

### **Section: Contact Information**

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### **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 : **A Genome-Wide Association Study for Frailty in Adult Survivors of Childhood Cancer**

Planned research population (eligibility criteria) :

**This study will be conducted in the 5,324 childhood cancer survivors of European ancestry who are enrolled to the CCSS original cohort (diagnosed 1970-1986) and who have available genotype data. All CCSS participants (original and expansion cohorts) who completed a follow up questionnaire by the end of 2016 and are at least 18 years old have already been characterized for frailty (n=10,899).**

Proposed specific aims :

**Aim 1: Evaluate the relationship between previously-published genetic variants associated with components of frailty and the risk for these frailty-related outcomes in survivors of childhood cancer**

**Aim 2: Identify novel genetic variants associated with frailty-related outcomes and frailty status classification in survivors of childhood cancer**

**Aim 3: Develop an integrated clinical and genetic risk prediction model for frailty in survivors of childhood cancer**

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 : **Secondary**

Psychology / Neuropsychology :

Genetics : **Primary**

Cancer Control :

Epidemiology / Biostatistics : **Secondary**

**Section: Outcomes or Correlative Factors**

Late mortality :

Second Malignancy :

**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 :

Heart and vascular :

Respiratory :

Digestive :

Surgical procedures :

Brain and nervous system :

Other : **Primary**

If other, please specify : **FRAILITY (recently characterized by Hayek and Ness et al.)**

**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 :

Chronic conditions (CTCAE v3) : **Secondary**

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 : **Yes**

Local institutional statistician : **Yes**

If local, please provide the name(s) and contact information of the statistician(s) to be involved. :

**Analysis will be conducted by Melissa Richard under the supervision of Philip Lupo and Monica Gramatges. Replication is requested with the assistance of Dr. Yasui.**

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 :

**Dr. Ness is a collaborator on this proposal and has agreed to share the frailty characterization data currently under review. Dr. Hayek is also included.**

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