Cooperative behavior among individuals often involves resource sharing which in turn provides fitness advantages to the community. Myxobacteria are a microbial example where individuals share their resources to build cooperative multicellular communities, as exemplified by fruiting body development. In the case of *Myxococcus xanthus*, cells will transiently fuse their outer membranes (OMs) and exchange their OM proteins and lipids, a process that is mediated by the TraA polymorphic cell surface receptor and the TraB cohort protein. Resource sharing within diverse microbial communities found in native soil environments raises interesting questions about how partner cells are identified and whether such interactions are regulated. In this regard, we have genetically shown that cell-cell recognition is mediated by homotypic interactions among TraA receptors. Thus cells that express identical or nearly identical *traA* alleles form a functional recognition group, while strains with divergent TraA receptors will not exchange. Our molecular and phylogenetic studies suggest that among environmental populations there are hundreds of different TraA recognition/social groups. Phenotypically, we have found that Tra-dependent exchange leads to both beneficial and adversarial outcomes. Examples of cell envelope repair involving proteins and lipopolysaccharide (LPS) transfer will be discussed as a cooperative behavior, while under different conditions OM exchange leads to lethal consequences to partnering cells. In summary, OM exchange represents a new paradigm for how bacterial cells can communicate and interact. These interactions are complex; in some cases they are constructive and lead functional communities or even tissue-like behaviors. In other cases Tra-dependent interactions are antagonistic, suggesting populations regulate or 'police' how cells interact.