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## Polymeric micelles for the dispersal of infectious biofilms

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## **Propositions**

### **Polymeric Micelles for the Dispersal of Infectious Biofilms**

**Shuang Tian**

1. Dispersal provides a viable approach for controlling bacterial biofilm infections. (This thesis)
2. Dispersed bacteria are more susceptible to eradication by antibiotics or immune cells than those hidden within biofilms. (This thesis)
3. Self-targeting, pH-responsive polymeric micellar dispersants enhance the therapeutic efficiency of antibiotics. (This thesis)
4. Intravital imaging is a crucial tool for revealing self-targeting of nanoparticles *in vivo*. (This thesis)
5. Protected encapsulation of dispersants during circulation in the bloodstream increases the likelihood of their arrival at an infection site. (This thesis)
6. Balanced dispersal aids the host immune system in eradicating bacteria without the use of antibiotics. (This thesis)
7. Polymers can be equipped with specific chemical groups to protect enzymatic or molecular dispersants. (This thesis)
8. Clear goals are the key to one's success.
9. To do a great right, you may do a little wrong. (Charles Dickens)
10. No matter how much suffering you went through, you never want to let go of those memories. (Haruki Murakami)