Yuko Ulrich’s research is focused on the evolutionary interplay between social organization and disease resistance in animal societies. Living in groups comes with both advantages and disadvantages. For example, group-living enables division of labour, which can increase efficiency; on the other hand, it can facilitate the spread of infectious diseases.

Yuko Ulrich and her team are investigating the causes and consequences of social behaviour, and whether there may actually be forms of social organisation that can reduce disease transmission, using ants as an experimental system. “The clonal raider ant Ooceraea biroi, combines the rich social biology of ants with a high degree of experimental amenability.” Yuko Ulrich