Prof Pippa Whitehouse is a leading expert on glacial isostatic adjustment (GIA), the response of the solid Earth to changes in ice and ocean loading as ice sheets change with time. She implements numerical models of GIA and is equally expert on records of past ice sheet configurations and sea level change. In landmark papers, she completed a continent-wide reconstruction of the Antarctic ice sheet and a new GIA model for Antarctica.

Prof Whitehouse has transformed the understanding of GIA by establishing the influence of solid earth deformation on the behaviour of the ice sheet, with major implications for future sea level rise. She is a greatly-valued and extremely-generous collaborator and her expertise is highly sought after by many, as indicated by the large number of co-authored papers on wide-ranging topics. Through her highly cited publications, she has brought new GIA understanding to the global science community.

Within SCAR, Prof Whitehouse took on leadership of the SERCE (Solid Earth Response and Influence on Cryosphere Evolution) Scientific Research Programme, implementing high-profile science activities and highly successful Training Schools. She was also a lead proponent of the current Scientific Research Programme INSTANT (INStabilities & Thresholds in ANTartica), fostered collaborative meetings with other science organizations, and the SERCE Training Schools significantly advanced the capacity-building goals of SCAR.