Biological markers of past climate change in ancient ice PIs: Raymond Sambrotto and Lloyd Burckle

Abstract: Recently, ancient ice samples from Antarctica have become available from deep drill sites and other sources. We will focus on the biogenic particles in the ice in order to better constrain the probable source of the material, its usefulness as a paleo-climatic indicator, and its potential to harbor viable ancient organisms. The material will be identified as far as possible microscopically and subjected to molecular techniques in an attempt to place the material in an evolutionary context. The work is designed to leverage external funding for future work.