

**Speaker: Nicole Alberts, PhD**

Title: Leveraging mHealth to examine Chronic Pain in the Childhood Cancer Survivor Study

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*Objectives/Purpose.* Exposure to cancer-directed therapies in childhood often results in medical and psychological late effects, including clinically significant pain. Despite this, pain, and in particular *chronic* pain, remains understudied relative to other late effects. Leveraging an integrated mobile health (mHealth) and ecological momentary assessment (EMA) approach, the primary aim of the current study was to estimate the prevalence and nature of chronic pain among long-term survivors of childhood cancer.

*Methods.* Potential participants included a random sample of 700 adult survivors of childhood cancer from the Childhood Cancer Survivor Study (CCSS), a multi-institutional cohort of 5-year survivors of childhood cancer, who were invited to download the CCSS Eureka app to complete baseline measures of chronic pain and related constructs. Participants next completed daily app-based pain assessments over the course of two weeks.

*Results.* Of the 700 survivors invited, 256 (37%) have registered on the app, and 234 (33%) have consented to study to date. Preliminary findings pertaining to the prevalence and nature of chronic pain among survivors will be presented. Lessons learned regarding the feasibility of utilizing an app-based EMA approach within a large scale cancer survivor cohort will also be discussed.

*Conclusions and Clinical Implications.* mHealth and EMA can be used together to study chronic pain within large survivorship cohorts. However, limited participation rates and participation bias may be limitations. Clinical implications of the study findings and future research directions for the examination of chronic pain in survivors of childhood cancer, including utilization of technology-based approaches, will be described.