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## **Infectious Disease and Families: The effect of long-term social affiliations on the evolution of social complexity in the face of epidemics**

Social interactions have long been understood to expose populations to risk from infectious disease. Previous studies have shown that populations displaying only selfish local behaviors, in the absence of disease, could have evolved complex, highly stable social organizations, and that long-term social affiliations such as family bonds can aid in the advancement of social complexity. However, as the amount of social interaction increases in the population, so too does the potential for disease burden. We examine the tradeoff to the social organization between maintaining long-term social interactions and the detriment posed by the increased risk of disease.