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 : **Statistical Analysis for Genome-Wide Data with Interval-censored Outcomes in Oral Health Studies**
Planned research population (eligibility criteria) :
The participants with genomic and dental data available.
Proposed specific aims :
Aim 1 - Develop nonparametric screening method for ultrahigh-dimensional interval-censored data. With this robust method, we aim to efficiently reduce the dimensionality while retaining all the active variables for next step model development. Rigid theoretical proof and extensive simulation studies will be provided.

Aim 2 - Develop penalized regression method for data with reduced dimensionality generated from Aim 1. Based on the preprocessed data in Aim 1, with this method we will identify the most significant factors related to the outcome. Rigid theoretical proof and extensive simulation studies will be provided.

Aim 3 - Apply the methods developed in Aim 1 and Aim 2 to d CCSS data. We anticipate to identify genetic and other risk factors associated with several oral diseases in the CCSS cohort.
Will the project require non-CCSS funding to complete? : **Yes**
If yes, what would be the anticipated source(s) and timeline(s) for securing funding? :
We will submit a proposal on Feb 2019 and hope it will be funded.

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

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 : **Oral health**

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) :
Health status :

Group: Demographic

Age :
Race :
Sex :
Other :
If other, please specify :

Group: Cancer treatment

Chemotherapy :
Radiation therapy :
Surgery :

Section: Anticipated Sources of Statistical Support

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