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## Contact Information

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### Requirements to submit AOI (all answers must be "yes" to proceed)

<b>A comprehensive review of previously published data has been completed</b>	Yes
<b>The specific aims are clear and focused</b>	Yes
<b>The investigator has appropriate experience and expertise to develop the concept proposal; if not, has identified a mentor or senior co-investigator.</b>	Yes
<b>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</b>	Yes

**Project Title** Associations Between Neurocognitive Impairment and the Development of Chronic Health Conditions

### Planned research population (eligibility criteria)

Survivors >18 years of age who completed follow-up 2 (original)/follow-up 5 or 6 (expansion) NCQ assessment and completed assessments at follow-up 5/6 (original) and 7 (expansion).

### Proposed specific aims

1) Examine associations between neurocognitive impairment and new onset chronic health conditions across cancer survivors adjusting for relevant demographic factors and pre-existing chronic health conditions.

a. Hypothesis: After adjusting for relevant demographic factors and existing chronic health conditions, neurocognitive impairment will be associated with increased risk of developing chronic health conditions (grade  $\geq 3$ ).

2) Identify the extent to which healthcare utilization and risky health behaviors mediate the association between neurocognitive impairment and new onset chronic health conditions in childhood cancer survivors stratified by CNS treatment exposures (i.e., those with CNS treatment exposures [intrathecal methotrexate, cranial radiation, and/or neurosurgery] and those without CNS treatment exposures).

a. Hypothesis: After adjusting for relevant demographic variables and existing chronic health conditions, risky health behaviors and healthcare utilization will mediate associations between neurocognitive impairment and new onset chronic health conditions for survivors without CNS treatment exposures, but not for survivors with CNS exposures who experience greater neurocognitive impairment but are less likely to engage in risky health behaviors.

**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? (Select all that apply)**

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

## Outcomes or Correlative Factors

Late Mortality	
Second Malignancy	

## Health Behaviors

Tobacco	
Alcohol	
Physical Activity	
Medical Screening	
Other	

**If other, please specify**

## Psychosocial

Insurance	Correlative Factors
Marriage	Correlative Factors
Education	Correlative Factors
Employment	Correlative Factors
Other	

If other, please specify

## Medical Conditions

Hearing/Vision/Speech	
Hormonal Systems	
Heart and Vascular	
Respiratory	
Digestive	
Surgical Procedures	
Brain and Nervous System	
Other	Correlative Factors

If other, please specify

CHC at baseline considered a correlative factor

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## Medications

Describe medications

Psychologic/Quality of Life

BSI-18	
SF-36	
CCSS-NCQ	
PTS	
PTG	
Other	

If other, please specify

### Other

Pregnancy and Offspring	
Family History	
Chronic Conditions (CTCAE v3)	Primary
Health Status	Correlative Factors

### Demographic

Age	Correlative Factors
Race	Correlative Factors
Sex	Correlative Factors
Other	

If other, please specify

### Cancer Treatment

Chemotherapy	Correlative Factors
Radiation Therapy	Correlative Factors
Surgery	Correlative Factors

### Anticipated Sources of Statistical Support

CCSS Statistical Center	No
Local Institutional Statistician	Yes

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?

If other, please explain

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## Other General Comments

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### Agree

I agree to share this information with St. Jude

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