

Brian Sprague, PhD is a cancer epidemiologist and associate professor in the Department of Surgery at the University of Vermont. My research includes observational studies of breast cancer risk, detection, and survivorship. My recent work focuses on generating evidence to inform risk-based breast cancer screening strategies, through the development of risk prediction models for screening outcomes, evaluation of breast imaging screening and diagnostic performance according to patient risk characteristics, and the identification of novel prognostic markers for early-stage breast cancer. These efforts seek to support the development of personalized screening strategies that maximize benefits while limiting the harms associated with false positive exams and overdiagnosis. I lead the Vermont Breast Cancer Surveillance System (VBCSS), a research program that collects integrated patient, radiology, pathology, and outcomes data associated with breast imaging at all radiology facilities in Vermont. The VBCSS is a member registry within the P01-funded Breast Cancer Surveillance Consortium (BCSC). As the VBCSS registry lead, I conduct collaborative research within the BCSC and serve on its steering committee. I am principal investigator of NCI-funded studies investigating supplemental ultrasound screening strategies and molecular characterization of screen-detected breast cancers. I have also collaborated for many years with the Cancer Intervention and Simulation Modeling Network (CISNET) in studies of breast cancer screening strategies, and was PI of the U54-funded Vermont Research Center (2011-2018) within NCI's consortium for Population-based Research to Optimize the Screening Process (PROSPR).