First Name: Lucie
Last Name: Turcotte
Institution: University of Minnesota
Address 1: 420 Delaware St SE
Address 2: MMC 484
City: Minneapolis
State/Province: MN
Country: USA
Zip: 55455
Phone: 612-626-2778
Alternate Phone: 612-708-1282
Email: turc0023@umn.edu

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: Beyond radiation: Understanding thyroid cancer risk in childhood cancer
Planned research population (eligibility criteria): Will compare individuals in the CCSS cohort with secondary thyroid cancers to CCSS cohort members without secondary thyroid cancer
Proposed specific aims: 1. Investigate the role of gender and sex hormones in secondary thyroid cancer a. Evaluate relationship between parity and thyroid SMNs in the female CCSS population b. Assess whether use of oral contraceptives or hormone replacement therapies are associated with increased risk of thyroid SMNs c. Describe menstrual histories and female survivors and identify whether an association exists with development of thyroid SMNs 2. Investigate the role of weight, lifestyle factors and type 2 DM in thyroid SMNs a. Determine whether increased BMI is associated with increased risk of thyroid SMNs b. Evaluate possible associations between type 2 DM, as well as antidiabetic medications, and development of thyroid SMNs c. Determine whether physical activity level is associated with risk of thyroid SMNs
Will the project require non-CCSS funding to complete?: No
If yes, what would be the anticipated source(s) and timeline(s) for securing funding?:

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.:
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

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:
- Second Malignancy: Primary

Health Behaviors

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

Psychosocial

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

Medical conditions

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

Medications
Describe medications: Oral contraceptives, sex hormone replacement therapy, fertility drugs, antidiabetic agents (metformin, insulin, sulfonylurea, etc)

Pregnancy and offspring: Correlative Factors
Family History:

Psychologic/Quality of Life

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

Chronic conditions (CTCAE v3):
Health status:

Demographic

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

Cancer treatment

Chemotherapy:
Radiation therapy: Correlative Factors
Surgery:

Anticipated sources of statistical support

CCSS Statistical Center: Yes
Local institutional statistician:
If local, please provide the name(s) and contact information of the statistician(s) to be involved.: Will this project utilize CCSS biologic samples?: No

If yes, which of the following?
Buccal cell DNA:
Peripheral blood:
Lymphoblastoid cell lines:
Second malignancy pathology samples:
Other requiring collection of samples:
If other, please explain:

Other general comments: I would like to use this project as a spring board for a possible K-award. Ideally, we can describe some of the risk factors that have been identified in de novo thyroid cancers within the CCSS cohort and identify some possible reasons for gender differences in incidence, and use that information to help formulate ideas for a study looking at some of the underlying biological mechanisms.