First Name : Lindsay Last Name : Morton Institution : National Cancer Institute, Division of Cancer Epidemiology and Genetics, Radiation Epidemiology Branch Address 1 : 9609 Medical Center Drive Address 2 : City : Bethesda State/Province/Region : MD Country : United States Zip/Postal Code : 20892 Phone Number : 240-276-7377 Alternate Phone Number : Email Address : mortonli@mail.nih.gov

Section: Project Requirements and Description

Group: Requirements to submit AOI

A comprehensive review of previously published data has been completed. : **Yes** The specific aims are clear and focused. : **Yes**

The investigator has appropriate experience and expertise to develop the concept proposal; if not, has identified a mentor or senior co-investigator. : **Yes**

The investigator agrees to develop an initial draft of the concept proposal within 6 weeks of approval of the AOI and to finalize the concept proposal within 6 months. : **Yes**

Project Title : Radiotherapy- and chemotherapy-related risks of thyroid cancer among childhood cancer survivors

Planned research population (eligibility criteria) :

Participants in CCSS who were originally diagnosed during 1970-1999 Proposed specific aims :

1. Quantify the magnitude and shape of the dose-response relationship for thyroid cancer risk after childhood cancer associated with radiation dose to the thyroid and specific chemotherapeutic agents.

2. Evaluate whether treatment-related thyroid cancer risks estimated in Aim 1 are modified by patient demographics (e.g., age at exposure, sex, and attained age), other treatment exposures (e.g., splenectomy, radiation dose to the pituitary gland), or other cancer risk factors (e.g., body mass index, other endocrinopathies).

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? : This project will be supported by the Intramural Research Program of the National Cancer Institute. Funds are available.

Group: Does this project require contact of CCSS study subjects for:

Additional self-reported information : No

Biological samples : No

Medical record data : No

If yes to any of the above, please briefly describe. :

Group: What CCSS Working Group(s) would likely be involved? (Check all that apply)

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

Section: Outcomes or Correlative Factors

Late mortality : Second Malignancy : **Primary**

Group: Health Behaviors

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

Group: Psychosocial

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

Group: Medical Conditions

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

Group: Medications

Describe medications :

Group: Psychologic/Quality of Life

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

Group: Other

Pregnancy and offspring : Family history : **Correlative Factors** Chronic conditions (CTCAE v3) : **Correlative Factors** Health status :

Group: Demographic

Age : Correlative Factors Race : Correlative Factors Sex : Correlative Factors Other : If other, please specify :

Group: Cancer treatment

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

Section: 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. : **Sara Schonfeld (schonfes@mail.nih.gov)** Will this project utilize CCSS biologic samples? : **No** If yes, which of the following? : If other, please explain :

Section: Other General Comments

Other General Comments : We propose to build an interdisciplinary research team including investigators from NCI and CCSS with appropriate expertise. I agree to share this information with St. Jude : Yes