

Received: 9/8/11  
First Name: Liang  
Last Name: Zhu  
Institution: St. Jude Children's Research Hospital  
Address 1: 262 Danny Thomas Place  
Address 2:  
City: Memphis  
State/Province: TN  
Country: US  
Zip: 38105  
Phone: 9015955240  
Alternate Phone:  
Email: liang.zhu@stjude.org

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Requirements to submit AOI:

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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

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Project Title: Statistical Analysis of a mixture of recurrent event and panel count data  
Planned research population (eligibility criteria): the whole CCSS study population (as a motivating example)  
Proposed specific aims: A.1. To develop nonparametric estimation of the mean function and to develop the procedures of nonparametric two-sample comparison for type I and type II mixture data. A.2. To develop likelihood-based methods and semiparametric estimating equation-based methods for regression analysis of type I and type II mixture data. A.3. To develop the likelihood-based methods and the semiparametric estimating equation-based methods for regression analysis of multivariate mixture data.  
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?:

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Does this project require contact of CCSS study subjects for . . .

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Additional self-reported information: No  
Biological Samples: No  
Medical record data: No  
If yes to any of the above, please briefly describe.:

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What CCSS Working Group(s) would likely be involved? (Check all that apply)

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

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To describe the anticipated scope of the study, please indicate the specific CCSS data to be included as outcome (primary or secondary) or correlative factors. (Check all that apply)

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Late mortality:  
Second Malignancy:

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Health Behaviors

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

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Psychosocial

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

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Medical conditions

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

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Medications

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Describe medications:

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Pregnancy and offspring: Primary  
Family History:

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Psychologic/Quality of Life

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BSI-18:

SF-36:

CCSS-NCQ:

PTS:

PTG:

Other:

If other, please specify:

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Chronic conditions (CTCAE v3):

Health status:

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Demographic

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Age:

Race:

Sex:

Others:

If others, please specify:

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Cancer treatment

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Chemotherapy:

Radiation therapy:

Surgery:

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Anticipated sources of statistical support

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CCSS Statistical Center:

Local institutional statistician: Yes

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

Will this project utilize CCSS biologic samples?: No

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If yes, which of the following?

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Buccal cell DNA:

Peripheral blood:

Lymphoblastoid cell lines:

Second malignancy pathology samples:

Other requiring collection of samples:

If other, please explain:

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Other general comments: