Jane Indorf University of Miami Phylogeography of the marsh rice rat, Oryzomys palustris, in wetlands of the southeastern United States.

Jane Indorf's Ph.D. dissertation research is uncovering the evolutionary history of the marsh rice rat. She is examining how the biogeographic history of the southeastern United States has affected the present genetic structure of this wetland dependant species. In December 2008, Jane collected DNA samples from marsh rice rats inhabiting the St. Joseph Bay State Buffer Preserve. This area to the west of the Apalachicola River was a key collecting site in her study. Many animals are divided genetically into eastern and western groups, with the divide occurring at the Apalachicola river. After analyzing samples from the Preserve along with samples collected to the east of the Apalachicola River, she found that this river is not a barrier to gene flow for the marsh rice rat. This is most likely due to the marsh rice rat's ability to easily swim and disperse over water. Some populations of the marsh rice rat are threatened due to wetland habitat loss. Data from Jane's research will be useful for management plans involving this species.