Mar. 7	Tamara Pico Harvard	Integrating global and local processes of sea-level change to reconcile paleo-sea-level observations with model calculations, with the goal of refining global and regional ice volumes over glacial timescales.

Title: In and out of the last ice age: Insights from sea-level change and river evolution in North America

Abstract : Ice ages cycles are often described as comprising a slow glacial build-up phase followed by a rapid deglaciation. However, during much of the last ice age, global ice volumes are largely uncertain due to a sparsity of sea-level records. Furthermore, it is challenging to reconstruct individual ice sheet geometries because advancing ice sheets raze evidence of previous ice margins. I revisit two topics of considerable debate within these broader questions. The first is the timing of both the expansion of the ice-free corridor between the Cordilleran and Laurentide Ice Sheet and the flooding of the Bering Strait. In this case, I use observations of the Bering Strait flooding as sea-level indicators to fingerprint the timing and location of North American saddle deglaciation. The second is the geometry of the Laurentide Ice Sheet in the build-up toward Last Glacial Maximum. To investigate this issue, I use sea-level records from the U.S. east coast and glacial isostatic adjustment modeling to infer the large-scale growth history of North American ice sheets. I also demonstrate that ancient landscapes provide additional insight into ice loading histories, as rivers can faithfully record surface deformation, and I use geologic records of U.S. east coast rivers as a novel data set for inferring the history of glaciation.