Received: 5.3.11 First Name: David Last Name: Hodgson

Institution: Princess Margaret Hospital

Address 1: 610 University Ave

Address 2: City: Toronto

State/Province: Ontario

Country: Canada Zip: M5R1L5

Phone: (416) 946-2919 Alternate Phone:

Email: david.hodgson@rmp.uhn.on.ca

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: Development of Radiobiologic Models of Second Cancer Risk for Childhood Cancer Patients Treated with Radiation Therapy.

Planned research population (eligibility criteria): Hodgkin lymphoma patients aged 13+ treated with thoracic RT.

Proposed specific aims: 1. to reconstruct 3D normal tissue dosimetry on a sample of HL patients treated with thoracic RT. 2. To apply radiobiologic models of SC risk to this dosimetry and to compare estimated risk with observed risk. 3. to modify models and retest on a test set to create a validated model of SC risk that can be used in modern RT planning systems

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?: Canadian Institutes for Health Research Deadline for application JUNE 1

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

Additional self-reported information: No

Biological Samples: No Medical record data: Yes

If yes to any of the above, please briefly describe.: We would like RT dosimetry data, and

SC outcome data

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 <u>outcome</u> (primary or secondary) or <u>correlative factors</u> . (Check all that apply)
Late mortality:
Second Malignancy: Primary
Health Behaviors
Tobacco:
Alcohol:
Physical activity:
Medical screening:
Other:
If other, please specify:
Psychosocial
Insurance:
Marriage:
Education:
Employment:
Other:
If other, please specify:
Medical conditions
Hearing/Vision/Speech:
Hormonal systems:
Heart and vascular:
Respiratory:
Digestive:
Surgical procedures:
Brain and nervous system:
Other:
If other, please specify:

Describe medications:
Pregnancy and offspring: 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: Secondary Race: Sex: Secondary Others: If others, please specify:
Cancer treatment
Chemotherapy: Correlative Factors Radiation therapy: Correlative Factors Surgery:
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.: We request formal collaboration with Marilynn Stovall (I have discussed this with her) and would value the input/collaboration of any other appropriate CCSS

investigator (eg. Dr. Armstrong, Dr Oeffinger) 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: