surveillance practices among women previously treated with chest radiation for a childhood cancer. JAMA 2009; 301(4): 404-414. PMCID: PMC2676434.
3. **Moskowitz CS**, Chou JF, Wolden SL, Bernstein JL, Malhotra J, Novetsky Friedman D, Mubdi NZ, Leisenring WM, Stovall M, Hammond S, Smith SA, Henderson TO, Boice JD, Hudson MM, Diller LR, Bhatia S, Kenney LB, Neglia JP, Begg CB, Robison LL, Oeffinger KC. Breast cancer after chest radiation therapy for childhood cancer. J Clin Oncol. 2014 Jul 20;32(21):2217-23. PMCID: PMC4100937.
4. **Moskowitz CS**, Ronckers CM, Chou JF, Smith SA, Friedman DN, Barnea D, Kok JL, de Vries S, Wolden SL, Henderson TO, van der Pal HJH, Kremer LCM, Neglia JP, Turcotte LM, Howell RM, Arnold MA, Schaapveld M, Aleman B, Janus C, Versluys B, Leisenring W, Sklar CA, Begg CB, Pike MC, Armstrong GT, Robison LL, van Leeuwen FE, Oeffinger KC. Development and validation of a breast cancer risk prediction model for childhood cancer survivors treated with chest radiation: A report from the Childhood Cancer Survivor Study and the Dutch Hodgkin Late Effects and LATER Cohorts. J Clin Oncol. 2021 Sep 20;39(27):3012-3021.

B. Positions and Honors

Employment

1995 – 1997 Mathematical Statistician, Longitudinal Surveys Branch, US Bureau of the Census
2000 – 2000 Research Assistant, Scientific Advisory Committee, General Clinical Research Center, University of Washington
2000 – 2002 Research Assistant, Department of Biostatistics, University of Washington
2002 – 2006 Assistant Member (Level 1), Memorial Sloan-Kettering Cancer Center, New York, NY
Assistant Biostatistician, Memorial Hospital, NY
2006 – 2012 Assistant Member, Memorial Sloan Kettering Cancer Center, New York, NY
Assistant Biostatistician, Memorial Hospital, NY
2012 – 2020 Associate Member, Memorial Sloan Kettering Cancer Center, New York, NY

Associate Biostatistician, Memorial Hospital, NY
2020 – Member, Memorial Sloan Kettering Cancer Center, New York, NY
Biostatistician, Memorial Hospital, NY

Other Positions

2009 Member, Special Emphasis Panel ZCA1 RTRB-8 (09)
2011-2015 Member, NCI Review Group Subcommittee J - Population and Patient Oriented Training
2015- Faculty member, Radiological Society of North America Clinical Trials Workshop
2015 Chairperson, Special Emphasis Panel ZCA1 RTRB-8 M1 S

Honors and Awards

1993 John W. Tukey Award for Excellence in Statistics, NJ Chapter of the ASA
1990 – 1994 Rutgers College Honors Program
1997 Honorable Mention, National Science Foundation
1997 Gertrude Cox Scholarship for Women in Statistics
1997 – 2000 Achievement Reward for College Scientists Fellowship
2001 Senior Student Award, Dept. of Biostatistics, University of Washington
2003 David Byar Young Investigator Award, Biometrics Section of the ASA

C. Contributions to Science

1. Variation in tumor measurements

I have been involved in several different studies which evaluate factors that are associated with variability in tumor measurements made from imaging tests, assess how this variability affects tumor response assessment, and propose methods for quantifying this variability. One particular paper of note reports on the results of a simulation study I led that evaluated how changing the number of target lesions used to measure tumor burden affects response assessments.

a. Zhao B, Schwartz LH, **Moskowitz CS**, Wang L, Ginsberg MS, Cooper CA, and Kalagian JP. Pulmonary metastases: effect of CT section thickness on measurement-initial experience. Radiology 2005; 234:934-939. PMID: 15681690
b. **Moskowitz CS**, Jia X, Schwartz LH, Gönen M. A simulation study to evaluate the impact of the number of lesions measured on response assessment. Eur J Cancer. 2009 Jan; 45(2): 300-310. PMCID: PMC2652848
c. Zhao B, James LP, **Moskowitz CS**, Guo P, Ginsberg MS, Lefkowitz RA, Qin Y, Riely GJ, Kris MG, Schwartz LH. Evaluating variability in tumor measurements from same-day repeat CT scans of patients with non-small cell lung cancer. Radiology. 2009 Jul;252(1):263-72. PMCID: PMC2797680.
d. **Moskowitz CS**, Gönen M. Evaluating agreement between solid tumor measurements used to assess response. Journal of Biomedical Graphics and Computing. 2015; 5(2): 1-8.

5. Evaluating imaging tests for the detection and localization of cancer

I have collaborated with radiology and medical physics colleagues studies evaluating the ability of imaging tests to detect and determine the extent and location of tumors. This work has involved studying many different imaging modalities such multi-parametric MRI, functional MRI, diffusion weighted imaging, CT, and mammography and has spanned a number of different cancers including prostate cancer, ovarian cancer, and breast cancer. Jochelson MS, Dershaw DD, Sung JS, Heerdt AS, Thornton C, **Moskowitz CS**, Ferrara J, Morris EA. Bilateral Contrast-enhanced Dual-Energy Digital Mammography: Feasibility and Comparison with Conventional Digital Mammography and MR Imaging in Women with Known Breast Carcinoma. Radiology. 2013 Mar;266(3):743-51. PMCID: PMC5673037

a. Donati OF, Mazaheri Y, Afaq A, Vargas HA, Zheng J, **Moskowitz CS**, Hricak H, Akin O. Prostate cancer aggressiveness: assessment with whole-lesion histogram analysis of the apparent diffusion coefficient. Radiology. 2014 Apr;271(1):143-52. PMID: 24475824
b. Sung JS, Lebron L, Keating D, D'Alessio D, Comstock CE, Lee CH, Pike MC, Ayhan M, **Moskowitz CS**, Morris EA, Jochelson MS. Performance of dual-energy contrast-enhanced digital mammography for screening women at increased risk of breast cancer. Radiology. 2019 Oct;293(1):81-88. PMCID: PMC6776233
c. Qureshi TA, Veeraraghavan H, Sung JS, Kaplan JB, Flynn J, Tonorezos ES, Wolden SL, Morris EA, Oeffinger KC, Pike MC, **Moskowitz CS**. Automated breast density measurements from chest computed tomography scans. J Med Syst. 2019 Jun 22;43(8):242. PMID: 31230138