

# Spatial and nonspatial evolutionary games and their applications

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## Propositions accompanying the dissertation

### Spatial and Nonspatial Evolutionary Games and Their Applications

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1. If a game is too simple, its optimal strategies may become unrealistically complex (Chapter 2).
2. Because of the dispersal conflict and saturation handling methods, dynamics of discrete-space population games are sensitive to the choice of the grid, and different from those of continuous-space population games (Chapter 3).
3. In a local interaction bacterial killer game, coexistence is mainly determined by neighborhood size (Chapter 4).
4. Understanding the composition of a tumor and its evolution is a key to designing effective cancer treatment (Chapter 5).
5. A well-designed spatial game of angiogenesis in a tumor holds the promise of a system through which many *in vitro* trials of treatment can be analyzed (Addendum: Valorization).
6. When we lose many complex jobs to machines, new jobs such as robot experts who train robots in gaining specific new skills will appear.
7. As cancer research institutes/companies apply clinical trials, they create vast amounts of data, all of which should be used for training machines to precisely predict the effectiveness of trials.
8. A PhD candidate's scientific output increases as a function of the number of research-related Skype calls.
9. Not speaking each other's language allows for more communication in a relationship than if you do speak the same language.