Section: Contact Information

First Name : Duncan Last Name : Ramsey Institution : Massachusetts General Hospital Address 1 : 55 Fruit Street, Yawkey Building Address 2 : City : Boston State/Province/Region : MA Country : United States Zip/Postal Code : 02114 Phone Number : 5129239891 Alternate Phone Number : Email Address : duncan.c.ramsey@gmail.com

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 : Long-term functional, surgical, and socioeconomic outcomes of local control (radiotherapy, amputation, or limb salvage/reconstructive options) in patients with primary bone sarcomas in the modern era of orthopedic oncology

Planned research population (eligibility criteria) :

Lower extremity bone sarcoma survivors who underwent any form of local control management, including primary limb salvage procedures, amputation or radiotherapy. We will restrict our study to the expanded cohort (1987-99), where interrogate modern prosthetic design, materials science, and surgical techniques were instituted and continue to this day

Proposed specific aims :

1) Describe the long-term functional and psychosocial outcomes of osseus sarcoma patients treated with various local control options in the modern era of orthopedic oncology, including amputation, radiotherapy, and primary limb salvage procedures as stratified by technique -- rotationplasty, endoprosthetic, allograft, or allograft-composite reconstruction.

2) Determine the long-term socioeconomic outcomes of osseus sarcoma patients treated with various local control options in the modern era of orthopedic oncology, including amputation, radiotherapy, and primary limb salvage procedures as stratified by technique -- rotationplasty, endoprosthetic, allograft, or allograft-composite reconstruction.

3) Identify the proportion of patients in each local control strategy group that received medical care in the previous two years and the type of medical care received. Further, identify factors predictive of recent medical care.

4) Determine the late complication profile for each local control strategy, including local

recurrence and surgical intervention such as revision or amputation. Further, identify risks factors for late complications specific to initial local control strategy.

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 : **Secondary** Genetics : Cancer Control : Epidemiology / Biostatistics :

Section: Outcomes or Correlative Factors

Late mortality : **Secondary** Second Malignancy : **Secondary**

Group: Health Behaviors

Tobacco : Secondary Alcohol : Secondary Physical activity : Secondary Medical screening : Secondary Other : Secondary If other, please specify : Late (>5 years) surgical procedures, late (>5 years) recurrence

Group: Psychosocial

Insurance : Secondary Marriage : Secondary Education : Secondary Employment : Secondary Other : Secondary If other, please specify :

Group: Medical Conditions

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

Group: Medications

Describe medications :

Group: Psychologic/Quality of Life

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

Group: Other

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

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 : 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 : It may be necessary to re-review Expanded Cohort operative notes to classify the primary local control surgical modality for some patients. I agree to share this information with St. Jude : Yes