Constructing global $\delta^{13}C_{carb}$ and $\delta^{13}C_{org}$ reference curves for the Triassic Miriam Katz (PI) & David Mosher (graduate student); Collaborators: D. Kent (Rutgers U.), G. Muttoni (U. of Milan), Atle Mørk (SINTEF Petroleum Research, & Norwegian U. of Sci. & Tech.), A. Milligan (Oregon State U.) Comparison with $\delta^{13}C_{carb}$ records from Tethyan sections in China Carbon isotopes Time scale Age (Payne et al. 2004) reveals a global signal in our Svalis Dome Cordevoliar Carnian (Barents Sea) $\delta^{13}C_{org}$ data in the Early to earliest Middle Triassic, Late Svalis Dome Triassic showing promise for C-isotope stratigraphy. 400 Ladinian Long. 350 Ladinian 300 Similarities in the Svalis 600 Dome and China δ^{13} C 250 241 Illyrian Middle records provide evidence of a 200 Anisian Triassic 500 global signal linked to sea 150 isian level. During sea level rise, Vs. symmetricus Nii, kock Vs. triangularis 100 ¹²C-enriched organic matter Height Spathian 50 was sequestered on Aea continental margins, driving 247 Spathian the available C reservoir Smithian Smithia towards higher δ^{13} C values. Early 200 Triassic During falling sea level, Dienerian remobilized organic matter Diener.? Griesb. 100 Griesbachian was reintroduced ¹²C to the seawater. 251.4 Late Changxingian Permian $\delta^{13}C$ -2 δ¹³C_{carb} (‰)

In the second year of research on this project, we are completing isotopic studies on the inorganic bulk sediments. All samples have been crushed and await analysis at Rutgers University. Data analysis and results will be presented at a national meeting, and I anticipate that results will be submitted in 2 manuscripts for journal publication by the end of the year.