Section: Contact Information

First Name : **Sarah**
Last Name : **Kerns**
Institution : **University of Rochester Medical Center**
Address 1 : **265 Crittenden Blvd**
Address 2 : **Box 318**
City : **Rochester**
State/Province/Region : **NY**
Country : **US**
Zip/Postal Code : **14642**
Phone Number : **585-275-2229**
Alternate Phone Number :
Email Address : **sarah_kerns@urmc.rochester.edu**

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 : **Genetic association study of cardiac toxicity following chest radiotherapy**
Planned research population (eligibility criteria) :
Receipt of chest radiotherapy and availability of genome-wide SNP data.
Proposed specific aims :
1. Identify SNPs associated with development of cardiac valvular disease or arrhythmias following chest radiotherapy
2. Determine whether a polygenic risk score for cardiac disease is associated with increased risk of cardiac valvular disease or arrhythmia in survivors treated previously with chest radiotherapy
3. Explore mechanisms of radiotherapy related cardiac valvular disease or arrhythmia using genetically predicted gene expression patterns
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? :
While external funding is not required due to availability of existing institutional research support for the applicants, NIH R21 funding will be sought to alleviate the need for such institutional support.

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 : **Correlative Factors**
Alcohol : **Correlative Factors**
Physical activity : **Correlative Factors**
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 : **Primary**
Respiratory :
Digestive :
Surgical procedures :
Brain and nervous system :
Other :
If other, please specify :

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) : **Correlative Factors**
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 :

Section: 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. : **Statistical analysis will mainly be performed by the applicant (Sarah Kerns) working together with collaborator Carmen Bergom, Assistant Professor of Radiation Oncology at the Medical College of Wisconsin. In addition, Dr. Kerns has local statistical support through her department at the University of Rochester.**
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 :
I agree to share this information with St. Jude : **Yes**