Project Title: Molecular variation between spontaneous breast cancers and breast cancers induced by radiation in survivors of Hodgkin's Lymphoma
Planned research population (eligibility criteria): Long term childhood survivors of Hodgkin's Lymphoma who developed secondary breast malignancies
Proposed specific aims: 1. Compare gene expression profiles of radiation induced breast cancers to those of spontaneous breast cancers 2. Describe molecular variation between the two populations 3. Identify potential treatment differences for patients who develop radiation induced breast malignancies
Will the project require non-CCSS funding to complete?: Yes
If yes, what would be the anticipated source(s) and timeline(s) for securing funding?: Funding will be obtained from the Ohio State University Radiation Oncology department.

Does this project require contact of CCSS study subjects for . . .

Additional self-reported information: No
Biological Samples: Yes
Medical record data: Yes
If yes to any of the above, please briefly describe.: Access to biological samples and medical record data of survivors of Hodgkin's Lymphoma is necessary to conduct further molecular analysis to detect variation in secondary breast cancer subtypes compared to patients with spontaneous breast cancers.
What CCSS Working Group(s) would likely be involved? (Check all that apply)

Second Malignancy: Secondary
Chronic Disease:
Psychology / Neuropsychology:
Genetics: Primary
Cancer Control:
Epidemiology / Biostatistics:

To describe the anticipated scope of the study, please indicate the specific CCSS data to be included as outcome (primary or secondary) or correlative factors. (Check all that apply)

Late mortality: Secondary
Second Malignancy: Primary

Health Behaviors

Tobacco: Correlative Factors
Alcohol:
Physical activity:
Medical screening: Correlative Factors
Other:
If other, please specify:

Psychosocial

Insurance:
Marriage:
Education: Correlative Factors
Employment:
Other:
If other, please specify:

Medical conditions

Hearing/Vision/Speech:
Hormonal systems: Correlative Factors
Heart and vascular:
Respiratory:
Digestive:
Surgical procedures: Correlative Factors
Brain and nervous system:
Other:
If other, please specify:
Medications

Describe medications:

Pregnancy and offspring: Correlative Factors
Family History: Correlative Factors

Psychologic/Quality of Life

BSI-18:
SF-36:
CCSS-NCQ:
PTS:
PTG:
Other:
If other, please specify:

Chronic conditions (CTCAE v3): Correlative Factors
Health status: Correlative Factors

Demographic

Age: Correlative Factors
Race: Correlative Factors
Sex: Correlative Factors
Others:
If others, please specify:

Cancer treatment

Chemotherapy: Correlative Factors
Radiation therapy: Correlative Factors
Surgery: Correlative Factors

Anticipated sources of statistical support

CCSS Statistical Center:
Local institutional statistician: Yes
If local, please provide the name(s) and contact information of the statistician(s) to be involved.: The statistics will be done within the radiation oncology department at Ohio
State University.
Will this project utilize CCSS biologic samples?: Yes

If yes, which of the following?

Buccal cell DNA:
Peripheral blood:
Lymphoblastoid cell lines:
Second malignancy pathology samples: Yes
Other requiring collection of samples:
If other, please explain:

Other general comments: