The IGCP Grant-in-Aid of the sum of $1500 went towards an airfare to Mendoza, Argentina, for IGCP Project No 587: Identity, Facies and Time - The Ediacaran (Vendian) Puzzle: *Factors Controlling the Observed Diversity and Reality of the Relationships of the Earliest Metazoans*. My particular interest in this project is to investigate the morphology of *Rangea* to interpret the biology and ecology in combination with the environment at the time. The structure of this organism is unique and it is not fully understood how they lived, or what they were. Using new techniques including surface scanning, computer based CT reconstructions and 3D printing we can better investigate the internal and external morphology of these organisms.

While in Mendoza, I presented a poster titled *Reconstructing Rangea using digital techniques*, on the new technology available to palaeontologist to scan and digitally analyse fossils. When 3D or partial 3D preservation is available, it is possible to reconstruct the morphology of the Ediacaran faunas using CT scanning and surface scanning. It also provides an opportunity to make multiple copies of rare material through 3D printing, that can be passed on to other researchers without the need to send originals.

The CT scans from this study have a lot of potential for analysis of internal structures to reconstruct their morphology. This will hopefully tell us more about their unique structure, biology and way of life. We are currently working on writing this paper for submission.