Section: Contact Information

First Name : Rebecca Last Name : Ronsley Institution : Nationwide Children's Hospital Address 1 : Nationwide Children's Hospital, Faculty Office Building, 4th Floor Address 2 : 700 Children's Drive City : Columbus State/Province/Region : OH Country : United States Zip/Postal Code : 43205 Phone Number : (614) 355-1848 Alternate Phone Number : Email Address : rebecca.ronsley@nationwidechildrens.org

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 : Endocrine Late Effects in Survivors of Childhood Brain Tumors: A Report from the Childhood Cancer Survivor Study

Planned research population (eligibility criteria) :

Survivors of childhood cancer treated for any central nervous system malignancy (glioma, medulloblastoma, ependymoma, other embryonal tumor, CNS germ cell tumor, pineoblastoma) prior to age 21 in the entire CCSS cohort

Proposed specific aims :

1. To describe the endocrine outcomes (primary gonadal dysfunction, the metabolic syndrome, obesity, insulin resistance/diabetes mellitus, dyslipidemia, hypopituitarism, central hypothyroidism, adrenal insufficiency, growth hormone deficiency, central gonadotropin deficiency, primary hypo or hyperthyroidism) in survivors of childhood central nervous system (CNS) tumors.

2. To correlate the risk of endocrinopathies with age of cancer treatment (<5 years, 5-10 years, >10 years), chemotherapy and radiation therapy administered in survivors of childhood CNS malignancies.

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? :

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

Section: Outcomes or Correlative Factors

Late mortality : **Primary,Secondary,Correlative Factors** Second Malignancy :

Group: Health Behaviors

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

Group: Psychosocial

Marriage : **Primary,Secondary,Correlative Factors** Education : Employment : Other : If other, please specify :

Group: Medical Conditions

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

Group: Medications

Describe medications : Estrogen supplement Progesterone and analogs Testosterone/androgen supplements Fertility medications (for example, use of clomiphene) Levothyroxine or other thyroid hormone replacement Glucocorticoids, mineralocorticoids, or other steroid analog/replacement Vasopressin or DDAVP Insulin Metformin or other insulin sensitizing agent

Group: Psychologic/Quality of Life

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

Group: Other

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

Group: Demographic

Age : **Primary** Race : **Primary** Sex : **Primary** 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 : **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? : If other, please explain :

Section: Other General Comments

Other General Comments :

Building on work by Moustoufi-Moab and colleagues (Mostoufi-Moab et al JCO 2016) this proposal will describe endocrine outcomes in a disease-focused group of CNS tumor survivors using the expanded CCSS cohort. Furthermore, we will explore the association between treatment factors and age of treatment with endocrine outcomes using age cutoffs that represent relevant stages of HPA/G axis maturation.

I agree to share this information with St. Jude : Yes